The Effect of Social Inclusion Intervention for Preschoolers with Social Communication Deficit in Inclusive Settings in Hong Kong

by

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Statement of Originality

I, CHENG, Wai Kuen Libby, hereby declare that I am the sole author of the thesis and the material presented in this thesis is my original work except those indicated in the acknowledgment and declaration. I further declare that I have followed the University's policies and regulations on Academic Honesty, Copyright and Plagiarism in writing the thesis and no material in this thesis has been submitted for a degree in this or other universities.

Abstract

This study adopted a pre- and post-intervention design to develop and investigate the efficacy of the social inclusion intervention for pre-schoolers with social communication deficit (SCD). It is based on the operant conditioning theory to promote peer acceptance and positive attitude towards children with SCD for their friendship formation in inclusive preschool settings. The participants were 128 pre-schoolers aged from 3 years 9 months to 6 years 11 months old (Mean age = 4 years 9 months) in Hong Kong. There were 54 children with SCD and 74 without SCD with 71 boys and 57 girls. A quasi-experimental research design was conducted, and quantitative data analysis methods were applied. The data were analyzed using a mixed measures ANOVA, followed by two-way ANOVA and independent samples *t* test or pair samples *t* test for further analysis. By comparing the sociometric, observation, and questionnaire data before and after the social inclusion intervention, the changes in the sociometric status, interaction frequency, and questionnaire scores of the participants were analyzed. The results indicated a significant increase in popularity and decrease in peer rejection for social acceptance level (SAL) and gain in mutual friendships (MF), $F(1, 124) = 4.74$, $p < .05$, $\eta_p^2 = .04$, for all children (both SCD and non-SCD) in the experimental class. No significant differences were found in the Mutual Social Interaction (MSI) and Social Inclusion Status (SIST) scores for all children in the experimental and control class, $ps > .05$. The performance across the diagnostic types (SCD versus non-SCD) were further compared. The results in the SCD group revealed a statistically significant gain in the production of SAL and MF, $F(1, 124) = 5.08$, $p < .05$, $\eta_p^2 = .04$, and no statistically significant differences in MSI and SIST, $ps > .05$. The key findings suggested that the novel intervention in the current study is effective to enhance children's social acceptance level and friendship formation in an inclusive preschool setting. It is recommended that this social inclusion intervention can be promoted to all local preschools and also to junior primary

student populations with minor adjustments made. The potential to extend its scope to other regions internationally in the future can be explored. Finally, its clinical implications and future research directions are discussed.

Keywords: social communication deficit, pre-schoolers, social acceptance, mutual friendship, social interaction

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List of Abbreviations

ASD	Autism Spectrum Disorder
AD/HD	Attention-Deficit/Hyperactivity Disorder
AVIP	Accept, Value, Include, Partner
CSENIE	Centre for Special Educational Needs and Inclusive Education
DD	Developmental Delay
EBP	Evidence-Based Practice
EdUHK	The Education University of Hong Kong
FP	Freeplay
GS	Graduate School
IP	Integrated Program
IP-KGC	Integrated Program Kindergarten-cum-Child Care Center
KGC	Kindergarten-cum-Child Care Center
LD	Language Delay
MF	Mutual Friendships
MSI	Mutual Social Interaction
NTD	Neurotypically Developing
PE	Physical Education
SAL	Social Acceptance Level
SCBA	Social Communication Behavioral Assessment
SCD	Social Communication Deficits
SEN	Special Educational Needs
SIST	Social Inclusion Status

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Chapter 1: Introduction

Inclusive education is defined as providing service, support, and acceptance to all learners including children with disabilities within a regular education setting, with the aim to work towards 'education for all' (UNESCO, 1994; UNESCO, 2000; UNESCO, 2001). In 2008 the Geneva International Conference advocated worldwide inclusive education; governments started to transform school systems to include children with special educational needs (SEN) in regular schools and preschool (UNESCO, 2008). Due to the surging number of children with SEN including those with autism spectrum disorder (ASD), attention-deficit/hyperactivity disorder (AD/HD), developmental delay (DD), and language delay (LD) being educated in inclusive settings around the world, for example, the number of children with SEN in the UK increased by 2.6% between 2017 and 2018 (UK Department of Education, 2018) and the number of children with SEN aged 3 to 5 in the US increased by 1.3% between 2014 and 2015 (US Department of Education, 2018). Research related to inclusive education around the world has also increased.

Ainscow and César (2006) investigated the relationship between leadership practice and the inclusive philosophy of the educational system worldwide. Lindsay (2007) reviewed the deployment of resources in the UK that promotes educational practices by using evidence-based outcomes. More locally, Sin (2010) investigated the support given to children with autism and intellectual disabilities regarding the resources, provisions, and development of education and services, and shared valuable experiences of how to overcome the difficulties to achieve and promote inclusive education in Hong Kong. Furthermore, the systematic review of Hansen, Blakely, Dolata, Raulston, and Machalicek (2014) found 16 single-subject design Social

Communication Interventions for children with ASD between the years of 2005 and 2012. Other studies have examined the effectiveness of their newly designed intervention to improve the social interaction skills of children with SEN and aimed to help these children to be fully inclusive in the mainstream setting (Deitchman, Reeve, Reeve, & Progar, 2010; Leaf et al., 2012; Licciardello, Harchik, & Luiselli, 2008; Stanton-Chapman & Brown, 2015). Up to now, far too little attention has been paid to employing the philosophy of social inclusion and promoting it in preschool settings (Gena, 2006; Sainato et al., 2015; Stanton-Chapman, Denning, & Jamison, 2012). It may be caused by the lack of shared understanding of what should be the valid measurement to evaluate the social inclusion status for preschool children and what social inclusion means in an educational setting.

As mentioned earlier, the surging trend of the inclusive placement for children with SEN around the world is increasing year by year (Arjmandi et al., 2015; Kennedy, 2013; Koegel et al., 2012; Martin-Denham, 2015; Owen-DeSchryver et al., 2008; Pastor & Reuben, 2008). In the US, there has been a rapid growth of the number of integrated placements in public education for children with disabilities since 2008 (Camargo et al., 2014). The number of children aged 3 through 5 served under IDEA-Part B increased from 709,136 to 769,801 between 2005 and 2016 (US Department of Education, 2018). In the UK, the number of children with special educational needs increased from 1,244,255 to 1,276,215 between 2017 and 2018 (UK Department of Education, 2018). In Hong Kong, children with disabilities surged from 33,830 to 45,360 between 2013 and 2018 (LC, 2019).

In general, children studying in special childcare centers in Hong Kong have severe disabilities including mental handicap, physical handicap, auditory and/or visual impairment, and ASD. Other children studying together with neurotypically developing (NTD) children in “Integrated Program” Kindergarten-cum-Child Care Centers (i.e., preschool setting) have

various developmental disabilities, such as AD/HD, DD, LD, and mild ASD (Social Welfare Department, 2019). Coincidentally, many research studies have identified a common characteristic of social communication deficit (SCD) among the majority of children with ASD, AD/HD, GDD or LD (Ho & Lam, 2005; White, Keonig, & Scahill, 2007). The typical symptoms of these children with social communication difficulties include difficulties in verbal communication and social interaction deficits, such as taking turns, sharing, and responding to a peer (DuPaul, McGoey, Eckert, & VanBrakle, 2001; Martin-Denham, 2015). Moreover, children with SCD also have difficulties in establishing and maintaining friendships with peers (DuPaul et al., 2001; Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011; Martin-Denham, 2015) and are less likely to be socially included in an inclusive educational setting (Pijl, Frostad, & Flem, 2008). Regarding this phenomenon, ample literature can be found investigating the effectiveness of a novel social skills intervention which aimed to help children with particular types of disabilities, such as ASD, AD/HD, GDD or LD in inclusive settings (Deitchman et al., 2010; Goldstein et al., 2014; Hansen et al., 2014; Jung, Sainato, & Davis, 2008; Leaf et al., 2009; Licciardello et al., 2008; Stanton-Chapman & Brown, 2015). A systematic review of Goldstein et al. (2014) found that the majority of social skills intervention studies have had a single-subject design, with only nine out of 67 interventions involving peers or implemented in a group of children with and without ASD. Moreover, these group interventions did not specifically address SCD in SEN children with ASD, AD/HD, GDD or LD; neither did the intervention focus on promoting social inclusion in a preschool setting.

Aim of the Study

Scholars state that “inclusion is a philosophy that urges schools, neighborhoods, and communities to welcome and value everyone, regardless of differences” (Renzaglia

Karvonen, Drasgow, & Stoxen, 2003, p. 140); it is also "a belief that everyone belongs, diversity is valued, and we can all learn from each other" (Renzaglia et al., 2003, p. 140). In order to assist children with SCD to be genuinely included in our community, we should start by enabling social inclusion in preschool settings, helping these children to be accepted and valued among their peers. However, there is a lack of intervention programs that target the training of social inclusion skills, supporting these children to overcome their difficulties in social communication and be able to form friendships with their peers. Moreover, these social inclusion intervention programs should focus on training social inclusion skills for the whole class, not just for those with SCD. As the focus in these social inclusion intervention programs is different from those in conventional social skills training programs, a review of what should be the valid measures for evaluating the social inclusion status for preschool children should be done prior to the intervention development. The ecological validity indicators and evidence-based practice strategies from the key findings of the peer-reviewed literature should be used as a reference for the development of social inclusion intervention. The present study, therefore, aimed (i) to develop a novel social inclusion intervention that is grounded on the ecological validity indicators and evidence-based practice strategies for children with SCD identified from a robust systematic review procedure; (ii) to examine the effectiveness of this novel intervention for the pre-schoolers in Hong Kong by investigating whether the preschool social inclusion intervention has any significant effects on the preschool participants when compared with children in a control class; and finally (iii) to test if the novel intervention will benefit children with SCD more than children without SCD in inclusive classrooms.

Chapter 2: Literature Review

Definition of Social Inclusion in Early Childhood Educational Settings

In general, social inclusion is the provision of certain rights, such as being accepted as an individual beyond disabilities, having mutual friendships, and having appropriate living accommodations, formal and informal supports, employment, and community involvement, to all individuals and groups in society (Hall, 2009; Power, 2013). In an early childhood educational setting, social inclusion is a predominant agenda for inclusive education for pre-schoolers. Scholars stated that social inclusion signifies being accepted as part of a group, having one or more mutual friendships, and participating in social group activities with equal opportunities (Cullinan, Sabornie, & Crossland, 1992). Hence, social inclusion is perfectly demonstrated concerning the formation of friendships and social relationships built on mutual friendships among children with SEN or with their NTD peers, including social acceptance in the inclusive environment. To illustrate, Koster, Nakken, Pijl, and Van Houten (2009) studied social inclusion intervention by performing a meta-analysis, which is based on the ideas of social inclusion but elaborated on the components of social interactions with peers, social relationships among children with SEN or with their NTD peers, and the status of social acceptance in inclusive classrooms. To conclude, social inclusion concerns providing resources, opportunities, tasks, rights to voice opinions, education for children with SEN and their participation in an inclusive environment with or without SEN to learn together (Board, 2012; Frederickson, 2008; Mittler, 2012).

Ineffective Measurement for Social Inclusion Intervention

Past research studies on social inclusion intervention mainly focused on promoting social inclusion by enhancing the social skills of children with SEN to communicate and

interact with peers, for instance, initiating a greeting, answering peers' questions, or engaging in an activity with peers for a prolonged period of time in an inclusive education setting (Chan & O'Reilly, 2008; Hundert, 2007; Jung et al., 2008; Katz & Girolametto, 2013; Nelson et al., 2007; Tzanakaki et al., 2014; Wichnick et al., 2010). Although the above mentioned social inclusion studies yielded positive outcomes in regard to increasing social interaction for children with SEN in inclusive education preschool settings, these significant positive results in relation to the increased social interaction do not guarantee the existence of mutual friendships in an inclusive education setting (Tsang & Cheng, 2017).

In real-life practice, it is simpler to guarantee the physical existence of children with SEN in school environments by applying school enrollment statistics and demonstrate their accomplishment through academic testimonials. Nevertheless, insufficient empirical evidence supporting the physical presence of children with SEN in mainstream school environments has been accepted socially as well (Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011). To date, there is limited empirical evidence showing that children with SEN who are physically included in inclusive settings have also demonstrated enhanced social inclusion (Kavale & Forness, 2000; Lindsay, 2003). For instance, children with ASD can be taught to remain in their seat for the whole class period, but may not to be able to participate in any learning exercise that is synchronized with the progress of his/her NTD peers.

On the other hand, other social inclusion intervention studies have investigated the social acceptance level of children in addition to their social interaction with peers in regard to social inclusion (Hansen et al., 2014; Tsang & Cheng, 2017). Nonetheless, some research studies investigating social inclusion status have yielded inconsistent findings. Some have stated that children with SEN have fewer mutual friendships, lower popularity, and seldom are group members when compared to their peers without SEN (Freeman & Alkin, 2000; Kasari et al., 2011). In contrast, other research studies have claimed that most children with

SEN have at least one mutual friend and have an acceptable amount of social interaction with their NTD peers in the inclusive setting (Pijl, Frostad, & Flem, 2008; Koster, Pijl, Nakken, & Van Houten, 2010). Therefore, either just measuring the social acceptance level or the number of mutual friendships along with measuring social interactions is unreliable to reflect the social inclusion status of children in an inclusive educational setting. Further investigation of how to do so is warranted.

Social Inclusion Intervention for the Preschool Population

Indeed, past social inclusion research addressing social acceptance and peer relationships mainly targeted at the primary population in the school community (Chamberlain, Kasari, & Rotheram-Fuller, 2007; Siperstein, Glick, & Parker, 2009), and limited information was provided for the children learning in inclusive preschool settings. The systematic review of Tsang and Cheng (2017) found that studies in inclusive preschool settings mainly focused on measuring the enhancement of the social interaction rather than the effect on the level of social acceptance and peer relationship as the evaluation of the effectiveness of the social inclusion intervention. More findings were revealed from the systematic reviews of social inclusion interventions of both Hansen et al. (2014) and Tsang and Cheng (2017), who discovered that only a small number (i.e., about 20%) of the reviewed interventions had measured social inclusion from the view of the status of social acceptance, and none of them measured the mutual friendships among children. The status of children's friendships can only be measured directly by the mutual friendships among children, which should be one of the critical elements to assess the social inclusion status of children in an inclusive setting. What else should be included in the process to identify the status of social inclusion of children with SEN is warranted to be investigated.

Valid Measure Indicators for Social Inclusion Intervention

In general, the essential agenda of inclusive education from the perspective of different stakeholders is social inclusion. The study of Bossaert, Colpin, Pijl, and Petry (2013) claimed that the increased opportunities of social interaction are the core underlying motive of parents behind sending their young children with SEN into the mainstream setting. Their simple belief can explain the urge of the parents: there is a positive correlation between the opportunities for comprehensive social contacts with NTD peers and the attainment of the development of social-emotional skills for their children with SEN (Koster et al., 2009). Another research study mentioned that social inclusion indicates seeing a child be accepted as a part of a group, having one or more mutual friendships, and participating in group activities socially equivalent to their NTD peers (Cullinan, Sabornie, & Crossland, 1992). Undoubtedly, social inclusion is perfectly demonstrated by the established social network, the extent of social acceptance, and the mutual friendships built by the positive interpersonal relationships of children with and without special needs.

Nonetheless, it is more complicated to promote social inclusion than to encourage social interaction among children. The prior construct is interpersonal and involves the changes between two or more individuals, in opposition to the later intra-personal construct, which is a notion associated with the characteristics of a child. Therefore, only measuring the intervention in relation to its success in fostering social communication and interaction skills, for example, response to a greeting, initiating a chat with peers, and requesting help in inclusive classrooms, does not automatically lead to success of social inclusion promotion, for instance, active participation and establishment of mutual friendships among special needs children.

Furthermore, from the socio-ecological perspective, the systematic review of Tsang and Cheng (2017) examined ten intervention studies with three ecological validity indicators,

which included: (i) social acceptance status, (ii) social relationship, and (iii) social interaction. The team found that none of the ten studies embraced all three indicators to assess the effectiveness of their interventions. Indeed most of the studies only measured the social interaction to reflect the intervention efficacy and two of them had a measurement of social interaction and social acceptance status (Tsang & Cheng, 2017). As mentioned earlier, the linkage between friendship establishment and social interaction is weak. The team of Koster (2009) suggested investigating the efficacy of social inclusion intervention as in Cullinan et al. (1992), but also including the social interaction component that included: (i) the status of social acceptance in class (i.e., social position), (ii) the social interactions, and (iii) the social relationships among children with SEN or with their NTD peers. Therefore, an investigation of the social inclusion status based on the above three ecological validity indicators should be applied to truly reflect the experimental outcome.

Utility Validity Indicators for Social Inclusion

The importance of evaluating the effectiveness of social inclusion intervention with a valid social inclusion measure has been discussed. Practically, it is much more complicated to assess interpersonal relationships than intra-personal characteristics, as the former needs to include the perspectives of multiple stakeholders. In the past, rating scales were used to evaluate the social status of children with SEN in school settings (Bauminger & Kasari, 2000; Hunt, Soto, Maier, & Doering, 2004). In the past decade, the number of researchers who adopted sociometric techniques, such as peer nomination tests or sociograms, in social inclusion studies has increased, providing a background of how to assess interpersonal relationships among children in an inclusive setting (Mikami et al., 2013; White, Keonig, & Scahill, 2007). Future studies should mimic the same utility validity indicators to assess the effectiveness of social inclusion interventions.

Evidence-Based Practice (EBP) Strategies for Social Inclusion Intervention

To achieve the goal of enhancing the ability of children with SEN to form mutual friendships and be accepted by their NTD peers in inclusive classrooms, the key is to follow reliable and valid EBP criteria to evaluate the intervention of social inclusion. There are five EBP criteria suggested by the team of Reichow (2011) to examine the efficacy of the strategies of an intervention, containing (i) the assessment of research design (i.e., single case or group research), (ii) the operational definitions displayed with rubrics, (iii) the description of vital or non-vital quality indicators, (iv) the strength of a research report determined with a strong, moderate, or weak rating standard, and (v) the overall rating of the intervention strategies decided with the criteria of EBP (Reichow, 2011). According to the above five EBP criteria, the systematic review of Tsang and Cheng (2017) evaluated ten social inclusion interventions for preschool children. Among the ten studies, only six studies were rated as strong or adequate studies. A total of nine intervention strategies were used among the six studies, but only four of the nine types of intervention strategy fulfilled the EBP criteria. The four EBP strategies included (i) positive feedback, (ii) visual support, (iii) peer-mediated modeling, and (iv) response prompting (Tsang & Cheng, 2017). The above four EBP strategies should be applied to the social inclusion intervention to enhance positive treatment outcomes.

To conclude, the above literature identified the ecological validity indicators to measure the social inclusion status to reflect the effectiveness of social inclusion interventions. Besides, past research also suggested applying evidence-based practice strategies to enhance the effectiveness of social inclusion interventions. Based on these findings from the literature, social inclusion intervention should embrace the above four EBP strategies that fulfill the EBP criteria and are measured with the ecological validity indicators.

Next, an investigation of the study of Social Inclusion Intervention in Hong Kong is presented.

Study of a Social Inclusion Intervention Program for Hong Kong Pre-schoolers

Studies aiming to promote social inclusion interventions can easily be found in the USA or UK (Jung et al., 2008; Nelson et al., 2007; Tzanakaki et al., 2014). In contrast, there have been limited studies focused on interventions that promote social inclusion in Hong Kong. A few years ago, Wong (2008) replicated a socio-emotional curriculum program, namely Zippy's Friends, and implemented the translated Chinese version of the Zippy's Friends' program in ten Hong Kong preschools for children with and without special educational needs. Although Wong's (2008) study yielded a significant gain in positive coping strategies, improvement in social skills and reduced some problem behaviors when compared to the control class, building children's socio-emotional learning skills and coping strategies in an inclusive setting does not necessarily lead to mutual friendships. Peers' social acceptance level and mutual friendships were not measured in Wong's (2008) study to reveal the mutual friendships among children.

