CHAPTER FIVE
DISCUSSION AND CONCLUSION

5.0 Introduction

The findings generally support the previous findings that the socioemotional behaviors of the children in the child-initiated learning programme differ to the children in the teacher-directed instruction programme. Statistical analyses have shown that Montessori/thematic-play children have shown socioemotional deficits than the teacher-directed instruction children. In general, boys and girls in the whole sample and in each programme do not differ significantly in terms of their social skills and problem behaviors. However, boys in the Montessori/thematic-play programme have shown significantly more socioemotional deficits than boys in the teacher-directed instruction programme. Similar findings are observed when only girls from the two programmes are compared.

5.1 The Nature of the Samples

An attempt has been made to select the samples from the same pool of population so that sociometric biasness can be reduced.

The descriptive analysis has shown that Montessori/thematic-play group has lower mean age than teacher-directed instruction group by approximately 12 months. Despite the fact that researches relating to three- to six-year-old children have shown that social and emotional development change with age (Newcomb and Bagwell, 1995; Yong, 1993; Konchanska, Murray and Coy, 1997; Brown and Dunn, 1996; Hartup,
1989; Lagattuta, Wellman and Flavell, 1997), comparison of the same age groups cannot be made due to difficulty in the selection of the samples.

Nonetheless, the findings of the study have shown some significant results. For instance, previous short- and long-term studies have shown that child-initiated learning approach contribute to higher gains in socioemotional development (Schweinhart, 1997; Schweinhart and Weikart, 1988; Marcon, 1990; Burts, Harts, Renee, Charlesworth, Fleege, and Mosley, 1990; Burts, Hart, Charlesworth, Fleege, Mosley and Thomasson, 1992; Devries, Reese-Learned and Morgan, 1991; Weikart, Epstein, Schweinhart and Bond, 1978; Dunn and Kontos, 1997). These studies compared children in the same age group. Thus, the effectiveness of child-initiated learning over teacher-directed instruction cannot be ascertained when older teacher-directed instruction children are compared to younger child-initiated learning children.

The descriptive analysis has also shown that children from both programmes are evenly represented by gender. The sample consists of over 50% Chinese in each group, and followed by a small number of children from other races such as Indians, Malays and Sikh. Yong (1993) has demonstrated that racial awareness among Malaysian preschool children is almost negligible, hence, the influence of racial difference in this study is minimal. The descriptive analysis on parents' occupations also shows that parents of Montessori/thematic-play group have slightly higher percentage of high rank working positions such as general manager or director than teacher-directed instruction group.
5.2 The Nature and Differences of Socioemotional Behaviors of Children in Both Programmes

The Montessori/thematic-play group has a significantly lower mean for each individual subscale of social skills and total social skills compares to teacher-directed instruction group. In contrast, the Montessori/thematic-play group has a significant higher mean for each individual subscale of internalizing problem behaviors and total internalizing problem behaviors compares to the teacher-directed instruction group. As for the externalizing problem behaviors, the Montessori/thematic-play group also has significantly higher means for all the three individual externalizing subscales and total externalizing problem behaviors compares to the teacher-instruction direction group. Overall, the Montessori/thematic-play group shows a significantly higher mean scores on the total problem behaviors than the teacher-directed instruction group.

The above empirical findings are not consistent with the previous short-term (Marcon, 1990, 1993; Gotlieb, Lennox, Kronitz, Allan, Hart and Read, 1993; Burts et al., 1990, 1992; DeVries, et al. 1991) and long-term studies (Weikart, Epstein, Schweinhart and Bond, 1978; Schweinhart, 1997; Schweinhart, Weikart and Larner, 1986; Stallings, 1976; Minuchin, Biber, Shapiro and Zimiles, 1976; Battistich, Solomon and Deluchi 1990; Dunn and Kontos, 1997). These studies support the notion that children in child-initiated learning programme are better than teacher-directed instruction programme in terms of various social, emotional and behavioral measures. Nonetheless, the findings of this study are consistent with the findings of Miller and Dyer (1976). Miller and Dyer (1976) demonstrated that there was no substantiate
evidence to confirm that differential outcomes on verbal-social participation is due to participation in different preschool programmes.

The inconsistency is probably due to the one-year age gap between the subjects of Montessori/thematic-play programme and teacher-directed instruction programme. Further study is suggested in the future in order to substantiate the relationship between age and socioemotional behaviors.

Two studies on the outcomes of internal locus of control and the development of social, physical, self-help, language and academic achievements between Montessori and the comparison groups do not seem very promising too (Stephens, 1973; McKinnon, Flieger and Patterson, 1982). Their findings failed to demonstrate that Montessori programme was better than the other comparison programmes, or vice versa. Glenn (1999), on the other hand, supported the advantages of Montessori programme on positive learning and self-development in the long run.

Bearing in mind that the focus of this study is not to compare teacher-directed instruction with Montessori programme, but rather the teacher-directed instruction with child-initiated learning programme. Although a common child-centered Montessori programme is thus not considered from the very beginning of this research, the Montessori programme still share a number of characteristics that are similar to child-initiated learning programme. Therefore, a Montessori/thematic-play programme has been chosen for this study because it integrates theme learning approach as well. A child-initiated learning programme will be then represented.
Social skills subscales consist of social cooperation, social interaction, and social independence. Among the items in social cooperation are cooperation, following rules and instruction from adults, sharing behaviors and taking turn; the social interaction items include helpfulness, having skills or abilities that are admired by peers, inviting other children to play, trying to understand another child’s behavior, showing positive responses and affection to other children who are upset and making friends easily; and the social independence items include playing with several children, adapting well to different environments, able to separate from parent without extreme distress, working and playing independently and attempting new tasks before asking for help. Yong (1993) has indicated that sharing behaviors (or social cooperation as defined by Merrell, 1994), social interaction, and emotional development change with age. An elder child tends to show more sharing behaviors and to have better interacting skills, and has higher ability to empathize. Since Montessori/thematic-play group does not show any superiority over one-year older teacher-directed instruction group in terms of their socializing skills, the findings also do not support Renshaw and Asher’s (1982), Benton-Murray’s (1994) and Cook, Senders and Torgerson’s (1995) assertion that social skills can be taught and assimilated into the intervention programme. The findings also do not support Dodge, Goldhammer and Colker’s (1990) notion on the importance of teacher’s role and a supportive social environment for cultivating socially acceptable behaviors among the children.

Although Cillessen, Haselager and van Lieshout (1997) have proven that early peer interaction predicts later social adjustment such as victimization, loneliness, depression, and friendship as well as problem behaviors such as aggression, disruptive
behavior, social withdrawal and so forth, the overall findings of peer-related items within the social skills domain in this study do not show that Montessori/thematic-play children interact more socially acceptable ways with peers than the teacher-directed instruction children.

Rather than narrowing our scope of discussion on the outcomes of educational processes, the findings of this study are perhaps consistent with Ladd, Kochenderfer and Coleman's (1997) assertion that children's social adjustment in school may also be influenced by the diverse experiences that children encounter in different forms of relationships with their peers.

The findings of this study are also inconsistent with Normandeau and Guay's (1998) empirical findings that the need for socioemotional development must be met first because socioemotional related factors such as aggressiveness, anxious-withdrawn, and prosocial behaviors can also influence a child's cognitive self-control.

The findings for internalizing problem behaviors fail to support the contention that Montessori/thematic-play programme is more effective in reducing the incidences of social withdrawal and anxiety/somatic problems among the children in this programme than teacher-directed instruction group. Harrist, Zaia, Bates, Dodge and Pettit (1997) have proven that social withdrawal may put the children at a higher level of risk in their psychosocial development. Since Harrist et al. (1997) have stressed the disadvantages of being socially withdrawn, the findings of this study, however, fails to conclude that Montessori/thematic-play programme can reduce the occurrence of socially withdrawn syndrome in children. Nonetheless, the findings of this study may support Adalbjarnardottir's (1995) contention on the internalizing problems of the
children. Adalbjarnardottir (1995) has noted that social withdrawal, social anxiety, and the children’s negotiation skills (sociable behaviors/social skills) are interrelated. The Montessori/thematic-play children have shown lower social skills but higher internalizing problem behaviors compared to the teacher-directed instruction children.

Again, mean scores on the total externalizing problems of the two programmes are differed significantly. As we are aware, the three subscales of total externalizing problems are self-centered/explosive, attention problems/overactive, and antisocial/aggressive. When the individual subscales of externalizing problem behaviors are compared, Montessori/thematic-play group scored significantly higher for all the three subscales.

Brown and Dunn (1996) believed that temperament had influences on the emotion regulation. Some of the items that represent the self-centered/explosive dimension in this study are related to temperament. Items that are closely related to one’s temperament items are such as “has temper outbursts or tantrums”, “is moody or temperamental”, and “is easily provoked”. Kochanska, Murray and Coy (1997) also confirmed that the stability of temperamental inhibitory control increased with age. Thus, the finding implies that the significant difference on this subscale was probably due to the age gap between the two groups. In addition, Lagattuta, Wellman and Flavell (1997) also demonstrate emotion understanding increased with age among three- to six-year-olds.