In general, children with SEN in most of the studies were the primary target participants of intervention in the inclusive settings (Betz, Higbee, & Reagon, 2008; Koegel et al., 2012; Sainato et al., 2015). However, the other stakeholders' perceptive, acceptance status, relationships, and interpersonal interaction of preschoolers were not measured in most of the research studies (Hansen et al., 2014; Tsang & Cheng, 2017). Very few of the past studies examined the impact of the social inclusion interventions on children without SEN in inclusive education settings (Adams & Fleer, 2016; Hartung, Sproesser, & Renner, 2015). The inclusiveness of the peer group can be improved by reducing the social devaluation of children with SEN (Mikami et al., 2013) and can enhance the social inclusion status of

children with SEN. Nonetheless, a social inclusion intervention that can lead to mutual friendships should be assessed with the socioecological validity, including social interaction, social network and social acceptance status of multiple stakeholders in the preschool classroom environment with robust evidence-based sociometric measurements.

Framework of the Research Design

The intervention design in this study is guided by Bronfenbrenner's ecological systems theory and Bandura's social learning theory, along with the operant conditioning from Watson's behaviorism. Bronfenbrenner's ecological systems theory of the microsystem for an individual, childcare center or school is one of the three microsystems within other systems which includes children's interactions with their teachers, parents, and peers (Shaffer & Kipp, 2010). In the childcare center or school, the teachers and peers are the two major stakeholder groups who play an essential role in the interpersonal interaction with children with SCD in inclusive settings. Schools also provide opportunities for children to make connections with other peers or adults in these settings. With the nature of these links, children are influenced by the effect on those with whom they interact in the same system (Bronfenbrenner, 1979). This mutual influence among children and teachers under the same ecological system matches the concept of reciprocal determinism (Powell, Honey, & Symbaluk, 2016, p. 29). Bandura introduces the term 'reciprocal determinism' in his social learning theory that describes the role that an individual's behavior has on altering the environment and vice versa (Bandura, 1977). Bandura's social learning theory (1977) also states that people learn from one another through observational learning, imitation, and modeling.

We now turn to an investigation of observational learning in Operant Conditioning. The term operant conditioning can be traced back to Thorndike's law of effect in the 1890s,

which illustrated "the extent of which the consequences of behavior are annoying or satisfying determine whether that behavior will be repeated" (Powell et al., 2016, p. 226). Burrhus Frederick Skinner devotes himself to studying the principle of Operant Conditioning of Watson's behaviorism and realizes how to apply the principle of operant conditioning to understand and change behavior (Powell et al., 2016, p. 228). Skinner (1953) states that "in operant conditioning, we 'strengthen' an operant in the sense of making a response more probable or, in actual fact, more frequent" (p. 65). This means that strengthening the positive feedback (operant) has increased the possibilities of positive social interaction (response). For instance, if a teacher praises (positive feedback) child-A who offers help to child-B to complete a task (positive interaction), considering that 'praise' is the operant that results in strengthening, the frequency of the helping behavior of child-A (response) probably increases (see Figure 1). Therefore, we can assume that positive feedback (intervention) predicts positive interaction (outcome), and vice versa. The theoretical framework of the AVIP intervention is displayed in Figure 2.

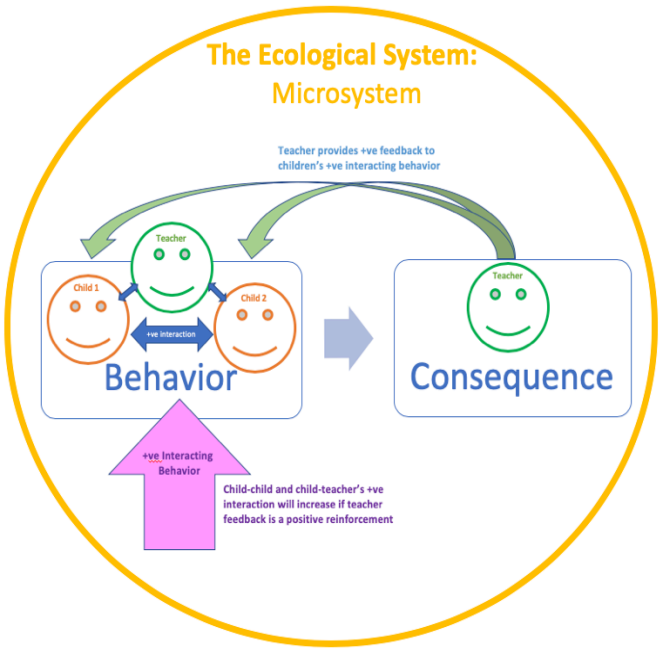


Figure 1. Example of Operant Conditioning

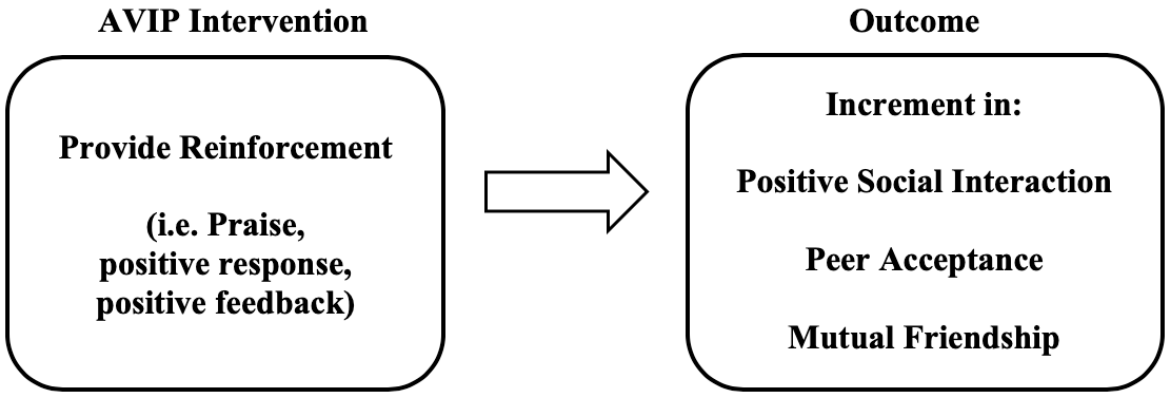


Figure 2. Theoretical framework of the AVIP intervention

Social Inclusion Intervention in the Current Study

Accept, Value, Include, and Partner (AVIP) treatment. The AVIP intervention program is designed for young children with SCD in an inclusive preschool setting. These children have language impairments when communicating socially with peers. They also have difficulties in understanding the diversity of emotional expression, abilities, and manners of peers in inclusive classrooms. Therefore, the AVIP intervention aims to teach children with SCD to understand peers in the aspects mentioned above. In order to teach these children effectively, evidence-based practice strategies should be applied.

The AVIP intervention is based on the ecological framework of social inclusion intervention according to the systematic review of Tsang and Cheng (2017). They have concluded four significant EBP strategies that were included in all effective inclusion intervention for young children with special needs in the inclusive preschool setting (Tsang & Cheng, 2017). These four EBP strategies are (i) positive feedback, (ii) peer mediation, (iii) visual support, and (iv) response prompting. Past studies showed that using positive feedback, such as verbal feedback, edibles, or tokens as the positive reinforcement contributed to the increment of positive interacting behavior among children in an inclusive

preschool (Jung et al., 2008; Nelson et al., 2007; Katz & Girolametto, 2013; Stanton-Chapman & Brown, 2015; Stanton-Chapman & Snell, 2011; Tzanakaki et al., 2014; Chan & O'Reilly, 2008; Hundert, 2007; Wichnick et al., 2010). Besides, intervention studies claimed that using peer mediation contributes to the increment of positive mutual interaction among children in an inclusive preschool setting (Jung et al., 2008; Nelson et al., 2007; Katz & Girolametto, 2013; Stanton-Chapman & Snell, 2011). Moreover, researchers also stated that using visual supports, such as visual cues, written prompts, and picture icons for communication contribute to the increment of social interaction for children with special educational needs with their peers (Jung et al., 2008; Stanton-Chapman & Brown, 2015; Stanton-Chapman & Snell, 2011; Wichnick et al., 2010; Woods & Poulson, 2006). For example, children can use a picture card (i.e., visual support) as the communication tool, and they can point to or hand in the corresponding picture card to answer a question in the session. Furthermore, response prompting, such as physical, gestural, or echoic prompts are the antecedent strategies that evoke corrective responses (Jung et al., 2008; Nelson et al., 2007; Katz & Girolametto, 2013; Stanton-Chapman & Snell, 2011; Tzanakaki et al., 2014; Chan & O'Reilly, 2008; Hundert, 2007; Wichnick et al., 2010; Woods & Poulson, 2006).

Concerning the aforementioned theoretical framework, positive feedback is one of the forms of positive reinforcement (see Figure 2), which serve as a core component of the AVIP intervention program. Peer mediation serves as a modeling prompt for children with SCD to acquire skills via observation and mimicking. However, children with SCD usually have difficulty in paying attention to others which inhibits their abilities to learn through observation (Lovaas, 1987; Powell et al., 2016, p. 445). So the presence of peers instead provides a platform for social interaction with peers. By embracing the four EBP strategies in the AVIP intervention to help children with SCD understand the feelings, abilities, and manners of their peers and equip them with social inclusion skills enhances their competence

in communication. Therefore, the four EBP strategies are named as (i) A - affirmative responses, (ii) V - visual support, (iii) I - interacting with a peer, and (iv) P - prompting techniques in the current AVIP intervention program.

In addition to the four EBP strategies, social stories, music, and games are used in the AVIP intervention program to enhance appropriate social interaction, peer acceptance, and mutual friendships among children in inclusive classrooms. First, the use of social stories is indicated to increase peers' social acceptance level by changing the attitude of young children toward their peers with SEN (de Boer, Pijl, Minnaert, & Post, 2014). Furthermore, interventions using social stories are useful for teaching interacting social skills and can increase the number of appropriate social interactions, such as social initiation and raising a hand to attract the attention of others; it can also decrease inappropriate vocalization (Chan & O'Reilly, 2008). Second, some studies claim that music might encourage young children to build social relationships with their peers (Lau, 2008; Seefeldt & Wasik, 2006; Wortham, 2006). Third, play intervention is found to improve children's play, behavior, and social skills (O'Connor & Stagnitti, 2011). Moreover, collaborative games are shown to be an effective method to increase the number of appropriate social interactions and engagement for children with SEN (Nelson et al., 2007; Stanton-Chapman & Snell, 2011). Therefore, social stories, music, and games are used with the EBP strategies to improve the social inclusion status for children in the inclusive preschool settings in the AVIP intervention program. To summarize the above information, the logic model for AVIP intervention is presented in Figure 3.

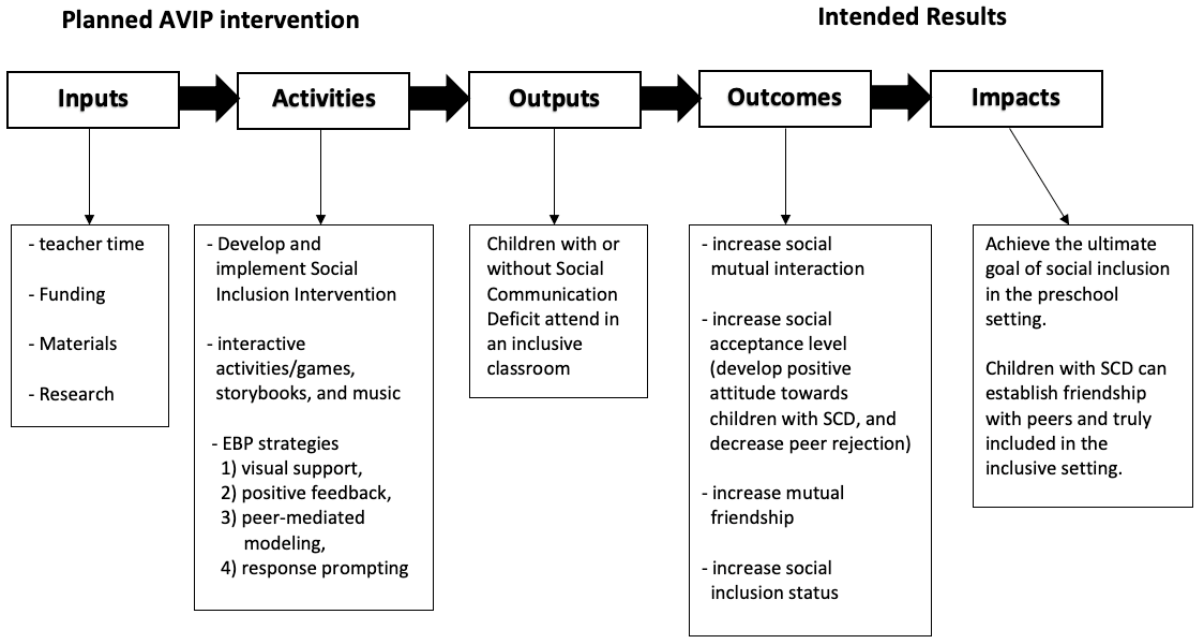


Figure 3. Logic model for AVIP intervention

Note. AVIP = Accept, Value, Include, and Partner; EBP = Evidence-Based Practice; SCD = social communication deficit.

The AVIP social inclusion program contains five themes: (1) Value every classmate, (2) Accept how classmates express their feelings, (3) Accept classmates' strengths and value classmates' weaknesses, (4) Include every classmate with preferred or annoying behaviors, and (5) Be a good friend/partner to each other (see Table 1). For example, the training objectives for theme (2) aim to help children to understand that everyone has their own way of expressing their emotions. Children practice with their peers regarding how to react appropriately to others' emotional expressions and show their understanding and acceptance, such as encouraging peers to stay calm to overcome their difficulties. Another example of the training objectives for theme (5) aims to promote building friendships by showing children how to be a good friend with peers; children then practice using positive feedback to admire peers' behaviors. The AVIP program is conducted in Cantonese by the researcher

with the class teachers who act as assistants during the weekly sessions. The teaching plan of the AVIP intervention program is displayed in Table 1, including the five AVIP themes with the weekly learning objectives. The description of the interactive games and activities and materials needed for each session are also listed in Table 1.

Table 1

The teaching plan and description of AVIP intervention

S	Theme	Learning Objective	Games/activities for skill practice	Materials
1	Value every classmate	AVIP story: Value every classmate a) Be friendly to each other i) Identify when and how to greet others ii) Recognize others is greeting oneself iii) Be aware in response to other's greeting b) Recognize and follow 2-3 appropriate classroom behaviors, such as sit still, eyes on the teacher, or be quiet. c) Identify the ten V song's gestures. (e.g. thumb up, giving a caring heart, giving high five) The Value (V) song: a) Learn to sing the V song b) Learn to use 2-3 gestures of the V song c) Recognize they are learning together as a group and can work hard together d) Be able to help each other with lots of care e) Learn to value each other disregard of other's personality or capability.	Activities: a) Practice greeting each other in a friendly way with a partner b) Practice singing the V song with gesture (positive feedback) in a group setting. Simon says game: a) Teacher says an appropriate classroom b) behavior along with the action, such as sit c) still or eyes on the teacher, children will follow her action. d) Practice performing the appropriate classroom behaviors in a group setting.	a) AVIP storybook: Value every peer b) The lyrics of V song c) The music of V song (melody: Twinkle twinkle little stars)
2	Accept how classmates express their feeling	AVIP story: Accept how classmates express their feeling a) Recognize 1-2 ways to express happiness, b) such as singing, laughing, or running around. c) Identify how others express happiness The traffic light calms down (CD) song: a) Recognize sad or angry emotion of self and others b) Learn to sing the CD song to calm down c) Learn when to use the CD song	Activities: a) Review singing the V song in a group setting b) Practice singing the calm down song with deep breathing by using traffic light picture card including the red angry face, yellow smiley face, and green laughing face representing the child's emotion, in a group setting. c) Practice responding to other's emotion (i.e., happiness) in a group setting with a magnet facial expression toy set, for instance, a child makes a face on the whiteboard, the rest of the class respond by saying, "I see you are wearing a big smile. I know that you are happy." "How do I feel" game: • Two to three children in a group and role-play to wear a self-designed happy face mask representing their emotion, peer(s) tell what do they see and labels the emotion accordingly. For instance, a child wearing a big smile mask, a peer will say, "I	a) AVIP storybook: Accept how classmates express their feeling b) The lyric of V song c) The music of V song (melody: Twinkle twinkle little stars) d) The CD song lyrics cardboard e) The music of CD song (melody: London bridges falling down) f) The traffic light emotion cards and the traffic light toy g) Happy emotion cards. h) A magnet facial expression toy set i) 15 sets of a blank mask with hair and ear only along with Velcro taped eyes, noses, and mouths with its corner turned up.

			see you are laughing, and I know that you are delighted."	
S	**Theme**	**Learning Objective**	**Games/activities for skill practice**	**Materials**
3	Accept how classmates express their feeling	AVIP story: Accept how classmates express their feeling a) Recognize 1-2 ways to express sadness, such as crying, tantrum, or screaming. b) Identify how others express sadness The traffic light calms down (CD) song: a) Recognize sad or angry emotion of self and others b) Learn to sing the CD song to calm down c) Learn when and how to use the CD song to calm down d) Learn when to recommend peers to use the CD song to calm down	Activities: a) Review singing the V song and CD song in a group setting b) Practice singing the calm down song with deep breathing by using traffic light picture card including the red angry face, yellow smiley face, and green laughing face representing child's emotion, in a group setting. c) Practice responding to other's emotion (i.e., sadness) in a group setting with a magnet facial expression toy set, for instance, a child makes a face on the whiteboard, the rest of the class respond by saying "I see you are crying, I know that you are sad. Let us sing the calm down song!" "How do I feel" game: • Two to three children in a group and role-play to wear a self-designed sad face mask representing their emotion, peer(s) tell what do they see and labels the emotion accordingly. For instance, a child wearing a big sad face mask, a peer will say, "I see your lip corner slight pull down, I know that you are unhappy."	a) AVIP storybook: Accept how classmates express their feeling b) The lyrics of V and CD song c) The music of V and CD song d) The traffic light emotion cards and the traffic light toy e) Sad emotion cards f) A magnet facial expression toy set g) 15 sets of a blank mask with hair and ear only along with Velcro taped eyes, noses, and mouths with its corner pull down.
4	Value classmate's strength and accept classmate's weakness	AVIP story: Value classmate's strength and accept classmate's weakness a) Recognize 1-2 strength of oneself and others, such as singing, calculating Maths, or academic. b) Identify when and how to admire others c) Response appropriately to other's praise.	Activities: a) Review singing the V song and CD song in a group setting b) Ask children to tell what is their strength in a group setting. c) Play the "I can do it" MTV and ask children to label the strength of the children in the video. Memory card game: a) Children take a turn to flip two cards to find a pair from a set of cards in a group setting b) Children practice admiring peer who has a strong memory and encouraging peer who has weaker memory.	a) AVIP storybook: Value classmate's strength and accept classmate's weakness b) The lyrics of V and CD song c) The music of V and CD song d) The traffic light emotion cards and the red, yellow, and green light toys e) The "I can do it" MTV f) Cards that represent different strength, such as sport, academic, singing, or drawing

				g)Ten pairs of emotion cards for the memory card game
S	**Theme**	**Learning Objective**	**Games/activities for skill practice**	**Materials**
5	Value classmate's strength and accept classmate's weakness	AVIP story: Value classmate's strength and accept classmate's weakness a)Recognize 1-2 weakness of oneself and others, such as weak in singing, attending, or academic. b)Identify when and how to encourage others to overcome a difficulty c)Response appropriate to other's encouragement	Activities: a)Review singing the V song and CD song in a group setting b)Ask children to tell what is their weakness in a group setting. c)Group drawing task: i) four to five children in a group to complete drawing a playground. ii) children practice coping with and assisting others to complete the task with peers. iii) practice to accept others who have weaker drawing skills and assist others. Memory card game: a)Children take a turn to flip two cards to find a pair from a set of cards in a group setting b)Children practice admiring peer who has a strong memory and encouraging peer who has weaker memory.	a)AVIP storybook: Value classmate's strength and accept classmate's weakness b)The lyrics of V and CD song c)The music of V and CD song d)The traffic light emotion cards and the red, yellow, and green light toys e)Cards that represent different weakness, such as sport, academic, singing, or drawing f) Ten pairs of emotion cards for the memory card game
6	Include every classmate with preferred or annoying behaviors	AVIP story: Include every classmate with preferred or annoying behaviors a)Recognize 1-2 self-preferred behavior of others, (e.g., caring, be polite, or be helpful) b)Recognize 1-2 other's preferred behavior c)Identify when and how to respond to other's good behavior d)Recognize that everyone's behavior can be liked or disliked. e)Learn to include peers who perform preferred behavior into the group.	Activities: a)Review singing the V song and CD song in a group setting b)Practice responding to other's liked behavior in a group setting, for instance, saying, "I see you helping others. I admire your good behavior." Roleplay game: a)Two to three children in a group and pick a card that shows a scene of good behavior, these children need to act the scene out (e.g. helping to tidy up or sharing toys). The rest of the class will say, "I see you sharing toys, well done (with a thumb up gesture)!" b)Children practice admiring peer who performed good behaviors	a)AVIP storybook: Include every classmate with preferred or annoying behaviors b)The lyrics of V and CD song c)The music of V and CD song d)The traffic light emotion cards and the red, yellow, and green light toys e)The scene cards that show different good behaviors, such as helping others, sharing toys, or lining up nicely

S	Theme	Learning Objective	Games/activities for skill practice	Materials
7	Include every classmate with preferred or annoying behaviors	AVIP story: Include every classmate with preferred or annoying behaviors a) Recognize 1-2 self-disliked behavior of others, (e.g., coughing without covering mouth, self-talking during the lesson, no eye contact during conversation) b) Recognize 1-2 other's disliked behavior c) Identify when and how to respond to other's annoying behavior d) Recognize that everyone's behavior can be liked or disliked. e) Learn to include peers who perform annoying (non-preferred) behavior into group.	Activities: a) Review singing the V song and CD song in a group setting b) Practice responding to other's disliked behavior in a group setting, for instance, saying, "You just forgot to cover your mouth when coughing, please stop doing that again and apologize." "Please stop hitting others. You will hurt him/her. Let us sing the CD song to calm down now." Roleplay game: a) Two to three children in a group and pick a card that shows a scene of annoying behavior, these children need to act the scene out (e.g., suddenly scream during class). The rest of the class will say, "You just make a loud voice, it hurts my ear, please stay quiet (with the index finger on the lips)!" b) Children practice reminding peer to stop performing annoying behaviors.	a) AVIP storybook: Include every classmate with preferred or annoying behaviors b) The lyrics of V and CD song c) The music of V and CD song d) The traffic light emotion cards and the red, yellow, and green light toys e) The scene cards that show different annoying behaviors, such as pushing, screaming, or talking to others without eye contact
8	Be a good friend/partner to each other	AVIP story: Be a good friend to each other a) Identify 2-3 qualities of a good friend, such as being helpful, polite, or thankful. The Friendship (F) song: a) Recognize 1-2 behavior to treat others as a friend b) Recognize 1-2 behavior that a friend will do to self c) Identify 1-2 expectation after treating others as friend d) Identify when and how to respond to other's friendly behavior e) Identify how to respond to others ignoring behavior after treating others as a friend	Activities: a) Review singing the V song with action in a group setting b) Practice singing the F song with the positive gesture, such as high five or thumbs up, in a group setting. Be a good friend game: • Children take a turn to look for a good friend behavior picture from a set of behavior picture cards, other children practice being a • good friend by providing praise or encouragement (positive feedback) to the child's correct or wrong choice, respectively.	a) AVIP storybook: Be a good friend to each other b) The lyrics of V song and F song c) The music of V song d) The music of F song (melody: If you are happy and you know it) e) The good friend cards that show different good behaviors, such as helping others to tidy up, sharing toys, or saying thank you

Note. AVIP = Accept, value, include, and partner intervention; S = session; V song = the value song; CD song = the traffic light calms down song; F song = the friendship song; MTV = Music television video. Adapted from "The Effects of AVIP Intervention on Peers' Social Acceptance and Mutual Friendship among Kindergarteners with or without Social Communication Disorder," by L. W. Cheng, V. Tsang, Y. Hsueh, S. K. Lo, K. Y. Fung and E. S. Chen, 2019, Manuscript submitted for publication.

The AVIP sessions. The AVIP intervention comprises eight weekly 30-minute-long sessions. For each session, there is a theme with several activities such as stories, games, songs, and skills. The AVIP session is delivered to the intervention class in the afternoon during the regular class time. In each session, the implementer reviews the song and theme from the previous session in the first 3 minutes, then uses the AVIP storybook (V-strategy) and song to introduce the new theme in 5 minutes. They are followed by two 10-minute periods for skill practice and interactive games. The implementer contrives a situation for children to practice the targeted skills with peers by using all four EBP strategies, namely, (i) scenario picture cards (V-strategy), (ii) theme song (A-strategy, P-strategy, and I-strategy), and (iii) praising or token economy system (A-strategy and V-strategy) to help children remember the steps of how to respond to others appropriately. Then, children are required to play an interactive game (I-strategy) with one partner to role-play and practice the target skills of the current lesson. After game playing, children are briefed with a conclusion as a reminder of the targeted skills and encouraged to apply the learned skills across people and settings in daily situations in the last 2 minutes. The AVIP intervention program curriculum progression is displayed in Table 2.

Table 2

The AVIP intervention program curriculum progression

W	Session Theme	Concept Introduction and conclusion (10mins)	Skill Practice (10 mins)	Interactive activities with peers (10mins)	Strategies (A, V, I, P)
1	Value every classmate	-AVIP story: Value every classmate -AVIP's V song	-practice providing positive feedback with the signs from the AVIP's V song	-games for children to provide positive feedback to peer's positive or correct choice.	A, V, I, P
2	Accept how classmates express their feeling	-a quick review of the previous session -AVIP story: Accept how classmates express their feeling -AVIP's CD song	-practice AVIP's V song and CD song -practice how to respond when seeing others being happy -practice providing positive feedback to peer in a group setting	-invite a peer to be a partner for role play -games for children to role-play with peers to express happiness in their way and responding to others' feeling	A, V, I, P
3			-practice AVIP's V song and CD song -practice how to respond when seeing others being sad -practice providing positive feedback to peer in a group setting	-invite a peer to be a partner for role play -games for children to role-play with peers to express sadness in their way and responding to others' feeling	A, V, I, P
4	Accept classmate's strength and value classmate's weakness	-a quick review of the previous session -AVIP story: Value classmate's strength and accept classmate's weakness -Watch "I can do it" MTV	-practice AVIP's V song and CD song -practice how to admire other's ability in a group -practice providing positive feedback to peer in a group setting	-invite a peer to be a partner for role play -games for children to role-play with peers and practice admiring peers' ability	A, V, I, P
5			-practice AVIP's V song and CD song -practice how to encourage peer to overcome their difficulties -practice providing positive feedback to peer in a group setting	-invite a peer to be a partner for role play -games for children to role-play with peers and practice encouraging peers to overcome their difficulties	A, V, I, P
6	Include every classmate with preferred or annoying behaviors	-a quick review of the previous session -AVIP story: Include every classmate with preferred or annoying behaviors	-practice AVIP's V song -recognize appropriate behavior that others would like to see -practice providing positive feedback to peer in a group setting	-invite a peer to be a partner for role play -games for children to role-play with peers and practice praising peers' appropriate behavior	A, V, I, P
7			-practice AVIP's V song -recognize inappropriate behavior that others would like to avoid -practice responding to others' inappropriate behavior	-invite a peer to be a partner for role play -games for children to role-play with peers and practice responding to peers' inappropriate behavior	A, V, I, P
8	Be a good friend to each other	-a quick review of the previous session	-practice AVIP's F song -Identify the appropriate behavior of treating a good friend -practice responding to others as a good friend	- game for children role-play with peers and act like a good friend with appropriate behaviors.	A, V, I, P

		-AVIP story: Be a good friend to each other -AVIP's F song	-practice inviting others to be friends		

Note. AVIP = Accept, value, include, and partner intervention; A strategy = affirmative responses; V strategy = visual support; I strategy = interacting with a peer; P strategy = prompting techniques; W = week; V song = the value song; CD song = the traffic light calms down song; F song = the friendship song; MTV = music television.

Five storybooks and three songs are developed to advocate the goodness of valuing, admiring, encouraging, accepting, and including each other in inclusive classrooms. The five AVIP storybooks are: (i) Value every classmate (for session 1), (ii) Accept how classmates express their feelings (for session 2 and 3), (iii) Value classmates' strengths and accept classmates' weaknesses (for sessions 4 and 5), (iv) Include every classmate with preferred or annoying behaviors (for sessions 6 and 7), and (v) Be a good friend to one another (for session 8). The three AVIP songs are: (i) the value song, (ii) the friendship song, and (iii) the traffic light calm down song. The actions (e.g., high five, thumbs up, or wave) included in the value song and friendship song were practiced with the session's activities and games.

Besides, the traffic light calm down song is an individual activity. It assists children to calm down by singing the song and breathing deeply when angry. First, a child will identify his or her anger and stick the "red" angry face onto the spot representing the child's emotion. Then the child will turn on the traffic light toy and sing the calm down song and practice deep breathing. After singing the song once, the child has to identify his or her emotion. If the child feels better than before, he or she changes the "red" angry face to a "yellow" smiley face and repeats singing the song and practices deep breathing. Afterward, the child can change the "yellow" smiley face to a "green" laughing face to represent feeling

much better. If the child still feels angry after these activities, the child can sing the song again and practice deep breathing until he/she feels calm.

The researcher implements each AVIP session following the teaching plan presented in Table 1. For each session, the class teachers help run the AVIP activities and games. They also apply the AVIP strategies in their routines along with the classroom reward system. The teachers will praise (i.e., positive feedback) and record children's friendly behavior, for instance, being supportive, helpful, or respectful to classmates on the weekly classroom reward chart as an immediate reinforcer. The fun stickers act as the backup reinforcer (i.e., a delayed weekly reward) for the winning team. Every child in the winning team will receive a fun sticker at the end of each AVIP session according to the teachers' record on the reward chart for their past week's performance. The reward chart also represents indirect monitoring of the involvement of the teachers in applying the AVIP strategy (i.e., providing positive feedback). The AVIP storybook, emotion picture cards, calm down system (including the calm down song lyric cardboard, traffic light emotion cards, and the traffic light toy), song lyrics, and picture cards related to the weekly theme will be displayed in a particular spot in the classroom as visual support for children to use and review.

Fidelity of the AVIP Intervention program. The literature in the previous section indicated that EBP strategies are reliable and valid to enhance intervention effectiveness. In fact, the four EBP strategies (i.e., A = affirmative responses; V = visual support; I = interacting with a peer; P = prompting techniques) applied in the current intervention are easy to understand and implement, and all of the teachers in the present study mastered the application of the four EBP strategies in their daily practice. Therefore, the chosen four EBP strategies support the social fidelity for the current study. In order to enhance the effectiveness of the AVIP intervention program, the researcher encourages the teachers to

apply the AVIP intervention program principles to their school routines and class activities outside the AVIP sessions to promote generalization of the social inclusion skills in children. For example, the teacher can give positive feedback (A-strategy) for a child who encouraged a peer to finish a written task. The teacher can also provide a gesture prompt (P-strategy) for children to look at the visual cue (V-strategy) of how to regulate their emotions. Besides, the teacher can also employ the I-strategy of peer learning by arranging a peer to be the role model for a child with weaker skills during their regular lessons daily. Moreover, teachers' implementation of the AVIP strategies was indirectly monitored with the classroom reinforcement system.

The classroom reinforcement system is an interdependent group contingent 'token economy system,' namely classroom reward chart (Appendix L), which will also be used to record all positive interactions among children in inclusive classrooms, such as assisting and encouraging others to overcome difficulties and show understanding of others' inappropriate behavior, providing positive feedback to peers. The winning group will receive the privilege of the priority to play in a particular toy corner for days with the arrangement by teachers. Thus, the teacher's positive feedback is essential to affirm and praise the proper attitude or behavior of children to show their acceptance to each other. Besides, the reward system displayed in the classroom acts as a visual cue to remind children of their performance. It also works as a motivation for keeping the positive attitude of the children to achieve the intervention objective goals. The next chapter describes the research design and methodology, such as procedures, methods, and assessment measure, including all of the dependent variables in the current study.

Chapter 3: Research Design and Methodology

Research Questions

The goal of the current study is to investigate the effectiveness of a novel treatment named AVIP intervention. First, the AVIP intervention designed for children with and without SCD was developed and delivered to the whole class in a preschool setting. Second, the performance data between participants in the experimental class and the control class were compared to detect significant effects, if any, in the following four aspects: (i) social acceptance level; (ii) mutual friendship, (iii) social interactions, and (iv) social inclusion status among children. The hypotheses for this study were:

Hypothesis 1 regarding Social Acceptance Level (SAL): (a) the experimental class participants will report higher post-intervention SAL than the control class participants; and (b) the participants with SCD will report higher post-intervention SAL than the participants without SCD.

Hypothesis 2 regarding Mutual Friendships (MF): (a) the experimental class participants will gain more post-intervention MF than the control class participants; and (b) the participants with SCD will gain more post-intervention MF than the participants without SCD.

Hypothesis 3 regarding Social Mutual Interaction (SMI): (a) the experimental class participants will gain more post-intervention SMI than the control class participants; and (b) the participants with SCD will gain more post-intervention SMI than the participants without SCD.

Hypothesis 4 regarding Social Inclusion Status (SIST)*:* (a) The experimental class participants will report a higher post-intervention social inclusion status score than the

control class participants; (b) the participants with SCD will gain a higher post-intervention SIST score than the participants without SCD.

Research Method

Quantitative Research Method. Quantitative analysis was used to investigate the data collected from a teacher-rated questionnaire (i.e., SIST SCALE), direct observation for the number of mutual interactions among children, and the number of nominations from the peer interview from different preschools. The time sampling observation data were categorized into one of the two engagement types (i.e., positive or negative) aside from noting the occurrence of interactions and the status of interaction partners. The interview data were analyzed in the form of the social preference and social influence score, and the target sociogram was applied to display the social network and mutual friendships among children.

Analytic Strategy. First, the baseline equivalence of the variable across groups was examined by the univariate analysis of variance (ANOVA). Second, the differences of the variables among conditions was tested with mixed measure ANOVAs (i.e., 2 x 2 x 2 ANOVA) with time (pre- vs. post-) as a within-subjects factor, and treatment (AVIP intervention vs. control: regular class activities) and diagnosis type (SCD vs. non-SCD) as between-subjects factors. Follow-up two-way ANOVA for the factors with interacting effect, and independent samples *t* test or paired-samples *t* test was then conducted to further analyze the between-subject change before and after the intervention.

Research Design

This study used a quasi-experimental research design. In this experimental study, the independent variables are the AVIP intervention. The dependent variables are the score of

social acceptance level and social inclusion status, and the number of mutual friendships and mutual social interactions. The class from each preschool was randomly assigned to the AVIP intervention program (i.e., the intervention class) or regular class activities (i.e., the control class). Each session of the AVIP intervention had a theme, in which there were activities such as interactive games, stories, songs, and skill practice. The regular class activities (i.e., the control variables) in the control class included interactive games, such as playing "Duck Duck Goose," "Simon Says," or "Musical Chairs." The themes and components of the AVIP intervention are presented in Table 1, and the curriculum progression is displayed in Table 2.

Assessment Measures

Initial SCD screening for participants. A social communication screening assessment tool, the simplified second edition of Social Communication Behavioral Assessment (SCBA) was used to screen all children participants for social communication deficits. SCBA was initially designed for professionals and educators to identify social communication deficits (SCD) in young children with Autism (SAHK, 2014). The SCBA simple version contains 34 items extracted from the five sections in the standard version, which include (i) the basic ability to interact with others, (ii) mutual interaction, (iii) social-emotional skills, (iv) building relationship skills, and (v) specific behavior. The score of the screening assessment was divided into two parts: if a child scores less than 15 points in part 1 and scores 2 or more points in part 2, the social development of the child is below standard and needs extra attention from a teacher or therapist to assist the child to advance his or her social development. Otherwise, the development of the social communication skills of the child achieves the standard. Although SCBA was designed to assess children with ASD, research found that the majority of children with ASD have impediments in regard to social

communication (Ho & Lam, 2006; White et al., 2007) while children with SCD exhibit difficulties in the usage of language to communicate and interact socially with peers, such as taking turns and initiating to join in playing with peers. It is possible that children not having ASD also display social and communication deficit behaviors and have challenges to be socially included in inclusive settings. Research has also found that children diagnosed with Attention-Deficit/Hyperactivity Disorder (AD/HD), development delay (DD), and language delay (LD) also encounter many challenges in social communication (DuPaul et al., 2001; Martin-Denham, 2015). They also exhibit poor social competence compared with their neurotypically developing (NTD) peers and have difficulties in establishing mutual friendships (Guralnick, Neville, Hammond, & Connor, 2007; Merrell & Wolfe, 1998; Stanton-Chapman & Snell, 2011). Hereafter, children with the aforementioned disabilities are referred to as children with SCD in this study.

In the enrolment stage of this study, teachers were asked to rate the children participants with the SCBA assessment form (see Appendix A) to screen whether the young children in the preschool have SCD or not. Children scoring less than 15 points in part 1 and who score 2 or more points in part 2 were allocated to the SCD group; children scoring 15 or more points in part 1, and less than 2 in part 2 were allocated to the non-SCD group.

Pre- and post- data were obtained from three different sources for all children participants, namely the teacher-rated SIST SCALE scores, children's peer nomination interview, and direct observation. The measures selected were designed to evaluate the social acceptance level (SAL), mutual friendships (MF) and mutual social interaction (MSI), and the social inclusion status (SIST) for all children participants in the inclusive preschool settings.

Sociometric measures by Individual Child Interviews. A peer nomination interview was used to assess the social acceptance level and the existence of mutual friendship, as it is a frequently used scale for collecting sociometric data for the social relationship among young children (Asher, Singleton, Tinsley, & Hymel, 1979). Per group, the social acceptance level and mutual friendships were represented by social acceptance level's table and sociogram's figure, respectively. The peer nomination interviews took place in a separate quiet room or corner of the classroom of the preschool for the pre- or post-intervention period. Each child interview took about 8 minutes to complete. The interviewer presented an A3-sized colored printout that contained all the children's photographs in the size of 3.5x4.5 cm (see sample in Appendix B); the resolution of the picture was high enough for the children to recognize their classmates. The children were required to respond to two questions: "which three peers in the classroom do you like to play with most?" and "which three peers in the classroom do you like to play with least?" and provide the reason for their choices. During the assessment, the experimenter asked children to mention the name of the classmate to assure they could recognize their classmate in the picture. If the child still could not recognize or know the classmate, the rating of the classmate was coded as missing (Endedijk & Cillessen, 2015). All children in the current study were able to mention the name of their classmates correctly. The interviewer then marked down their responses on the interview record form (see Appendix C). The inter-rater consistency reached 98.3%, revealing good reliability among the interviewers.

Social Acceptance Level (SAL). The peer's social acceptance level was reflected by the *social preference* and *social influence scores* according to the number

of times children were chosen as being liked most or least from the nomination interview. By referring to the past studies, the standard scores for each child for being liked most and least were computed, and the formulas are shown below:

$$Z_{Child_{being\ liked\ most}} = \frac{Child_{being\ liked\ most} - Mean_{being\ liked\ most}}{Standard\ Deviation_{being\ liked\ most}} \quad (1)$$

$$Z_{Child_{being\ liked\ least}} = \frac{Child_{being\ liked\ least} - Mean_{being\ liked\ least}}{Standard\ Deviation_{being\ liked\ least}} \quad (2)$$

where $Z_{Child_{being\ liked\ most}}$ is the standard score for *being liked most,* $Z_{Child_{being\ liked\ least}}$ is the standard score for *being liked least,* $Child_{being\ liked\ most}$ is the child's score for *being liked most*, and $Child_{being\ liked\ least}$ is the child's score for *being liked least* (Cheng, Tsang, Hsueh, Fung, & Chen, 2019b; Monchy, Pijl, & Zandberg, 2004).

Furthermore, the scores for *social preference* (SP) and *social influence* (SI) were computed and the formulas are shown below:

$$SP\ score = Z_{Child_{being\ liked\ most}} - Z_{Child_{being\ liked\ least}} \quad (3)$$

$$SI\ score = Z_{Child_{being\ liked\ most}} + Z_{Child_{being\ liked\ least}} \quad (4)$$

where $Z_{Child_{being\ liked\ most}}$ is the standard score for *being liked most,* while $Z_{Child_{being\ liked\ least}}$ is the standard score for *being liked least.* Based on the SP and SI scores the children were divided into the sociometric categories of *popular*, *rejected*, *neglected*, *controversial*, and *average* according to the procedures described by Coie, Dodge, and Copotelli (1982). The classification rules are presented in Table 3. These rules show that a popular child, for instance, is liked by the classmates more than average (standardized score for *being liked most* is above 0), is liked least by the classmates less than average (standardized score for *being liked least* is under 0), and is

mentioned much more as 'liked most' than 'liked least' (social preference score above 1). The number of children grouped in various sociometric categories reflecting their social acceptance level are presented regarding their SP and SI score.