As the Montessori/thematic-play group is generally younger than the teacher-directed instruction group by one year, the reason to as why the teacher-directed instruction group scored a lower mean on self-centered/explosive subscale could
possibly be due to the fact that they were more mature and have better control of their behaviors. Hence, further study is needed to ascertain the relationship between age and problem behaviors.

In relation to the relationships between emotion and social behaviors, Eisenberg, Fabes, Murphy, Maszk, Smith and Karbon (1995) have found that socially acceptable behavior such as low level of aggressiveness and disruptive behaviors are related to the child’s low negative emotionality and high behavioral regulation. Roberts and Strayer (1996) also demonstrate that emotion is related to prosocial behaviors. The influences of educational process are important but this study fail to support the notion that the Montessori/thematic-play programme will be able to cultivate a better emotion and behavioral regulation in the children than teacher-directed instruction group especially relating to antisocial or aggressive behaviors.

This finding is also consistent with Murphy and Eisenberg’s (1997) and Eisenberg, Fabes, Nyman, Bernzweig and Pinuelas’s (1994) findings, in which, anger and aggression is probably not caused by provocation alone but is also partially related to temperamental inhibitory control such emotionality, constructive and nonconstructive coping, and behavioral regulation.

The author also suspects the inherent factor of aggression to be responsible for the failure of the Montessori/thematic-play programme to promote a better control of emotional conflicts among the children. Crick (1996) has demonstrated that individual differences in aggression are relatively stable over time. Nevertheless, the findings of this study support Crick’s (1996) finding that high level of aggression is related to low level of prosocial behavior. The findings of this study have shown that the children in
Montessori/thematic-play programme have higher aggressive behaviors but lower social skills, and vice versa for the teacher-directed instruction group. However, further investigations is needed in order to establish the significance of these relationships.

Eisenberg et al. (1994) also indicate attention control is associated with higher level of constructive reactions to anger whereas acting-out problem behavior is associated with lower level of constructive reactions to anger. If the regulation of socioemotional behaviors increase with age was true, we would expect similar significant findings for attention/overactive problems as well.

The finding has shown there is a significant difference on attention/overactive problems between the two programmes. The Montessori/thematic-play children have more attention problems and are overactive. Hence, this result does not support the fact that their active participation in the hands-on activities such as cooking class, water-play, role-play, and science experiment will promote better interactions between the teacher and the children. Similarly, although teacher-directed instruction group receive less personalized attention from their teacher and does not have interactions as warm as the Montessori-thematic-play group, the finding shows that they have better control of their behaviors.

The mean score on total problem behaviors including all internalizing and externalizing problem behaviors, however, is significantly higher for Montessori/thematic-play group than teacher-directed instruction group.

In general, the findings of this study are not consistent with the previous studies as mentioned earlier. The findings of Battistich et al (1990) and Gotlieb et al. (1993) have demonstrated that children who have undergone a child-initiated learning
programme known as Child Development Project and Kindergarten Intervention Project respectively have better acceptance by their peers, and show higher prosocial behavior, social competence and social adjustment, as well as fewer internalizing and externalizing problems behaviors than the control groups. Nevertheless, biasness could have existed since the staff from the experimental programmes conducted the studies, not the researchers.

5.3 The Differences of Socioemotional Behaviors by Gender

No significant gender differences are found for the whole sample which include all the boys and the girls from the two programmes on total social skills as well as for total internalizing problems, total externalizing problems, and total problem behaviors.

These findings do not support Roberts and Strayer’s (1996) finding on gender difference relating to socializing experience, demonstrating that boys appear to be having less pressure to behave prosocially than girls. Girls are prone to have pressure to behave prosocially regardless of whether they feel empathetic or not. Moreover, these findings are also not consistent with the researches done by Eisenberg, Fabes, Murphy, Maszk, Smith and Karbon (1995). Eisenberg et al. (1995) have found the teachers’ ratings show that girls are more socially appropriate than boys. Mothers’ reports also show that girls have fewer problem behaviors than boys. Also, both parents’ and teachers’ reports show that girls have higher behavioral regulation than boys. In addition, the findings of this study are also inconsistent with the following studies done by Brown and Dunn (1996), Yong (1993), Kochanska et al. (1997), and Eisenberg et al. (1994).
Brown and Dunn (1996) and Yong (1993) have proven otherwise in which girls have better understanding of emotions than boys, and Kochanska et al. (1997) have demonstrated that girls outperform boys in term of inhibitory control. Eisenberg et al. (1994) have also proven that boys score marginally higher on anger intensity and physical retaliation than do girls.