Table 3

Classification rules of sociometric categories

Category	Social Preference score	Social Influence score	Standard score 'being liked most'	Standard score 'being liked least'
Popular	>1		>0	<0
Rejected	<-1		<0	>0
Controversial		>1	<0	<0
Neglected		<-1	>0	>0
Average	*	*	*	*

Note. * = Scores not belonging to the other categories. Adapted from "Discrepancies in judging social inclusion and bullying of pupils with behavior problems," by M. D. Monchy, S. J. Pijl, and T. Zandberg, 2004, *European Journal of Special Needs Education*, *19*, p. 320. Copyright 2004 by Routledge Taylor and Francis Group.

Mutual Friendships (MF). Target sociograms were generated by the Development (2019) computer program providing an overall picture of the social relationships among children in each preschool. There are two kinds of social relationship: (i) mutual friendships (i.e., two-way nomination) that was shown as a purple line segment connecting two nodes, in which two children nominated each other, namely a pair (Development, 2019); and, (ii) triangular relationship that was shown as a triangle connecting three nodes (please refer to the later section in Figure 6 in the S2-Post AVIP intervention program), in which child 1, 2, and 3 nominated one another as a 'subgroup' (Development, 2019). Any child located in the periphery area outside the biggest circle had no relationship with anyone, namely an 'isolated member' (Pijl et al., 2008). Each node on each target sociogram represented one

participating child labeled with their ID and the number of positive one-way nomination. A pink thick circular node represents a girl; a blue thin circular node represents a boy. A node with an inside square represents a child with SCD, and a node without an inside square represents a child without SCD. For instance, in preschool A, the pink thick circular node with an inside square (i.e., ID#1028) located outside the outer most circle on the right bottom corner represents a girl with SCD; the blue thin circular node (i.e., ID#1007) located in the center circle represents a boy without SCD.

The position of each child in each target sociogram was decided by the frequency of the one-way positive nomination from the individual child interviews. The number displayed on the inner left-hand side of each circle represented the frequency of the one-way nomination. A node located in the space between two circular lines represents their total one-way nomination from peers. For example, in preschool A, a pink thick circular node with an inside square (i.e., ID#1014) located between circles 2 and 3 on the left-hand side of the sociogram figure represents a girl with SCD receiving two positive one-way nominations from peers who do not have any mutual friends with others. Another example is the blue thin circular node without an inside square (i.e., ID#1007) located inside the centermost circle which represents a boy without SCD receiving eight positive one-way nominations from peers and who has two mutual friendships with peers. All of the sociometric data for the experimental class (preschool A, n=31, preschool B, n=35) and control class (preschool C, n= 28, preschool D, n=34) were analyzed using a computer program (Development, 2019) and SPSS 25.

Mutual Social Interaction (MSI). Direct observation was applied to record the frequencies of social interaction among children. The observers collected the children's interaction and visual attention data during free-choice play, namely freeplay (FP) and physical education (PE) period at each preschool. The observers watched one targeted child for 10 minutes and recorded his/her interaction with any other children on the observation form (see Appendix E) in the classroom. Codes were adapted from the report of Vaughn et al. (2009) for recording the interaction episode with the affective valence (i.e., positive or negative). See Appendix D for the operational definitions of all codes and further examples of one MSI.

All children were observed either in-vivo or from the recorded videos during PE and FP for the pre- or post-intervention period. The observation scores were the total frequencies of positive and negative child-child mutual social interactions initiated by either the target child or peers; and the scores were converted into rates (per minute) and standardized within the classroom to adjust for the possibility of child absences and differences in the number of observational rounds across preschools (Shin, Kim, Goetz, & Vauaghn, 2014). The standardized gain scores of the positive and negative mutual interactions among the children were calculated by subtracting the post-intervention observation score from the pre-intervention observation score.

Social Inclusion Status (SIST). A teacher-rated scale, namely the Social Inclusion Status Scale (SIST SCALE) (see Appendix F), was used to evaluate the social inclusion status for children in the inclusive setting; the SIST SCALE consisted of 15 items assessing the SIST SCALE in four social dimensions: (i) peer acceptance, (ii) mutual friendship, (iii) participation, and (iv) self-perception; all survey questions utilized a 4-point Likert scale (0 = never (0%); 1 = rarely (<50%); 2 = sometime (50-80%); 3 always (>80%)) (Cheng, Cheung, Tsang, Lo, & Sam, 2019a).

The SIST SCALE was developed by the team of Cheng (2019a) by referring to the recommendation based on Koster et al.'s study (2009) to embrace four social dimensions: (i) peer acceptance, (ii) mutual friendship, (iii) participation and (iv) self-perception to assess the social status of children in an inclusive education setting. The 15 items of the SIST SCALE adhered to the above four dimensions, and the description of the four dimensions of the SIST SCALE is displayed in Table 4. The content of the items was mainly based on literature and partly on the research and clinical experience of the researchers who had analyzed the social dimension in inclusive education for many years. For instance, item-2 "Respond to others' greeting" in $Factor_{Accept}$ was adapted from the Social Communication Behavioral Assessment (SCBA) (SAHK, 2014); item-6 "Recognize the capabilities of oneself " in $Factor_{Value}$ was adapted from SPQ (Koster et al., 2009); item-9 "Correctly respond to the classroom signs given by others" in $Factor_{Include}$ was adapted from Assessment of Social and Communication Skills for Children with Autism (ASCS) (Quill, Bracken, & Fair, 2000); item-13 "Identify the appropriate behavior of treating a good friend" in $Factor_{Partner}$ was adapted from ASCS (Quill, Bracken, & Fair, 2000; Tsang and Cheng, 2017). Thus, the team of Cheng (2019a) revealed a good model fit of the SIST Scale and suggested that the SIST Scale is acceptable for use to measure social inclusion among the preschool population. Moreover, the internal consistency of the SIST Scale was good, and the value of Cronbach Alpha values was greater than 0.877.

Table 4

Description of the four dimension scales for the SIST SCALE

Scale name	Scale description	Sample item	Koster et al.'s dimension
Accept	The extent to which students actively interact and participate in peers groups/activities	Proactively greeting others (+)	P
Value	The extent to which students recognize self-value and have social self-competence	Shows appreciation of others' strengths (+)	S
Include	The extent to which students accept peers to groups	Shows understanding of others' inappropriate behavior (+)	PA
Partner	The extent to which students having a mutual friendship	Invite others to be friends (+)	MF

Note. P = participation; S = self-perception; PA = peer acceptance; MF = mutual friendship; all items are scored 0, 1, 2, and 3, respectively, for the responses of never (0%), rarely (<50%), sometime (50-80%), and always (>80%). Adapted from "Can social inclusion be evaluated? An investigation of the psychometric properties for the Social Inclusion Scale of pre-schoolers," by L. W. Cheng, R. Y. Cheung, V. Tsang, S. K. Lo, and K. Sam, 2019. Manuscript submitted for publication.

Moreover, the factor analysis of the SIST SCALE is presented in Figure 4. The fitness indices of Chi-Square/df = 1.671, RMSEA = 0.073, NFI = 0.939, TLI = 0.967, CFI = 0.974 and SRMR = 0.0326 (>3.84, <0.08, >0.90, >0.90, >0.90, and <0.08). All fitness indices of the SIST Model achieved the level of acceptance with good construct validity. Thus, the team of Cheng (2019a) revealed a good model fit of the SIST SCALE and suggested that the SIST SCALE is acceptable for use to measure social inclusion among the preschool population. Moreover, the internal consistency of the SIST SCALE was good and the value of Cronbach Alpha values was greater than 0.877.

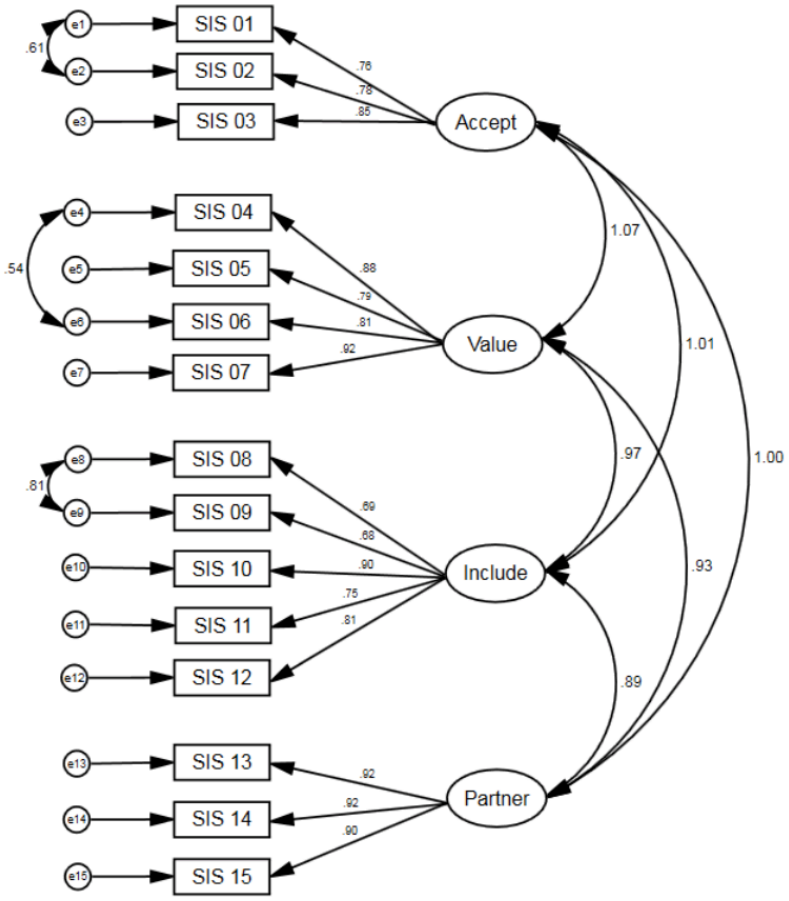


Figure 4. The factor analysis of the Social Inclusion Status Scale model

Note. The circle on the left denotes uniqueness; rectangles in the middle denote each question on the scale; ovals denote four different factors; arrows denote a relationship; SIS01: Proactively greeting others; SIS02: Respond to others' greeting; SIS03: Encourage others to overcome their difficulties; SIS04: Recognize the abilities of others; SIS05: Provide help and support when seeing others expressing negative emotions and inappropriate behavior; SIS06: Recognize the capabilities of oneself; SIS07: Shows appreciation of others' strengths; SIS08: Correctly applies the classroom signs to redirect others' behavior; SIS09: Correctly respond to the classroom signs given by others; SIS10: Proactively provide positive feedback to others; SIS11: Identify the intention of others' behavior; SIS12: Shows understanding of others' inappropriate behavior; SIS13: Identify the appropriate behavior of treating a good friend (such as, companionship/playing together/hanging out); SIS14: Treating others as one would a good friend; SIS15: Invite others to be friends. Adapted from "Can social inclusion be evaluated? An investigation of the psychometric properties for the Social Inclusion Scale of pre-schoolers," by L. W. Cheng, R. Y. Cheung, V. Tsang, S. K. Lo, and K. Sam, 2019. Manuscript submitted for publication.

Teachers were asked to rate each child for the pre- or post-intervention period, and no missing record was found. The SIST SCALE scores were the sum of all rated items according to the ratio of the factor score obtained from the SIST study (Cheng et al., 2019a). The standardized gain scores of the SIST SCALE scores among the children were calculated by subtracting the post-intervention SIST SCALE scores from the pre-intervention SIST SCALE scores.

Subject Recruitment

Preschoolers. A total of 135 children aged from 3 years 9 months to 6 years 11 months old (at the time of enrollment) were recruited from four Kindergarten-cum-Child Care Centers (KGCs) distributed in four districts of Hong Kong. One class of children and their teachers from each preschool participated in the current study. All students were screened with the social communication assessment tool for children with Autism (SAHK, 2014) and divided into two groups as: (1) having SCD if their $score_{part\ 1}$ was less than 15 and $score_{part\ 2}$ was more than 2, and (2) not having SCD (non-SCD) if their scores fell outside of the range for the SCD group. Children were included in this study only if they (i) had SCD with or without other comorbid diagnosis of special needs, or (ii) were NTD without SCD. Seven children were excluded from this study as their screening scores indicated that they did not have SCD although they had other diagnoses of special needs (i.e., Developmental Delay or Language Delay) (see Figure 4). As a result, a total of 128 preschoolers attending full-day preschool classes participated in the current study.

Teachers. A total of 14 teachers were recruited from the participating preschools. Teachers were included in this study only if they (i) were teaching in an

inclusive preschool, (ii) had certified teacher qualifications, (iii) had been teaching the participants over the past six months. Only one teacher was excluded as she was working as an intern for her certificate in education (see Figure 5) and did not meet criteria (ii) and (iii). As a result, a total of 13 full-time teachers working in the preschool class participated in the current study.

The participants are categorized by class level randomly into the experimental condition (n=66; SCD=29, non-SCD=37) or control condition (n=62; SCD=25, non-SCD=37). The flow of participants of the current study is illustrated in the chart presented in Figure 5.

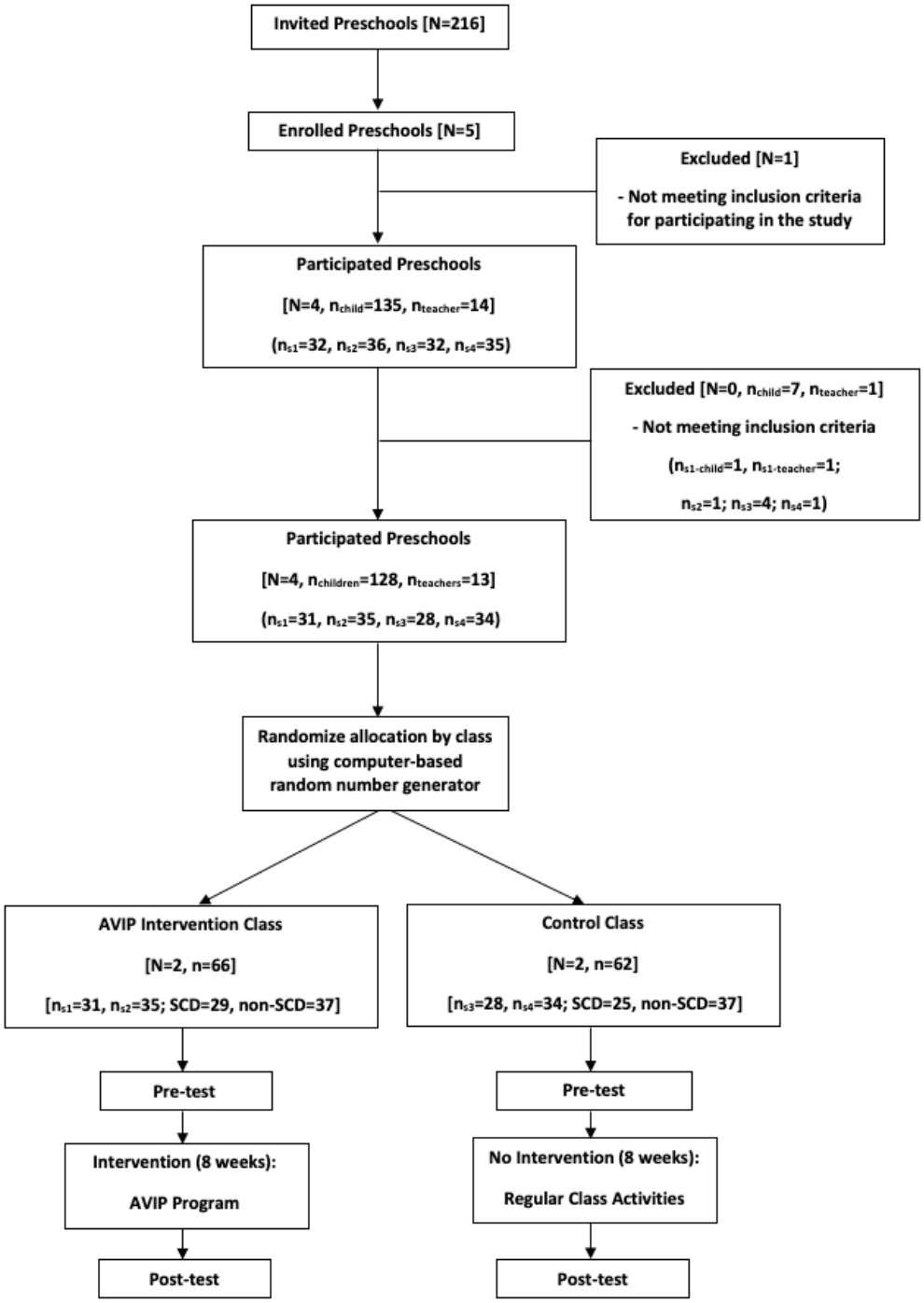


Figure 5. The study flowchart of participants' allocation

Note. AVIP = Accept, Value, Include, and Partner; N = number of participated preschool; n_{child} = number of child participants; $n_{teacher}$ = number of teacher participant; $n_{s1\text{-}child}$ = number of child participant in preschool 1; $n_{s1\text{-}teacher}$ = number of teacher participant in preschool 1; n_{s1} = number of participants from preschool 1; n_{s2} = number of participants from preschool 2; n_{s3} = number of participants from preschool 3; n_{s4} = number of participants from preschool 4.

In order to assure the reliability of the Social Inclusion Status Scale (SIST SCALE), teachers were appointed to describe children's social inclusion behaviors with the social inclusion survey since all the children in this study were preschoolers, who were not yet ready to evaluate themselves reliably regarding the social inclusion situation in inclusive classrooms. Thus, the teachers' ratings of children's social inclusion behaviors were collected and analyzed for the pre- and post-intervention periods.

Implementation Plan and Schedule

Procedures. The social inclusion intervention program was advertised through a social inclusion seminar in July 2017 by the Department of the Centre for Special Educational Needs and Inclusive Education (CSENIE) at the Education University of Hong Kong (EdUHK). After ethical review approval was obtained from the EdUHK, the researcher sent the invitation letter and consent form (see Appendix G) to 216 "Integrated Program" Kindergarten-cum-Child Care Centers (IP-KGC; named as a preschool in the current study) in Hong Kong in August 2017. Upon receiving the enrollment and consent from the participating preschools, the inclusion criteria for participating preschool (i.e., IP-KGC) were examined. First, each IP-KGC had to have (a) six or more children diagnosed with disabilities (e.g., AD/HD, mild ASD, DD, or LD) in a K2 or K3 classroom, and (b) not be participating in another research study currently. One of the five enrolled preschools failed to meet the above criteria. Only four IP-KGCs located in four different districts of Hong Kong joined the current study. Finally, four classes of pre-schoolers with one class of children (either K2 or K3) from each participating preschool, were recruited for this study (see Figure 4).

Then the teachers helped to distribute the parent invitation and consent form (see Appendix G) for their students to participate in the current study in September 2017. Moreover, the teacher was asked to complete the SCBA simple version (SAHK, 2014) for each child in their class after they collected the signed parental consent form. According to their scoring results, the children were divided into either the SCD or non-SCD group. The four classes were randomly assigned to the experimental (preschools A and B) and control class (preschools C and D) by a computer-based random number generator and executed by a postgraduate student not involved in the current study to ensure equality of allocation to each group.

Each class consisted of children with and without SCD. In order to introduce and explain the plan of the AVIP intervention program to the teachers and principal, a pre-intervention meeting was arranged for each preschool. Pre- and post-intervention assessments were conducted in October 2017 and January 2018, respectively, and the baseline data for all participants were collected before implementing the intervention to the intervention class. Furthermore, the participating children in both intervention and control class were requested to participate in the sociometric assessment named the peer nomination interview before (pre-intervention) and immediately after the program (post-intervention) on-site in the preschool where the program was implemented.

Children participants were directly observed in the preschool classroom with two 360-degree camcorders on a tripod. The researcher recorded child-child interaction continuously for 10 minutes in-vivo or by reviewing the recorded videos. If the target child left the classroom to use the washroom or run an errand for the teacher, the observation time was extended according to the missed time when the child returned to the classroom.

Setting. All procedures were completed within the participants' school environment. The peer nomination interviews were administered in a separate quiet room, corner of the classroom, or a quiet corner outside the classroom on the preschool campus (e.g., treatment room). The SCBA and the SIST SCALE were completed by the teachers in their own arranged time. Observation was completed within the child's classroom during freeplay (FP) time of the school day except during the physical education (PE) session. Observation during PE sessions was completed in the preschool's indoor playground, gross motor area, activity room, or classroom. The principal investigator administered all direct observations in both PE and FP conditions. All AVIP sessions were implemented in the participants' classroom, a separate activity room, or indoor playground in the preschool.

Tools and Materials. The materials needed for peer nomination interviews were an A3-sized colored printout that contained all the children's photographs in the size of 3.5x4.5 cm for the children to recognize their classmates (see Appendix B), and an interview record form (see Appendix C) to record the children's responses. Besides, the material needed for direct observation was the observational record form (see Appendix E), and two 360-degree camcorders, two tripods, and a one-minute interval timer. For the AVIP intervention program, the required materials including (i) lesson plan in Chinese (see Appendix I), (ii) storybooks (see Appendix J), (iii) theme songs lyric (see Appendix K), and (iv) classroom reward chart (see Appendix L).

Reliability. Procedural and measurement reliability was completed for all measures. The Cronbach's alpha of the SIST SCALE was .97, which reflected excellent internal reliability. The inter-rater reliability among teachers was computed by SPSS software, and the value of the Intraclass Correlation Coefficient (ICC) of this study was .66 with $p < .001$. The interviewer then marked down their responses. The inter-rater reliability among three interviewers for the child nomination interview was 98.3%, revealing excellent reliability among raters.

Chapter 4: Data Analysis and Results

Baseline Equivalence

The univariate ANOVA test ensured the baseline equivalence of the variables across both groups. All variables of the between-subject variances were nonsignificant, $p > .05$. It suggested the baseline equivalence for all variables under study.

Descriptive Statistics for the Participants

The descriptive statistics including the sociodemographic characteristics for teachers and children participants are presented in Table 5. Among the 54 SCD children in the SCD group, 40 were boys and 14 were girls. Among them, seven of the SCD group had confirmed medical diagnoses by registered medical practitioners as having ASD, 16 DD, five ADD or AD/HD, one LD, three comorbid DD and LD, and 22 NTD. Among the 74 children in the non-SCD group, 31 were boys and 43 were girls. The average class size in this study was 32 children with a mean age of 4 years and 9 months (SD=0.68).

Table 5

Sociodemographic characteristics of the teacher and children participants

Participants characteristics / Type of Participants								
Teacher (N=13)	Preschool				Grade		Gender	
	A	B	C	D	K2	K3	Female	Male
	2	3	5	3	5	8	12	1
	Teaching Experience					Freq	%	
	1 to 5 year(s)					6	46%	
	6 to 10 years					3	23%	
	11 to 15 years					0	0%	
	16 to 20 years					2	15%	
	21 to 25 years					2	15%	
	Qualification in Education							
	Certificate					4	21%	
	Diploma					3	23%	
	Bachelor Degree					6	46%	
Children (N=128)	Preschool				Grade		Gender	
	A	B	C	D	K2	K3	Girl	Boy
	31	35	28	34	66	62	57	71
	Age (year-month)					Freq	%	
	3-9 to 3-11					13	10%	
	4-0 to 4-11					62	48%	
	5-0 to 5-11					47	37%	
	6-0 to 6-11					6	5%	
						M=4.93 (SD=0.68)		
	Grouping							
	SCD					54	42%	
	non-SCD					74	58%	

Note. SCD = social communication deficit; non-SCD = without social communication deficit; Freq = frequency; N = number of Participants.

Sociometric Results: Social Acceptance Level

Social preference and social influence scores. The collected sociometric data were analyzed by the computed *social preference* and *social influence* scores to reveal the social position for all children and children with and without SCD after the 8-week AVIP intervention program. The classification rules for the sociometric categories according to the *social preference* and *social influence* scores are presented in Table 3. Mixed measure ANOVAs with time (pre, post) as a within-subjects factor, treatment (AVIP intervention program, control), and diagnosis type (SCD, non-SCD) as between-subjects factors reported a nonsignificant interaction between these factors for both social preference and social influence scores, *p*s > .05. The statistical results of the social acceptance level from the sociometric data for children in terms of 'being liked most and least' of the pre- and post-intervention for the experimental and control classes are displayed in Table 6.

Table 6

Social acceptance level of children in sociometric categories in terms of being liked least for pre- and post-intervention

		Sociometric categories									
		Popular		Rejected		Controversial		Neglected		Average	
Children	Treatment	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
All (n=128)	AVIP (n=66)	13	16	15	10	10	7	13	15	15	18
	Percentage	20%	24%	23%	15%	15%	11%	20%	23%	23%	27%
	Control (n=62)	13	15	8	11	9	6	16	12	16	18
	Percentage	21%	24%	13%	18%	15%	10%	26%	19%	26%	29%
SCD (n=54)	AVIP (n=29)	2	5	12	8	1	3	8	7	6	6
	Percentage	7%	17%	41%	28%	3%	10%	28%	24%	21%	21%
	Control (n=25)	1	3	7	8	5	1	9	5	3	8
	Percentage	4%	12%	28%	32%	20%	4%	36%	20%	12%	32%
non-SCD (n=74)	AVIP (n=37)	11	11	3	2	9	4	5	8	9	12
	Percentage	30%	30%	8%	5%	24%	11%	14%	22%	24%	32%
	Control (n=37)	12	12	1	3	4	5	7	7	13	10
	Percentage	32%	32%	3%	8%	11%	14%	19%	19%	35%	27%

Note. All = with and without social communication deficit; SCD = with social communication deficit; non-SCD = without social communication deficit; Pre = pre-Intervention; Post = post-Intervention; AVIP = Accept, Value, Include, Partner intervention.

All Children. In the experimental class, the increments in $Popular_{group}$, $Neglected_{group}$, and $Average_{group}$ were 4%, 3%, and 4% respectively; the decrements in $Rejected_{group}$ and $Controversial_{group}$ were 8% and 4% after the AVIP intervention program. In the control class, the increments in $Popular_{group,}$ $Rejected_{group}$, and $Average_{group}$ were 3%, 5%, and 3% respectively; the decrements in $Controversial_{group}$ and $Neglected_{group}$ were 5% and 7% respectively after the no treatment period.

Children with SCD. In the experimental class, the increments in $Popular_{group}$ and $Controversial_{group}$ were 10% and 7% respectively; the decrements in $Rejected_{group}$ and $Neglected_{group}$ were 13% and 4% respectively; the change in $Average_{group}$ was zero after the AVIP intervention program. In the control class, the increments in $Popular_{group}$, $Rejected_{group}$, and $Average_{group}$ were increases of 8%, 4%, and 20% respectively; the decrements in $Controversial_{group}$ and $Neglected_{group}$ were both 16% after the no treatment period.

Children without SCD. In the experimental class, the increments in $Neglected_{group}$ and $Average_{group}$ were both 8%; the decrements in $Rejected_{group}$ and $Controversial_{group}$ were 3% and 13% respectively; the change in $Popular_{group}$ was zero after the AVIP intervention program. In the control class, the increments in $Rejected_{group}$ and $Controversial_{group}$ were 5% and 3% respectively; the decrement in the $Average_{group}$ was 8%; and no change in $Popular_{group}$ and $Neglected_{group}$ after the no treatment period.

Sociometric Results: Mutual Friendships

Mutual Friendship Scores. Mixed measure ANOVAs by time (pre, post) and treatment (AVIP intervention, control: regular class activities), and diagnosis type (SCD, non-SCD) were conducted to investigate the effect of the AVIP intervention program over time. It revealed a significant interaction effect between "time and treatment," $F(1, 124) = 4.74$, , $p < .05$, $\eta_p^2 = .04$ (see Figure 6); and "time and diagnosis type" $F(1, 124) = 5.08$, $p < .05$, $\eta_p^2 = .04$ (see Figure 7). There was no significant effect due to "time" alone. Follow-up two-way ANOVA suggested that the experimental class reported significantly higher mutual friendship scores than the participants from the control class, $F(1, 126) = 5.938$, $p = .016$, $\eta_p^2 = .05$. No differences were found between "treatment and diagnosis

type" across time, *p*s > .05. An independent samples *t* test showed that the experimental class gained significantly more mutual friendships than the participants in the control class after the 8-week intervention, $t(126) = 2.44$, $p < .05$. Other follow-up two-way ANOVA suggested that children with SCD reported significantly higher mutual friendship scores than the participants without SCD, $F(1, 126) = 5.05$, $p < .05$, $\eta_p^2 = .04$. An independent samples *t* test showed that the children with SCD gained significantly more mutual friendships than the participants without SCD after the 8-week intervention, $t(126) = 2.25$, $p < .05$.

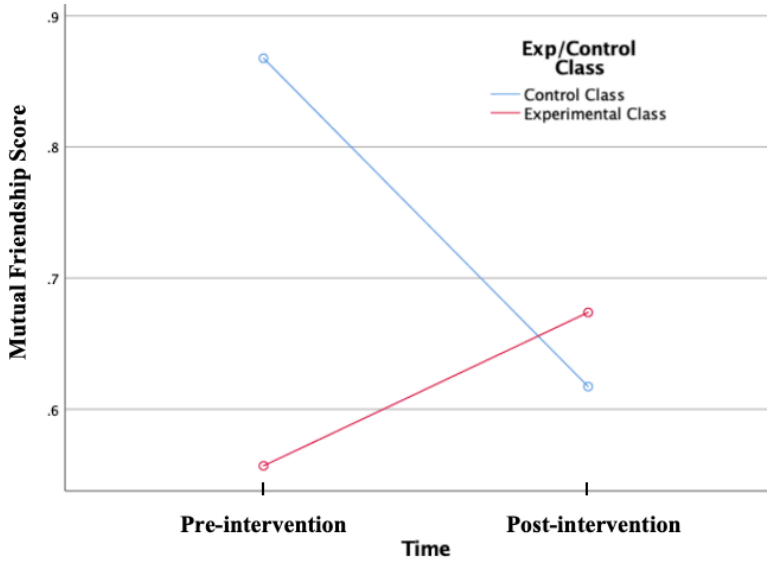


Figure 6. Mutual friendship score across treatments over time

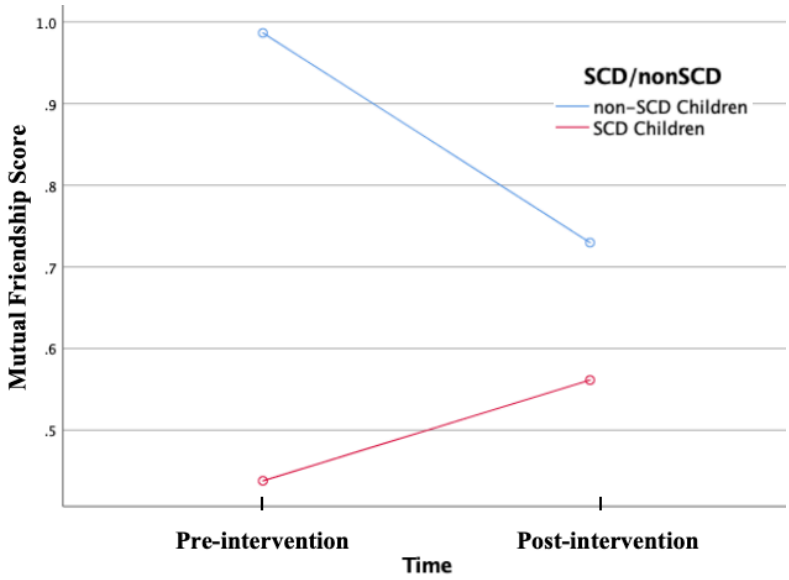


Figure 7. Mutual friendship score across diagnosis types over time

Pre-post comparison between sociograms. The collected sociometric data were drawn on a target sociogram to reveal the mutual friendships for children with and without SCD after the 8-week AVIP intervention program (see Figure 8). In the target sociogram, a circle with an inside square represents a child with SCD, a circle without an inside square represents a child without SCD, each purple line segment represents two-way nomination (i.e., one mutual friendship) between two children.

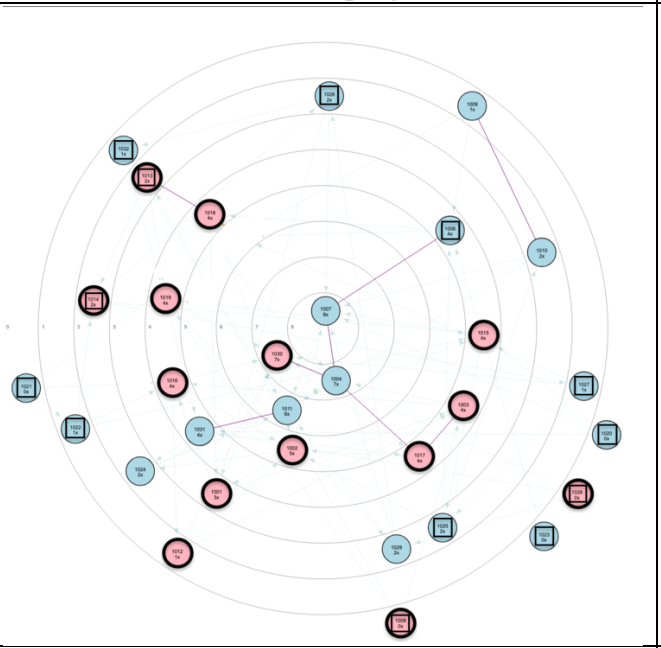
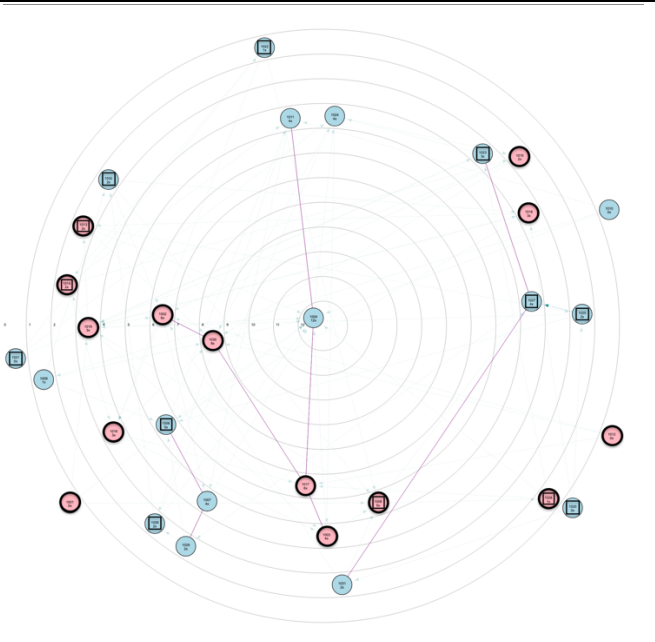
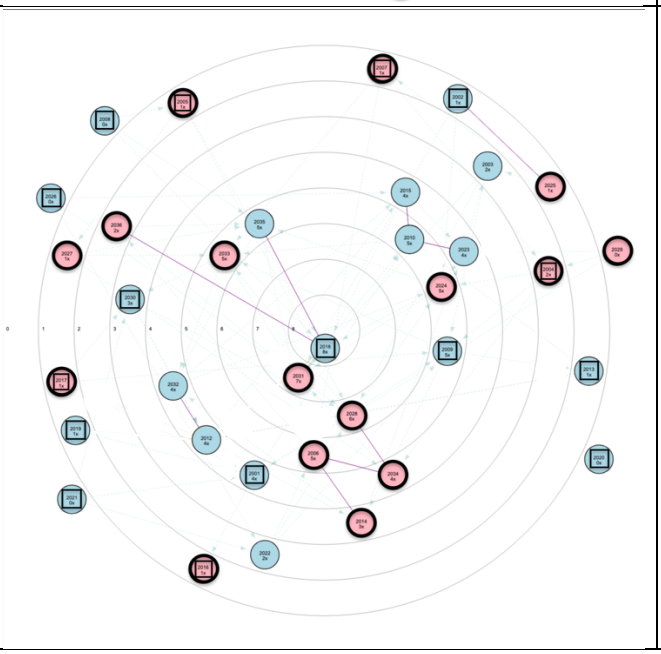
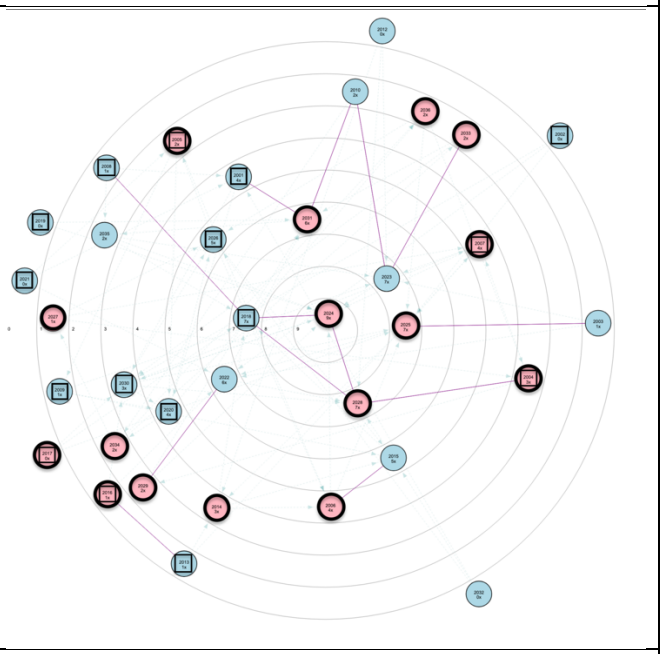
	Sch	Pre AVIP intervention program (Baseline)	Post AVIP intervention program
Experimental Class	A		
	B		

Figure 8. Two-way nomination and social position of children in a Target Sociogram

Note. The bold circular pink node denotes a girl; The thin circular blue node denotes a boy; The node with an inside square denotes a child with social communication deficit; The node without inside square denotes a child without social communication deficit; The purple line segment denotes a two-way nomination; AVIP intervention = Accept, Value, Include, Partner Intervention; Sch = preschool; A = preschool A; B = preschool B.