These findings, however, are consistent with the previous studies that both boys and girls do not differ in terms of their problem behaviors. For instances, both boys and girls are aggressive by nature (Crick, 1996; Murphy and Eisenberg, 1997), and anger does vary with gender (Murphy and Eisenberg, 1997). Furthermore, several studies have shown that preschool boys and girls do not benefit differently from their preschool experience (Weikart, Epstein, Schweinhart, & Bond, 1978; Schweinhart and Weikart, 1980); and do not vary in terms of internal locus of control (Stephens, 1973) and selection of friends (Hartup, 1989).

To date, inconsistent findings on gender differences may be due to the variations of methodological procedure, sample size and situational context of the study (Rose-Krasnor, 1997). Moreover, we do not know why, for instance, males are more physically vulnerable than females.

When the scores of social skills and problem behaviors scales for boys and girls are analyzed separately by own individual programme, the mean scores on total social skills as well as for all the problem behaviors are not significantly different.

In other words, the social skills and problem behaviors of the boys and the girls in Montessori/thematic-play programme do not differ significantly. Similar finding is
observed in teacher-directed instruction programme too. Thus, both programmes are equally appropriate for boys and girls.

When the scores of social skills and problem behaviors of boys from Montessori/thematic-play programme are compared with boys in teacher-directed instruction programme, there are significant difference on all the scales and subscales. Similar patterns are also found among girls.

The findings, therefore, do not support the study which was done by Burts et al. (1990, 1992) that boys in a developmentally inappropriate classroom would display more stress behaviors than boys in a developmentally appropriate classroom.

In conclusion, the researches on gender differences in the area of psychology have served to complicate rather than elucidated. However, the findings of this study have at least given some insights on gender differences relating to different educational preschool programme.

5.4 Limitations of the Study

Despite the fact that many circumstances have been considered, this study is still confined to several limitations as follow. First, a major impediment to this research on the outcomes of different curricula is the lack of a fine and comprehensive instrumentation that is able to measure the socioemotional behavior of preschool children (Merrel, 1994, 1995; Weikart, Bond and McNeil, 1978; Merrell and Holland, 1997).

Second, this study gauges information about the socio-emotional behaviors of the children through teachers’ ratings. Although the teachers have been teaching and
interacting with the children for at least a year, the actual ratings are done two months after the children are no longer with their respective teachers. Nevertheless, this one-year experience with the children has at least fulfilled the minimal requirement of three months required for rating the children (Merrell, 1994).

Third, the selection of the subjects is limited to two kindergartens only. While the child-initiated learning programme is represented by a group of children from the Montessori/thematic-play kindergarten, the teacher-directed instruction programme is represented by a group of pre-primary classes from another kindergarten. The selection of kindergartens, however, is carefully done so that they represent the kind of preschool programmes that are required in this study.

Fourth, the comparison of two cohorts aged five and six may be biased to the elder group. The author suggests that a comparison of the exact same age group to be considered in the future.

Lastly, Eisenberg et al. (1995) note that parents and teachers are actually focusing on different aspects of emotional and behavioral problems of the child, and the child may behave differently at home and in the school. However, teachers’ ratings are still suitable since this study intends to examine the outcomes of the preschool programmes on the children’s socioemotional behaviors in schools.

5.5 Conclusions and Suggestions

This study has shown that children from Montessori/thematic-play programme differ with children from teacher-directed instruction programme on their social skills and problem behaviors. Teacher-directed instruction children scored significantly
higher on social skills and lower on problem behaviors than the child-initiated learning children.

The outcomes of child-initiated learning educational processes in this study are found to be not consistent with those undertaken studies. These dissimilarities suggest that child-initiated learning programme does not strongly support the contention that it can contribute to the positive outcomes on social, emotional, and behavioral development of the preschool children in the short run.

This study has also ascertained that there are no gender differences among the children. Boys and girls in the whole sample do not generally differ significantly in terms of their social skills and problem behaviors. Boys and girls in each programme also do not differ significantly in terms of their social skills and problem behaviors. These findings show that both child-initiated learning and teacher-directed instruction classroom are equally appropriate for boys as well as for girls. On the other hand, when the boys in Montessori/thematic-play programme are compared with the boys in teacher-directed instruction programme, they do differ in terms of their social skills and problem behavior. Hence, boys in the Montessori/thematic-play programme show more socioemotional deficits than boys in the teacher-directed instruction programme. Similar findings are observed when comparing only girls from the two programmes. Therefore, girls in the Montessori/thematic-play programme show more socioemotional deficits than girls in the teacher-directed instruction programme.

The following are suggestions for future studies. First, to compare the socioemotional behaviors of children from the same age group instead of different age group or to select five- and six-year-old samples together for each group so that the
The relationship between age and socioemotional behaviors can be examined across programmes. Second, to select samples from more than one kindergarten but they still represent the similar programme. Third, to extend the research on the socioemotional behaviors of the children through parents' reports, ratings, or interviews.