(continued)

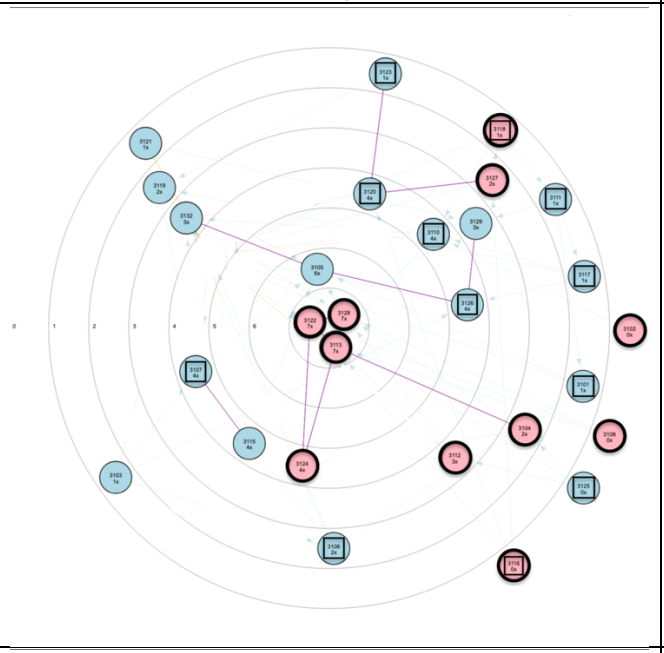
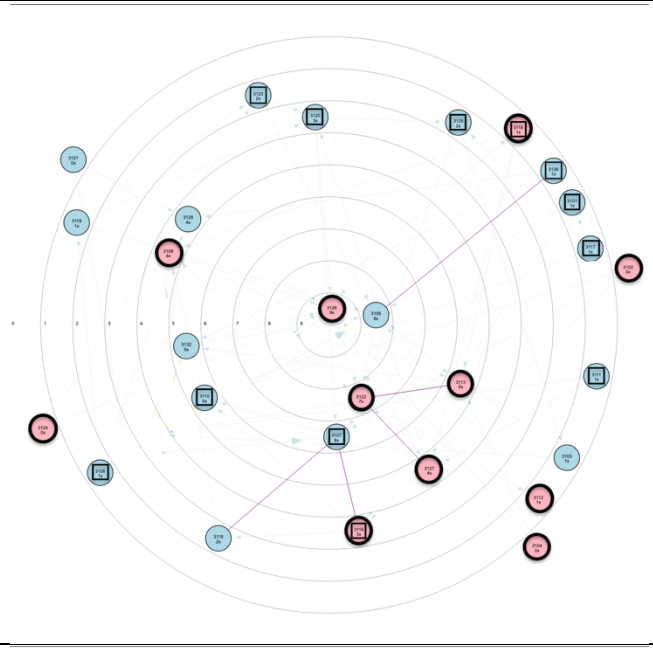
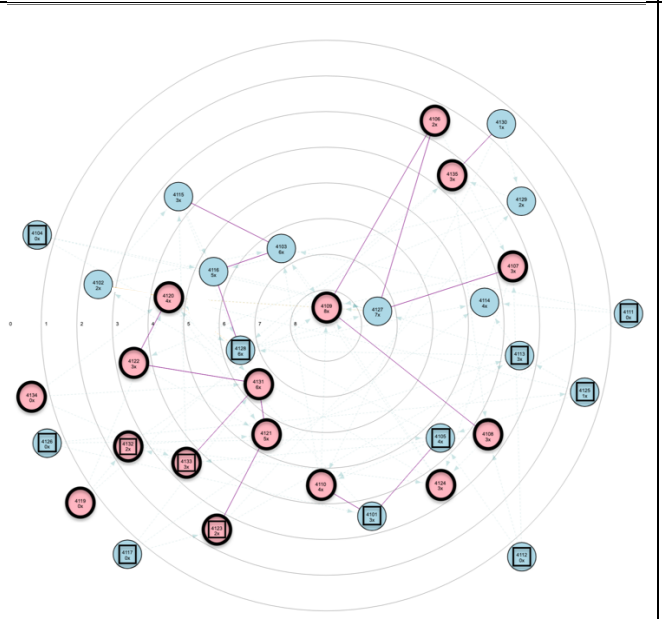
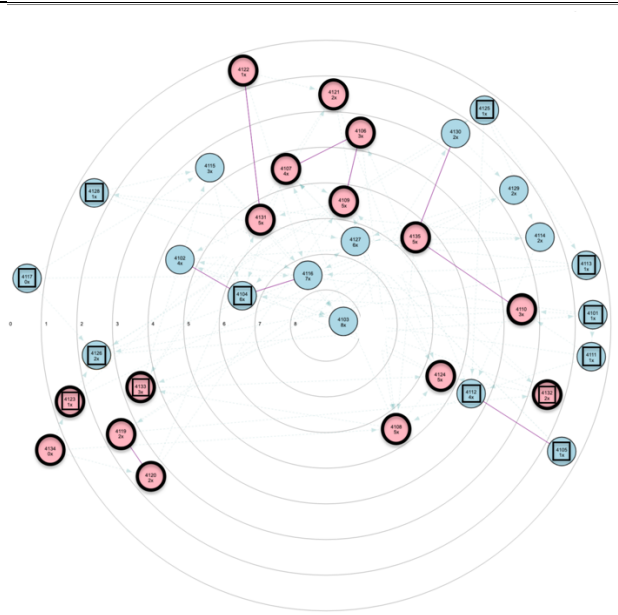
	Sch	Pre No Intervention (Regular Class Activities)	Post No Intervention (Regular Class Activities)
Control Class	C		
	D		

Figure 8. Two-way nomination and social position of children in a Target Sociogram

Note. The bold circular pink node denotes a girl; The thin circular blue node denotes a boy; The node with an inside square denotes a child with social communication deficit; The node without inside square denotes a child without social communication deficit; The purple line segment denotes a two-way nomination; AVIP intervention = Accept, Value, Include, Partner Intervention; Sch = preschool; C = preschool C; D = preschool D.

The total number of mutual friendships rose from 17 to 22 in the experimental class and dropped from 26 to 14 in the control class. The frequency counts of the number of mutual friendships among children with and without SCD are displayed in Table 7.

Table 7

The frequency counts of the number of mutual friendships among children

	Experimental Class		Control Class	
Children	**Pre**	**Post**	**Pre**	**Post**
All	17	22	26	14
SCD – SCD	0	3	2	2
SCD – Non-SCD	5	6	8	4
Non-SCD – Non-SCD	12	13	16	8

Note. All = children with and without social communication deficit; SCD-SCD = mutual friendship between children with social communication deficit; SCD – Non-SCD = mutual friendship between children with social communication deficit and without social communication deficit; Non-SCD – Non-SCD = mutual friendship between children without social communication deficit; Pre = pre-Intervention; Post = post-Intervention.

The change scores (post- minus pre-intervention) for the number of mutual friendships (pairs) among the children are shown in the bar chart in Figure 9. A positive change score represents an increment, and a negative change score represents a decrement in the number of mutual friendships after the AVIP intervention program.

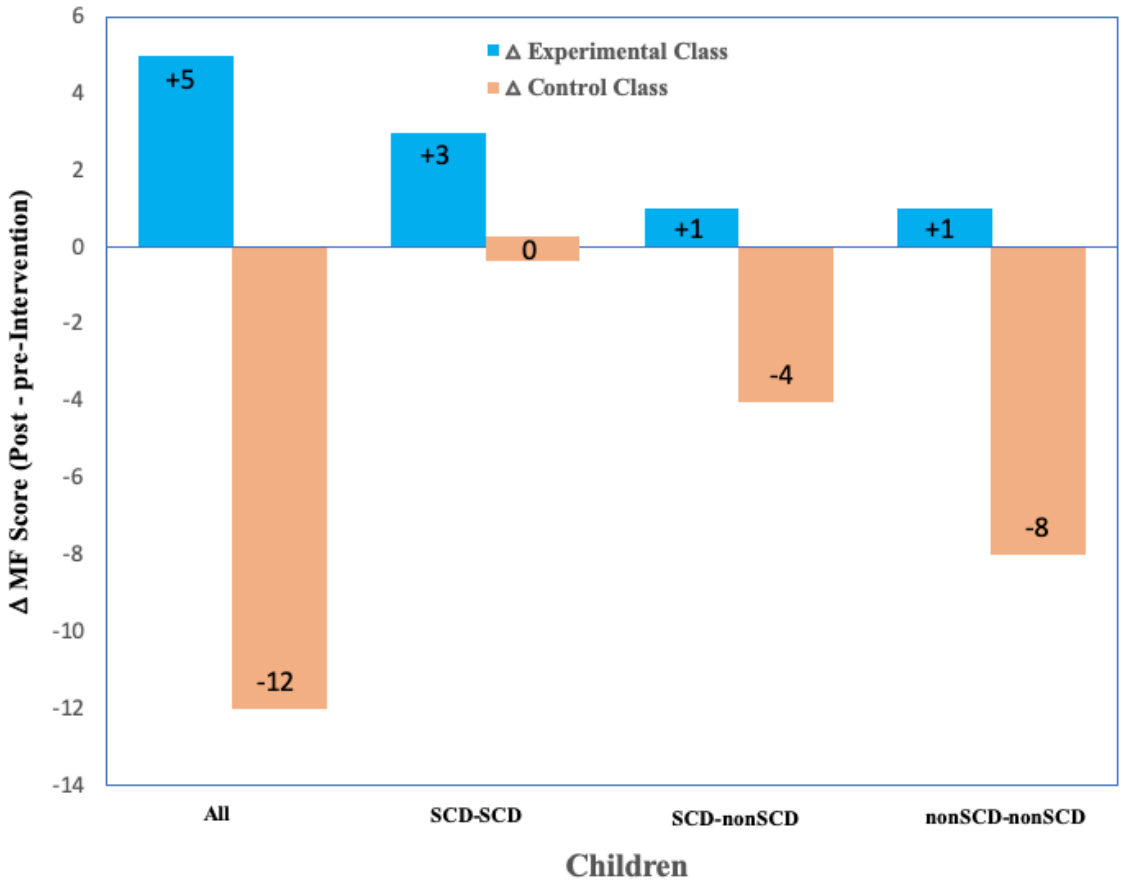


Figure 9. Change scores (post- minus pre-Intervention) of mutual friendships among children in the experimental and control classes

Note. Bars represent the change of mutual friendships for each class; ΔMR score = the change of mutual friendship score; ΔExperimental Class = the change score for the experimental class; ΔControl Class = the change score for the control class; All = mutual friendship score for all children; SCD-SCD = mutual friendship score between children with social communication deficit; SCD-nonSCD = mutual friendship score between children with and without social communication deficit; nonSCD-nonSCD = mutual friendship between children without SCD.

Direct Observation Results: Mutual Social Interaction (MSI)

MSI during freeplay (FP). Mixed measure ANOVAs by time (pre, post) and treatment (AVIP intervention, control: regular class activities), and diagnosis type (SCD, non-SCD) were conducted to investigate the effect of the AVIP intervention program over time. It revealed a significant effect across time for "positive" MSI, $F(1, 120) = 10.04$, $p < .01$, $\eta_p^2 = .07$, "negative" MSI, $F(1, 119) = 5.83$, $p < .05$, $\eta_p^2 = .05$. The mixed measure ANOVAs also revealed a significant interaction effect between "time and treatment" for "positive" MSI, $F(1, 119) = 6.24$, $p < .05$, $\eta_p^2 = .05$ (see Figure 10). No differences were found between "time and treatment" for "negative" MSI and "time and diagnosis type" for both "positive" and "negative" MSI, $ps > .05$. Follow-up two-way ANOVA suggested that the control class reported a significantly higher "positive" MSI than the participants from the experimental class, $F(1, 121) = 8.15$, $p < .01$, $\eta_p^2 = .06$. An independent samples *t* test showed that the control class gained significantly more mutual friendships than the participants in the experimental class after the 8-week intervention, $t(121) = -2.86$, $p < .01$ (with Bonferroni correction, $p<0.013$). A paired-samples *t* test for time suggested that the participants gained significantly more "positive" and "negative" MSI from the pre-intervention to post-intervention time, $t(122) = -2.86$, $p < .01$, $t(122) = -2.57$, $p < .05$, respectively.

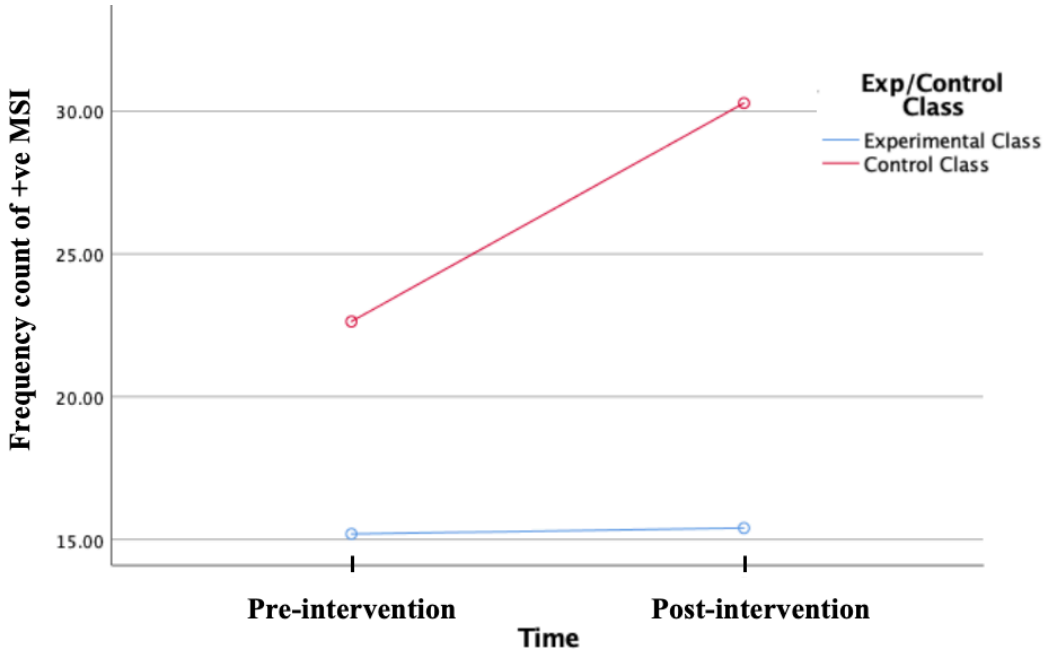


Figure 10. Mutual Social Interaction (MSI) during freeplay across treatments over time

MSI during physical education (PE). Mixed measure ANOVAs by time (pre, post) and treatment (AVIP intervention, control: regular class activities), and diagnosis type (SCD, non-SCD) were conducted to investigate the effect of the AVIP intervention program over time. The mixed measure ANOVAs revealed a significant interaction effect between "time and treatment" for "negative" MSI, $F(1, 119) = 4.11$, $p < .05$, $\eta_p^2 = .03$ (see Figure 11). No differences were found between "time and treatment" for "positive" MSI and "time and diagnosis type" for both "positive" and "negative" MSI, and across "time," ps > .05. Follow-up two-way ANOVA suggested no significant difference for "negative" MSI, $p > .05$.

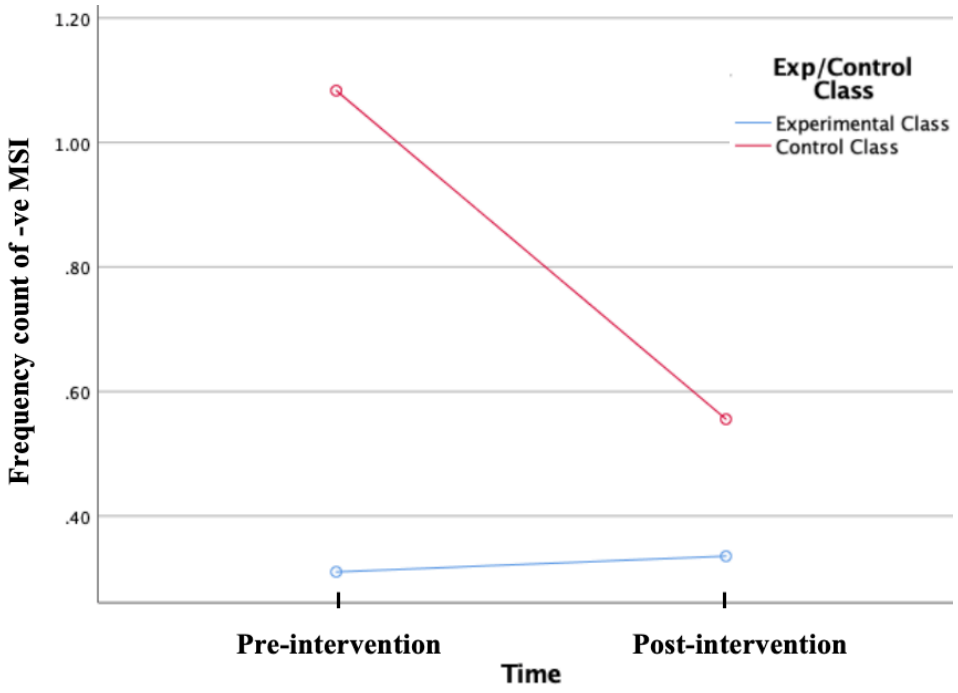


Figure 11. Mutual Social Interaction (MSI) during physical education across treatments over time

Social Inclusion Status Scale Results

Mixed measure ANOVAs with time (pre, post) as a within-subjects factor, treatment (AVIP intervention program, control), and diagnosis type (SCD, non-SCD) as between-subjects factors reported nonsignificant interaction between these factors for social inclusion status scores, *p*s > .05.

Chapter 5: Discussions and Conclusions

Discussions

In this study, we investigated the likelihood of improving the social inclusion status for pre-schoolers with social communication deficit in the inclusive setting by the AVIP intervention program. The intervention was developed by applying the four evidence-based practice strategies that help to develop positive attitudes towards children with SCD. It enhanced peer acceptance and friendship building in inclusive classrooms. The whole-class AVIP intervention provided the opportunity for children with or without SCD to learn and practice providing social acceptance of one another. This social acceptance behavior strengthened the positive social interaction among children in the inclusive setting, and contributed to the establishment of friendships among children with SCD, children without SCD, and between children with and without SCD. The findings of the current study also highlight the promising potentials of the AVIP intervention in the effort to offer all-inclusive education and care in Hong Kong preschools.

In this chapter, based on the results in the section of social acceptance level, mutual friendships, mutual social interaction, and social inclusion status scale, the key findings of the study's treatment effect regarding the four hypotheses will be first discussed followed by other findings, such as elaborating the invention of the benefit of whole-class AVIP intervention, which will be examined. Subsequently, a reflection on the assessment measures will be reviewed followed by a discussion of the three limitations of the current study.

Key Findings

Social Acceptance. The first hypothesis of the current study aimed to affirm the effect of AVIP intervention regarding the social acceptance level in two aspects. Firstly, the experimental class, consisting of participants with and without SCD, was assumed to have a higher social acceptance level than the control class, such as increasing the popularity and reducing the peer rejection in the inclusive setting. Mixed measure ANOVAs showed no significant interaction between the factors of time, diagnosis type, and treatment for both social preference and social influence scores. Thus, an additional analysis of combining the social preference and influence scores regarding the conversion guideline from Coie et al.' s (1982) study was conducted in which the social preference and social influence scores of the children were categorized into five groups to reflect their social acceptance level (see Table 2). The social acceptance level for all children in the intervention group was improved significantly. The children's popularity increased, and peer rejection decreased after the AVIP intervention (see Table 5).

On the contrary, the popularity and peer rejection of all children in the control class increased after having their regular class activities session for 8 weeks. Research had claimed that interactive group games could improve children's engagement and social interaction with peers with disabilities (Stanton-Chapman & Snell, 2011). It might also increase the rough social experience that leads to negative attitudes towards peers with SCD. That might contribute to developing more peer rejection after eight weeks in the control class. The AVIP intervention not only enhanced the popularity for all children in the experimental class but also reduced the number of peer rejections and neglections that improved the social acceptance level.

Secondly, participants with SCD were assumed to have a higher social acceptance level than the participants without SCD. As mentioned earlier, the mixed measure ANOVAs showed no significant interaction between the factors of time, diagnosis type, and treatment

for both social preference and social influence scores. Therefore, an additional analysis of combining the social preference and influence scores and categorizing it into five groups was used to reflect their social acceptance level (see Table 2). The social acceptance level for children with SCD was improved significantly. The popularity of children with SCD increased, and peer rejection and neglection decreased after the intervention when compared to the children without SCD (see Table 5). This suggested that the AVIP intervention can benefit children with SCD more than children without SCD.

Mutual Friendships. The second hypothesis of the current study aimed to affirm the effect of AVIP intervention regarding the mutual friendships of the participants in two aspects. Firstly, the experimental class consisting of participants with and without SCD was assumed to gain more mutual friendships than the control class. Mixed measure ANOVAs showed a significant interaction between the factors of "time and treatment." Besides, the follow-up two-way ANOVA also supports the finding, and the independent t-test results revealed that participants in the experimental class gained more mutual friendships than the control class.

Secondly, participants with SCD were assumed to have gained more mutual friendships than the participants without SCD. Mixed measure ANOVAs showed a significant interaction between the factors of "time and diagnosis type." Besides, the follow-up two-way ANOVA also supports the finding, and the independent t-test results revealed that participants with SCD gained more mutual friendships than the participants without SCD. This encouraging result suggested that the AVIP intervention can address the needs of children with SCD to help these children overcome their social communication challenges, and enable them to form friendships in inclusive classrooms.

Social Interaction. The third hypothesis of the current study aimed to affirm the effect of AVIP intervention regarding mutual social interaction (MSI) of the participants in

two aspects. Firstly, the experimental class consisting of participants with and without SCD was assumed to gain more mutual social interaction than the control class. Instead, a significant increase in "positive" MSI during FP and a decrease in "negative" MSI during PE was found in the control class. Although there was a significant gain in the "negative" mutual interaction during FP across the pre- and post-intervention period, $F(1,119) = 9.574$, $p = .002$, $t(122) = -2.86$, $p = .005$, the interaction between the factors of time and treatment was not shown.

Secondly, participants with SCD were assumed to have a higher MSI than the participants without SCD. The finding of the mutual social interaction failed to back up the second hypothesis, with no interaction between factors of time and diagnosis type revealed by the mixed measure ANOVAs analysis. Since no intervention effect was found in regard to increasing the mutual social interaction for children with SCD in both the intervention and control class, a comparison between children with SCD and children without SCD cannot be made. In other words, no interaction between the factors of time and diagnosis was shown. The above results revealed no significant difference between the experimental and control classes. This may be due to the similarity of containing interactive activities in both the experimental and control classes. However, there are only 10 minutes of interactive playtime in the AVIP intervention. It is only one-third of the regular 30 minutes of class activities. Therefore, a higher social interaction was found among children during "positive" MSI in FP and less "negative" MSI in FP and PE for the control class. In the future, the activities in the control group should be carefully arranged to avoid external influence.

Social Inclusion Status. The fourth hypothesis of the current study aimed to affirm the effect of AVIP intervention regarding the social inclusion status (SIST) of the participants in two aspects. Firstly, the experimental class consisting of participants with and without SCD was assumed to have a higher SIST than the control class. Secondly, participants with

SCD were assumed to have a higher SIST than the participants without SCD. The finding of social inclusion status scale from the mixed measure ANOVAs failed to support the fourth hypothesis in both aspects. Even though the SIST SCALE was developed to measure the social inclusion status for children with SCD with 15 items (see Figure 4 - English version / Appendix F - Chinese version), the objectives in the AVIP intervention were not measured accordingly. Therefore, the SIST SCALE can be adapted into a new scale that can measure the objectives of the AVIP intervention, and used to evaluate its effectiveness in future study.

Other Findings

Benefits for the whole class. In the current study, the favorable treatment effect of the whole-class AVIP intervention affirmed the belief of Renzaglia's team (2003) who equipped all children (with and without SCD) with inclusive skills in the target environments (i.e., in inclusive classrooms) for successful inclusion. Besides, the social inclusion intervention curriculum, based on the five themes of the AVIP intervention, namely (i) Value every classmate, (ii) Accept how classmates express their feelings, (iii) Accept classmates' strengths and value classmates' weaknesses, (iv) Include every classmate with preferred or annoying behaviors, and (v) Be a good friend/partner to each other, can support children with or without SCD to understand one another. By understanding the child diversity in the aspects of: (i) weaknesses and strengths, (ii) emotional expression, and (iii) favored or disturbing behaviors, children with and without SCD can be supported to develop positive attitudes toward one another. Moreover, the thinking of young children is mainly governed by perceptual experience (Dyson, 2005). The role-play games and interactive activities embraced in the AVIP intervention also provide opportunities for children without SCD to practice the social inclusion skills with their peers with SCD. When these children learn and practice the skills together, they develop positive attitudes towards one another. It helps

boost the social acceptance and friendship establishment in the inclusive setting (Odom, 2000).

A high proportion of children with SCD. In Hong Kong, not all kindergartens can serve children with SCD. Only those kindergartens participated in the Integrated Program Kindergarten-cum-Child Care Centers (IP-KGC) could receive the government's funding for children with special needs. All four kindergartens in this study are IP-KGCs, making SCD higher kindergartens than average kindergarten. In other words, these research/interventions sites leaned toward a higher enrollment of children with SCD than average. Furthermore, the general prevalence of children with disabilities in a classroom in the Integrated Program Kindergarten-cum-Child Care Centers in Hong Kong is around six children. Based on this number, we expected to have approximately 24 children (i.e., 6 x 4 for four kindergarten classes) with disabilities having social communication deficit in the current study. Surprisingly, we found that 54 children met the candidates' criteria for SCD among the 135 children after the SCBA screening assessment (see Table 1). It is twice the expected number and very high compared to the usual prevalence estimates we usually see in the literature. Among these 54 children, 32 were diagnosed with disabilities (i.e., AD/HD, DD, mild ASD, and SLI), and 22 were neurotypically developing children.

However, these 22 neurotypically developing children had been assessed as having SCD in the four preschools. They represented a group of young children having challenges in social communication without particular assistances in inclusive classrooms. It reduced the goal of inclusion, in which everyone belongs and has the resources and equality in learning and participating in an inclusive environment (Board, 2012). Indeed, by considering that these children can understand, accept, value, assist, and include children with SCD as their neurotypically developing peers it may affect the success of social inclusion

detrimentally. This is because every individual in the inclusive setting should be equipped with the social inclusion skills for inclusion to work (Renzaglia et al., 2003).

Albeit that this group of children are not categorized as having any disabilities, they should be identified as at-risk or hidden. The particular support regarding their frustration and impediment in social communication should be provided. This study suggests that a whole-class intervention similar to AVIP intervention may help to provide support for this group of children. To give these children the required communication and social inclusion skills, such as recognizing the diversity of ability, favorable or annoyed behavior, and the different way to express feelings, it is crucial to assist and equip these children with the inclusion skills following the objectives of the AVIP intervention. To enhance their social acceptance level from peers, positive mutual interaction may help to establish friendships with other children in inclusive classrooms.

Being Popular ≠ Having friendships. The last finding is presented with the target sociogram from the result of the sociometric data of the participants. Some children who were nominated by at least four peers in the inclusive classroom did not have any mutual friendships (i.e., two-way nomination). An example can be found in the sociogram of preschool B before the AVIP intervention: Child-2031 without SCD, Child-2001 with SCD, and Child-2009 with SCD received seven, four, and five nominations from peers, respectively (see Figure 8). All of these children had a high social preference score and had been categorized into the popular group (please refer to the classification rules in Table 3). However, none of these children had at least one mutual friend. It revealed that being popular in an inclusive classroom is not equivalent to having friendships with their peers. The finding supports the rationale of testing the efficacy of a social inclusion intervention in the aspect with three elements (i.e., SAL, MF, and MSI). There is a lack of

evidence of the mediating effect among these three elements. Further study can investigate the correlation between these three elements.

Reflection on the Assessment Measures

The Three Ecological Validity Indicators. The outcomes of the AVIP intervention were assessed from the socio-ecological perspective according to the systematic review of Tsang and Cheng (2017), which suggested examining the effectiveness of a social inclusion intervention with three ecological validity indicators, including (i) social acceptance status, (ii) social relationship, and (iii) social interaction. The current study has revealed the first two indicators with a significant gain in social acceptance level and mutual friendships. However, there is no significant treatment effect on mutual social interaction. One of the confounding variables may be the shorter period of interactive playtime compared to the regular class activities. The mutual social interaction of participants in the control class gained significantly more than the experimental class in the current study as intervention with the elements of "play" and "games" enhances the effectiveness of the intervention (Nelson et al., 2007; O'Connor & Stagnitti, 2011). Although we already included this crucial element in the AVIP intervention, the time for children to interact may be too short. Prolonging the time of the interactive game in the AVIP intervention may enhance the mutual social interaction in future study. Besides, the activities in the regular class should also be changed to other individual tasks to avoid the possible external influence on the current study. Furthermore, the coding of the observation data does not precisely measure the social inclusion behaviors that were taught in the AVIP session. Future exploration should also be carried out regarding what should be measured during direct observation.

The Social Inclusion Status Scale. The other reflection is on the social inclusion status scale, which was designed to measure the social inclusion status based on four modules consisting of Accept, Value, Include, and Partner (see Figure 4 for the English version or

Appendix F for the Chinese version). Although it may reflect whether the children have social inclusion skills or not, it cannot provide the information on the number of mutual friendships among children. It implies that social inclusion status scale cannot be used alone to reveal the status of inclusion for children with SEN. Besides, the objectives in the AVIP intervention were not measured precisely. A future study can adopt the SIST SCALE and develop a new scale to measure its objectives.

Limitation of the Study

Experimenter bias. There is only one intervention implementer in the current study. Even though it might minimize the treatment integrity of implementation of the AVIP intervention, this setup may pose an experimenter bias to this study. Concerning the issue, the researcher in the current study already implemented the AVIP intervention following an intervention plan according to the objectives and activities listed in Table 1 to maintain the fidelity of intervention implementation. In the future study, a special pre-intervention workshop for teachers should be arranged to prepare teachers as the implementers of the AVIP intervention. Teachers learn and practice to apply the AVIP strategies together with the teaching materials for each AVIP session. All teachers will be treated as a qualified implementer if they pass the training workshop by achieving 90% of the mastery criteria. Then teachers will be equipped and prepared to implement the AVIP intervention efficiently with fidelity.

Teachers' Implementation Fidelity. The second limitation is the absence of teacher evaluation for the classroom implementation of AVIP intervention strategies after the weekly AVIP session. Although teachers were responsible for providing positive feedback and recording children's positive, friendly, and encouraging behavior among children in the classroom reward system, using the reward system alone to reflect teachers' involvement is

not sufficient. In this study, teachers adhered to the plan giving positive feedback to their students and marking down children's friendly behavior on the reward chart as they agreed to. However, the reward chart can only act as an index of whether the teachers had used the reward system, but no information on how well the teachers delivered the AVIP strategies. For future study, a checklist as in the study of Meyer and Ostrosky (2015) should be added to monitor and maintain teachers' implementation fidelity. Besides, a communication system can be developed for teachers to communicate with the researcher when they encounter any problem during their daily practice of using AVIP strategies.

External influences. Some external influences were found in the current study that might have already affected the result obtained from the observation measures for mutual social interaction. First, there is only one observer to record children's social mutual interaction. Even though one observer can prevent the testing on the interobserver agreement, the validity of the observational data in this study may be threatened by the experimenter bias. Second, a flu outbreak in Hong Kong occurred during the post-observation period. It constituted a threat to the accuracy of the observed and recorded children's MSI. All participants were required to wear a medical mask when they attended school during this critical period. Some of the children's MSI might have been missed as their facial expression of the positive or negative response to their peers could not be seen when they had a mask on their faces. For example, an observer may see two children looking at each other, but cannot be certain that they are talking to each other. In this case, one MSI (i.e., eye contact) is recorded. Another example is that the observer cannot determine which child is talking when hearing a few children talking to each other while playing a game. In this case, no MSI can be recorded. Third, the limited function of the 360-degree camera may establish the issue of the quality of the videotapes. Albeit that the camera can capture a 360-degree view in a classroom, it needs to be placed in the middle of

the participants within ten feet without obstacles to produce high-resolution images and loud conversation recording. Therefore, some MSIs among children might have been missed while just capturing the back of some children. Besides, some verbal MSIs could not be recorded when children are more than ten feet away from the camera.

To address the above issues regarding the collection of mutual social interaction in future study, more observers can be recruited. Training can be provided as in the procedure of Stanton-Chapman, Denning, and Jamison's (2012) study, that suggested ensuring that the treatment status was blind to all observers. Besides, all observers must achieve the 90% mastery criteria of the skill training to record observations according to the protocol. Concerning the flu outbreak, the research team could not avoid this happening. However, the definition of MSI between children can be changed. Instead of just following the code from the study of Vaughn et al. (2009), the target behavior can also be represented by a gesture (i.e., the positive feedback gestures that children learned from the AVIP songs) in the future study to prevent missing any MSI. A gesture, such as clapping hands, a gentle patting, thumbs-up, or a muscular arm, can be observed and jotted down quickly even if children are wearing a face mask during the observation. The action of a gesture can be captured and noticed at a further distance from the 360-degree camera. Furthermore, at least four more camcorders can be set up in the corners of the classroom (around 400 square feet big) during freeplay to cover the blind spots of the 360-degree camera. Concerning the size of the arena (around 800 square feet) for the PE session, six camcorders and four 360-degree cameras are suggested for future study.

Conclusions

To conclude, two of the four hypotheses of the current study are supported as the results revealed a significant gain in social acceptance level and mutual friendships for children in the experimental class. It also revealed that children with SCD benefited more than the children without SCD in social acceptance level and mutual friendships. Although the other two hypotheses regarding the mutual social interaction and social inclusion status score are not significant, the possible external influences that may affect the results have been discussed. The study outcome revealed the importance of including the crucial elements and techniques (i.e., (i) A - affirmative responses, (ii) V - visual support, (iii) I - interacting with a peer, and (iv) P - prompting techniques) teaching children to value and admire others' strengths and succeed, accept the discrepancy of the ability and behavior of others, and learn to accompany others in an appropriate and appreciated way; and be able to make and retain friendships with peers in an inclusive setting.

Implications for Future Study

The finding of the current study showed that the "positive" MSI of children increased during PE and the "negative" MSI decreased during FP, and PE in the control class. It suggested that children in the control class gained more "positive" MSI and less "negative" MSI than the children in the experimental class. This may be due to the missing MSI that can be recorded during observation with the limitations as mentioned earlier. Indeed, researchers aim to enhance "positive" MSI among children to develop "positive" attitudes of neurotypically developing peers towards, and friendships with, children with disabilities (Meyer & Ostroksy, 2015; Mikami et al., 2013); however, the gain in positive mutual interaction does not guarantee a successful mutual friendship formation between children with and without disabilities (Tsang & Cheng, 2017). The current study demonstrated that growing in "positive" MSI and declining in "negative" MSI in the control class does not

contribute to boosting the popularity and lessening the peer rejection simultaneously regarding the peer acceptance level of children. Future study can investigate the mediating effect of mutual social interaction on peer acceptance level and friendship formation.

Moreover, valuable information is presented by the bar graph (see Figure 9) in the current study. The graph showed that there are three types of mutual friendships (i.e., SCD – non-SCD, SCD – SCD, and non-SCD – non-SCD) among participants in inclusive classrooms. It implies that a whole-class intervention created a setting not only for participants with SCD to establish friendships with peers without SCD but also with other peers with SCD. In this study, the participants with SCD surprisingly formed more mutual friendships than their peers without SCD after the intervention period. Further exploration in this area may help to modify other social inclusion intervention to enhance its effectiveness in regard to the extent of friendship establishment for children with disabilities in an inclusive educational setting.

Furthermore, scholars suggest equipping everyone with the skills to enhance the success of inclusion in inclusive educational settings (Renzaglia et al., 2003). It is achieved with the whole-class AVIP intervention. Besides, the AVIP intervention further extends the required social competence skills to the essential social inclusion skills for children with SCD to establish friendships and build up their social acceptance level. The social inclusion skills teach children with and without SCD to understand the diversity of each other and learn to Accept, Value, and Include their peers as Partners in inclusive settings. The findings of the current study also provide empirical evidence of what social inclusion skills should embrace in a social inclusion intervention, which contributes to boosting children's popularity, reducing peer rejection, and forming friendships for children with disabilities with their peers in inclusive educational settings.

Implications for Practice

The AVIP intervention program is a teacher-friendly tool as most teachers master the skills of using the four EBP strategies during their teacher certification training period. The menu of the AVIP intervention can be simplified, and the teaching materials can be ready as a package to reduce teachers' preparation time. The AVIP intervention should be promoted to be applied in all preschools in Hong Kong to assist children with and without disabilities to understand one another and be able to value and accept their peers as part of the group to achieve the ultimate goal of inclusion.

Undoubtedly, the AVIP intervention program has the potential to become a useful tool for professionals or teachers, as it helps children with and without SCD to improve their social relationships (i.e., peer acceptance) and inclusion status with peers and be able to establish mutual friendships in inclusive classrooms. Moreover, the AVIP intervention contains five themes along with four evidence-based practice strategies, which helps children learn to accept, value, include, and be a partner with their peers with or without SCD. Further exploration in regard to extending its use for the junior primary population (i.e., primary one to three) with minor adjustment of the teaching materials to match the primary children's level is needed.

In addition, the AVIP intervention program can also be applied to the preschool populations in other regions beyond Hong Kong, such as the southern part of China, including Jiangxi, Guangdong, Guangxi, and Huna. Inclusive education has also been advocated in mainland China for a long time. Besides, there are similarities in the cultural background and language usage between Hong Kong and the southern part of China. Teachers from the southern part of China have attended courses or workshops in the conference provided by the universities in Hong Kong. Teachers in China already have the

experience to learn and adopt effective teaching pedagogies and interventions for their classrooms. Therefore, the AVIP intervention should be easy to learn and suitable to apply in the cities of the southern part of China.

In summary, the key findings in the current study suggest that the AVIP intervention benefited all children (i.e., children with and without SCD) in the experimental class more than the control class regarding their improvement in social acceptance level and mutual friendship formation. And the AVIP intervention benefited the children with SCD more than the children without SCD regarding their improvement in social acceptance level and mutual friendship formation. Further exploration of the appropriateness of the current assessment measures for mutual social interaction and social inclusion status are suggested for future study. Lastly, the possibilities of extending the AVIP intervention program to all preschools and junior primary populations in Hong Kong and to other regions internationally should be further explored.

Declaration

A systematic review paper has been published as an early part of the research, and some parts of the chapter have been quoted as “Tsang & Cheng, 2017” in the current study.

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Appendix A: Social Communication Behavioral Assessment form

SAHK
香港耀能協會

《自閉症譜系障礙幼兒
社交及溝通行為量表》
第二版

（簡短版）

出版及發行：香港耀能協會
電話：2527 8978　傳真：2866 3727
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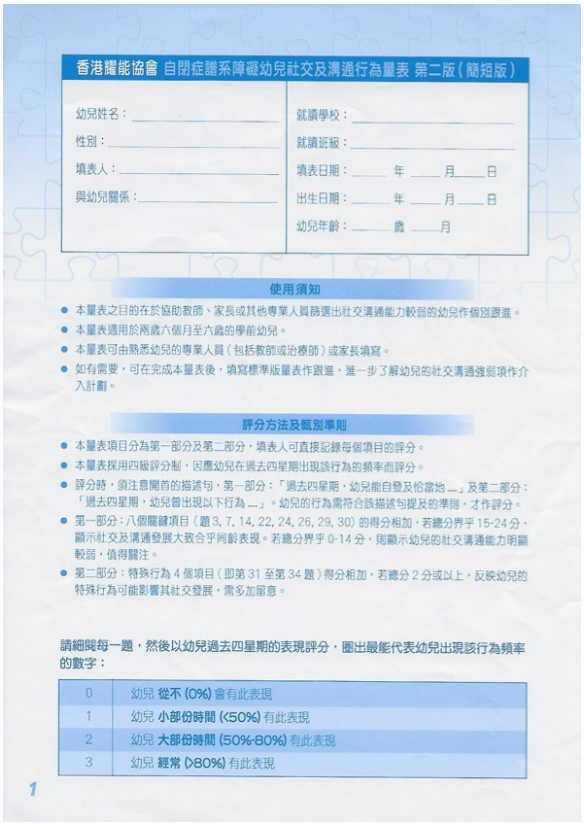


香港耀能協會 自閉症譜系障礙幼兒社交及溝通行為量表 第二版（簡短版）

幼兒姓名：_____　就讀學校：_____
性別：_____　就讀班級：_____
填表人：_____　填表日期：____ 年 ____ 月 ____ 日
與幼兒關係：_____　出生日期：____ 年 ____ 月 ____ 日
幼兒年齡：____ 歲 ____ 月

使用須知

- 本量表之目的在於協助教師、家長或其他專業人員篩選出社交溝通能力較弱的幼兒作個別跟進。
- 本量表適用於兩歲六個月至六歲的學前幼兒。
- 本量表可由熟悉幼兒的專業人員（包括教師或治療師）或家長填寫。
- 如有需要，可在完成本量表後，填寫標準版量表作跟進，進一步了解幼兒的社交溝通強弱項作介入計劃。

評分方法及甄別準則

- 本量表項目分為第一部分及第二部分，填表人可直接記錄每個項目的評分。
- 本量表採用四級評分制，因應幼兒在過去四星期出現該行為的頻率而評分。
- 評分時，須注意開首的描述句，第一部分：「過去四星期，幼兒能自發及恰當地 ....」及第二部分：「過去四星期，幼兒曾出現以下行為 ....」。幼兒的行為需符合該描述句提及的準則，才作評分。
- 第一部分：八個關鍵項目（題 3, 7, 14, 22, 24, 26, 29, 30）的得分相加，若總分界乎 15-24 分，顯示社交及溝通發展大致合乎同齡表現。若總分界乎 0-14 分，則顯示幼兒的社交溝通能力明顯較弱，值得關注。
- 第二部分：特殊行為 4 個項目（即第 31 至第 34 題）得分相加，若總分 2 分或以上，反映幼兒的特殊行為可能影響其社交發展，需多加留意。

請細閱每一題，然後以幼兒過去四星期的表現評分，圈出最能代表幼兒出現該行為頻率的數字：

0	幼兒 **從不 (0%)** 會有此表現
1	幼兒 **小部份時間 (<50%)** 有此表現
2	幼兒 **大部份時間 (50%-80%)** 有此表現
3	幼兒 **經常 (>80%)** 有此表現

1

第一部分：社交溝通

過去四星期，幼兒能自發及恰當地	從不 (0%)	小部份時間 (<50%)	大部份時間 (50-80%)	經常 (>80%)
1. 與對自己說話的人有眼神接觸	0	1	2	3
2. 跟隨別人指向的位置，望向在遠處的焦點	0	1	2	3
3. 向成人展示物件作分享	**0**	**1**	**2**	**3**
4. 指向某些物件來引起別人的注意	0	1	2	3
5. 模仿兩個連續的身體動作（不使用物件）	0	1	2	3
6. 在成人模仿自己動作後，重複動作來回應	0	1	2	3
7. 與一個小孩輪流參與桌面遊戲	**0**	**1**	**2**	**3**
8. 輪候參與小組活動	0	1	2	3
9. 在別人呼喊自己的名字時有反應	0	1	2	3
10. 辨認自己所屬的組別	0	1	2	3
11. 主動親近熟悉的人	0	1	2	3
12. 表示接受或同意＊	0	1	2	3
13. 辨識別人簡單的面部表情（包括眼神）並作出回應＊	0	1	2	3
14. 理解一般朋輩能明白的比喻或笑話＊	**0**	**1**	**2**	**3**
15. 向別人要求延續活動＊	0	1	2	3
16. 對身邊的事物表現關注或發表意見＊	0	1	2	3
17. 在對話中輪流發言（一轉對話）#	0	1	2	3
18. 在與別人交談時，輔以非口語的溝通方法作表達，如手勢、面部表情及語氣等	0	1	2	3
19. 對某些人表示鍾愛	0	1	2	3
20. 表達基本情緒：開心	0	1	2	3
21. 表達社交情緒：自豪	0	1	2	3
22. 說出自己的感受	**0**	**1**	**2**	**3**
23. 分享別人的歡樂	0	1	2	3
24. 察覺別人需要幫忙並作出回應	**0**	**1**	**2**	**3**
25. 接受與成人有身體接觸	0	1	2	3

＊用圖片、動作、聲音或說話回應均可　　# 一轉對話包括一方提出話題，而另一方就話題回應

2

過去四星期，幼兒能自發及恰當地	從不 (0%)	小部份時間 (<50%)	大部份時間 (50-80%)	經常 (>80%)
26. **主動參與其他小孩的遊戲**	**0**	**1**	**2**	**3**
27. 按物件的功能來玩遊戲	0	1	2	3
28. 用不存在的物件進行假想遊戲	0	1	2	3
29. 在進行角色扮演的遊戲中，說出與角色吻合的對白	**0**	**1**	**2**	**3**
30. 與朋輩共同參與互動遊戲	**0**	**1**	**2**	**3**
第一部分總分：				

第二部分：特殊行為

過去四星期，幼兒曾出現以下行為	從不 (0%)	小部份時間 (<50%)	大部份時間 (50-80%)	經常 (>80%)
31. 會刻板或重複地說話、做動作或使用物件，如原地打轉、搖擺身體或重複相同的說話	0	1	2	3
32. 有過份固執的傾向，如抗拒接受新事物，因生活常規或細節的改變而引發強烈的情緒反應	0	1	2	3
33. 顯示狹窄的興趣，如過度依附物件，以過分局限的方式玩玩具或遊戲	0	1	2	3
34. 對感官刺激有特殊反應，如過度敏感、遲鈍、沉迷或抗拒	0	1	2	3
第二部分總分：				

結果分析：

第一部分：社交溝通

簡短版八個關鍵項目（題 3, 7, 14, 22, 24, 26, 29, 30）的總分：

☐ + ☐ + ☐ + ☐ + ☐ + ☐ + ☐ + ☐ = ☐

☐ 0 - 14 分：社交及溝通發展值得關注
☐ 15-24 分：社交及溝通發展大致合乎同齡表現

第二部分：特殊行為

如總分取得 2 分或以上，反映幼兒的特殊行為可能影響其社交發展，值得留意。

＊如本問卷顯示幼兒在社交及溝通行為上出現困難，建議對幼兒的行為作詳盡的觀察，探討是否需要安排專業評估。如對幼兒的發展有任何疑問，請向相關醫護及其他專業人員查詢。

3

Appendix B: Children photos sample for peer nomination interview


李XX


王XX


李XX


陳XX.


王XX


李XX


李XX


鄺XX


陳XX


林XX


朱XX


江XX


黃XX


鄭XX


鄧XX


陳XX


周XX


陳XX


吳XX


蘇XX


梁XX

Appendix C: Interview record form

學生訪談表

訪談日期: _____ 訪談時間: _____ 訪談員: _____

#	學生姓名	你最鍾意跟那三位同學玩耍?(#, #, #)	原因?	你最唔鍾意(或好少或沒有)跟那三位同學玩耍? (#, #, #)	原因?
1	陳 XX				
2	周 XX				
3	陳 XX				
4	梁 XX				
5	黎 XX				
6	李 XX				

Appendix D: Operational definitions

Coding

Initiation of Interaction (I)

Initiation of interaction is defined as a demand, question, comment, or suggestion requiring a response from a child to another child (e.g., "Let us play this way." "What are you doing?" "It is funny"). The form of the behavior can be using eye contact, words, voice, gestures, or physical contact (e.g., pushing, poking, hitting, patting, or kicking)

Response to a child's Initiation (R)

A response to a child's initiation is defined as a providing answer according to the demand, question, comment, or suggestion from the child who initiates the interaction. (e.g., "Sure" "No, thank you" "What do you like to play?" "Yeah, it is cool!" "Umm… let us play this first."). The form of the behavior can be using eye contact, words, voice, gestures, or physical contact (e.g., pushing, poking, hitting, patting, or kicking)

Mutual Social Interaction (MSI)

Mutual Social Interaction is defined as a social exchange of two children. One child initiates an interaction (i.e., I), the other child response to the child's initiation (R) within 5s. (e.g., Child A and Child B are sitting next to each other, child A initiates an interaction (I) with voice by asking, "What are you playing?" Child B replied (R) with voice "I am building a castle" in 5 seconds)

Positive MSI

A positive MSI is defined as an interaction if:

1. one or both children exhibited positive affection during the social exchange (i.e., smiling, laughing, gesturing, or vocalization indicating a positive feeling) unless such expression has occurred with a negative affection (e.g., crying, ache, yelling) by the interacting partner;
2. one or both children had non-verbal exchanges that included eye contact, eye gaze, physical contact, and a reaction to contact or a gestural request.

Negative MSI

A negative MSI is defined as an interaction if:

1. one or both children exhibited negative affection (e.g., worry, anger, horror, and panic) in a facial, vocal, or gestural mode except such expressions were happened in the context of imaginative play (e.g., Ironman attacks Captain America).

Appendix E: Observational record form

學生社交互動行為觀察表

目標幼兒 (TG #)：_____ 性別: 男 / 女 觀察日期：____ /____ / _____

觀察員：_____ 班別: ____ 老師姓名: _____

10 分鐘段落(一) 活動性質：體能(全班、分組)、自選(全班、分組) 開始時間：_____ 結束時間：_____

時間 (分鐘)	**以(#) 顯示 TG 與同伴互動箭咀; 以(GE/SE)顯示 TG 與老師互動箭咀;**	時間 (分鐘)	**以(#) 顯示 TG 與同伴互動箭咀; 以(GE/SE)顯示 TG 與老師互動箭咀;**
1		6	
2		7	
3		8	
4		9	
5		10	

Appendix F: Social Inclusion Status Scale

「A.V.I.P. 做個好朋友」行為表現量表:

請細閱每一題，然後以幼兒在過去數星期的表現評分，選出最能代表幼兒出現該行為頻密的數字：

0: 幼兒從不(0%) 會有此表現
1: 幼兒小部份時間 (<50%) 會有此表現
2: 幼兒大部份時間 (50-80%) 會有此表現
3: 幼兒經常 (>80%) 會有此表現

在過去數星期，幼兒能夠…
[用圖片、動作、聲音或說話回應均可]

	從不 (0%)	小部份時間 (<50%)	大部份時間 (50-80%)	經常 (>80%)

*必填

1. *

請選擇所有適用項目。

	0	1	2	3
1) 主動跟他人打招呼	☐	☐	☐	☐
2) 回應他人跟自己打招呼	☐	☐	☐	☐
3) 意識到他人的能力特點	☐	☐	☐	☐
4) 對他人的弱項作鼓勵的回應	☐	☐	☐	☐
5) 當他人做出負面情緒行為時會表達安撫或支持	☐	☐	☐	☐
6) 意識到自己的能力特點	☐	☐	☐	☐
7) 對他人的強項作欣賞的回應	☐	☐	☐	☐
8) 正確地對他人運用課堂規則手勢	☐	☐	☐	☐
9) 對他人做的課堂規則手勢有正確的回應	☐	☐	☐	☐
10) 主動跟他人作出正面回應	☐	☐	☐	☐
11) 識別他人所作出的行為會令自己 (喜歡/不喜歡)	☐	☐	☐	☐
12) 對做了令自己不喜歡或煩擾的行為的人作包容的回應	☐	☐	☐	☐
13) 識別他人對好朋友會做的行為 (如陪伴/一起玩/相約)	☐	☐	☐	☐
14) 向他人做出對好朋友會做的行為	☐	☐	☐	☐
15) 邀請他人成為自己的朋友	☐	☐	☐	☐

技術提供：
Google Forms

Appendix G: School invitation and consent forms

香港教育大學
The Education University of Hong Kong

學校參與研究邀請信

研究計劃：探討「幼兒共融學習介入計劃」的成效

校長台啟:

現誠邀　貴園教師及幼兒參加上述研究計劃。本研究由香港教育大學特殊教育與輔導學系助理教授曾君蘭博士負責監督，並由香港教育大學特殊教育與輔導學系之研究院博士生鄭惠娟女士(BCBA-國際認證行為分析師)負責執行，目的是探究在兼收服務的幼兒園環境下，藉着「幼兒共融學習介入計劃」，提昇不同學習需要的四至六歲幼兒在共融學習環境中社交互動互融的能力。

根據大學有關研究道德的規定，我們研究團隊懇請　校長閣下填妥研究計劃同意書回條(附件二)，答允讓　貴園教師及幼兒參與此項研究。有關本研究計劃之程序詳情，請參閱附件一。

為確保參加者的學習受到最小的影響，研究人員將於小息期間與每位參與幼兒作個別面談約十分鐘。所有學校、教師及幼兒的參與純屬自願，均享有充分的權利決定在研究開始之前、之後或中途退出是項研究；凡有關參與者的資料將會保密，一切資料的編碼只有研究人員得悉，絕對不會外洩給其他人士；亦不會影響參與者在園內之考績與評估。

本研究團隊會確保研究參與者的所有資料絕對保密及不具名。研究計劃資料只屬執行研究導師及研究員審查，所收集的數據資料僅作本研究日後數據分析用途及被發佈於博士學位論文或期刊論文中。所有涉及個人身份及學校的資料會以編碼方式儲存作數據，確保參加者的私隱受到保障，研究數據將儲存於首席研究員辦工室三年，之後徹底銷毀。

如　閣下對這項研究有任何意見，可隨時與香港教育大學人類實驗對象操守委員會聯絡(電郵:hrec@eduhk.hk;地址:香港教育大學研究與發展事務處)。如　閣下想獲得更多有關這項研究的資料，請與首席研究員鄭惠娟女士聯絡，電話：

多謝閣下的支持及參與，敬希早日賜覆

研究執行員

鄭惠娟女士
BCBA-國際認證行為分析師
香港教育大學特殊教育與輔導學系之研究院博士生
電話：　　電郵：

二零一七年八月一日

香港教育大學
The Education University of Hong Kong

附件一

研究計劃：探討「幼兒共融學習介入計劃」的成效

研究計劃之程序

(1) **同意書**:
在　貴園分發邀請函及同意書予所有教導四至六歲及正接受兼收組服務幼兒的教師；
在　貴園分發邀請函及同意書予同意參與研究的教師所教導的班別中所有幼兒及其家長；

(2) **篩選測試**:
在介入計劃開始以前，參與教師需要使用約一小時填寫問卷，以及協助研究員安排對個別幼兒進行約十分鐘的個別訪談，收集同儕提名數據，作為分組篩選測試之用途。

(3) **前後測試**:
在介入計劃開始以前或以後，負責教師需: (i)為班內參與研究計劃的幼兒填寫前測和後測之問卷用作研究的資料記錄(使用約一小時)，(ii)參與約一小之面談; 以及(iii)協助研究員安排合適的互動遊戲課堂，讓研究員進行課堂觀察及錄影(如獲參與者批准，用作本研究日後數據分析用途);

(4) **解述計劃:**
在計劃開始以前，研究員將與負責教師解說計劃及基於行為治療的正向行為策略，讓負責教師了解介入計劃細節及明白教師當中擔任的角色，以便協助研究員在課堂內實踐「幼兒共融學習介入計劃」;

(5) **進行介入計劃**:
在介入計劃進行期間，負責教師需協助研究員安排及實踐每週一節為時 30 分鐘的「幼兒共融學習介入計劃」課堂(合共八節)。研究員將於每一節課堂進行錄影(如獲參與者批准，用作本研究日後數據分析用途);

(6) **滙報計劃:**
在介入研究計劃完畢後，研究員將到　貴園分享有關研究的成效，裨益教學。

香港教育大學
The Education University of Hong Kong

附件二

研究計劃：探討「幼兒共融學習介入計劃」的成效

校長同意書回條

請於 2017/08/31 或之前填妥此回條，電郵至
如有查詢請與鄭惠娟女士　　聯絡，謝謝!

致 ： 鄭惠娟女士 - BCBA-國際認證行為分析師
香港教育大學特殊教育與輔導學系之研究院博士生

本人明白上述的研究目的及程序，並 ＊**同意 / 不同意** (刪去不適用項) 提供場地（本校）及讓師生參與上述研究計劃。 本人是自願參上述的研究項目，研究開始後，本人有權拒絕或退出參與，並不需要面對任何後果。

校方聯絡人資料:

姓名:_____ 電話：_____ 電郵：_____

參與教師資料:

姓名：_____ 任教級別: K2 / K3 電話：_____ 電郵：_____

姓名：_____ 任教級別: K2 / K3 電話：_____ 電郵：_____

姓名：_____ 任教級別: K2 / K3 電話：_____ 電郵：_____

姓名：_____ 任教級別: K2 / K3 電話：_____ 電郵：_____

姓名：_____ 任教級別: K2 / K3 電話：_____ 電郵：_____

_____

簽署　　日期

_____

校長姓名　　學校名稱

研究計劃：探討「幼兒共融學習介入計劃」的成效

教師同意書回條

請填妥此回條，電郵至
如有查詢請與鄭惠娟女士　　聯絡，謝謝!

致 ： 鄭惠娟女士 - BCBA-國際認證行為分析師
香港教育大學特殊教育與輔導學系之研究院博士生

1. 本人***同意/不同意** (刪去不適用項) 參加是次研究計劃。 本人是自願參上述的研究項目，研究開始後，本人有權拒絕或退出參與，並不需要面對任何後果。

   簽署：_____ 簽署日 期: _____

   教師姓名：_____ 任教班級：_____ 性別：男 / 女

   幼教專業學歷：_____ 學總年資：_____年

2. 本人***同意/不同意** (刪去不適用項) 參加是次研究計劃。 本人是自願參上述的研究項目，研究開始後，本人有權拒絕或退出參與，並不需要面對任何後果。

   簽署：_____ 簽署日 期: _____

   教師姓名：_____ 任教班級：_____ 性別：男 / 女

   幼教專業學歷：_____ 學總年資：_____年

3. 本人***同意/不同意** (刪去不適用項) 參加是次研究計劃。 本人是自願參上述的研究項目，研究開始後，本人有權拒絕或退出參與，並不需要面對任何後果。

   簽署：_____ 簽署日 期: _____

   教師姓名：_____ 任教班級：_____ 性別：男 / 女

   幼教專業學歷：_____ 學總年資：_____年

4. 本人***同意/不同意** (刪去不適用項) 參加是次研究計劃。 本人是自願參上述的研究項目，研究開始後，本人有權拒絕或退出參與，並不需要面對任何後果。

   簽署：_____ 簽署日 期: _____

   教師姓名：_____ 任教班級：_____ 性別：男 / 女

   幼教專業學歷：_____ 學總年資：_____年

Appendix H: Parent invitation and consent form

香港教育大學
The Education University of Hong Kong

家長參與研究邀請信

研究計劃：探討「幼兒共融學習介入計劃」的成效

致_____家長：

誠邀　貴子女參加上述研究計劃。本研究由本研究由香港教育大學特殊教育與輔導學系助理教授曾君蘭博士負責監督，並由香港教育大學特殊教育與輔導學系之研究院博士生鄭惠娟女士(BCBA-國際認證行為分析師)負責執行，目的是探究在兼收服務的幼兒園環境下，藉着「幼兒共融學習介入計劃」，提昇有自閉症特徵以及正常發展的四至六歲幼兒在共融學習環境中社交互動互融的能力。

在研究開展期間，每位參與幼兒將會接受研究員訪談，面談會在幼兒園中進行，每節時間以五分鐘為限。卡通貼紙將被給予完成訪談的孩子作為鼓勵。此外，研究員亦會於課堂內進行約一小時之課堂觀察、記錄/及錄影(如獲參與者批准)。在介入計劃進行期間，負責教師會協助研究員安排研究員於本年十至十二月實踐每週一節為時 30 分鐘的「幼兒共融學習介入計劃」課堂(合共八節)。研究員將於每一節課堂進行錄影(如獲參與者批准)，所有觀察記錄僅作日後數據分析用途。

本研究樣本總數為 120 名兒童和 8-10 名班教師。為確保參加者的學習受到最小的影響，研究人員將會於小息期間與每位參與幼兒個別面談約五分鐘。 所有學校、教師及幼兒的參與純屬自願，均享有充分的權利決定在研究開始之前或之後退出是項研究；凡有關參與者的資料將會保密，一切資料的編碼只有研究人員得悉，絕對不會外洩給其他人士；亦不會影響參與者在園內之考績與評估。

本研究團隊會確保研究參與者的所有資料絕對保密及不具名。研究計劃資料只屬執行研究導師及研究員審查，所收集的數據資料僅作本研究日後數據分析用途及被發佈於博士學位論文或期刊論文中。所有涉及個人身份及學校的資料會以編碼方式儲存作數據，確保參加者的私隱受到保障，研究數據將儲存於首席研究員辦工室三年，之後徹底銷毀。

如　閣下對這項研究有任何意見，可隨時與香港教育大學人類實驗對象操守委員會聯絡(電郵:hrec@eduhk.hk;地址:香港教育大學研究與發展事務處)。如　閣下想獲得更多有關這項研究的資料，請與首席研究員鄭惠娟女士聯絡，電話：

多謝閣下的支持及參與，敬希早日賜覆

研究執行員

鄭惠娟女士
BCBA-國際認證行為分析師
香港教育大學特殊教育與輔導學系之研究院博士生
電話：　　電郵：

二零一七年九月二十日

香港教育大學
The Education University of Hong Kong

研究計劃：探討「幼兒共融學習介入計劃」的成效

家長同意書回條

請於 2017 / / 填妥此回條並請交回班主任教師，謝謝!

致：鄭惠娟女士 - 香港教育大學特殊教育與輔導學系之研究院博士生

學生姓名：_____ 班級：K2 / K3

性別：男 / 女 學生出生日期: _____ 學生年齡：_____

學校名稱：香港基督教播道會聯會中國基督教播道會厚恩堂厚恩幼兒學校

本人明白上述的研究程序，並就本計劃回覆下列項目，及簽署作實。 本人是自願參上述的研究項目，研究開始後，本人有權拒絕或退出參與，並不需要面對任何後果。

(請在以下適用空格內畫＜✓＞號)

☐ 本人得悉 敝子女將於幼兒園中參加是次研究計劃。

☐ 本人 **同意/ 不同意** (刪去不適用項) 研究團隊就 敝子女的課堂行為作錄影記錄。

家長簽署：_____

家長姓名：_____

性別：男 / 女 與學生關係：_____

學歷：_____ 職業：_____

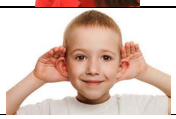
日期：_____ 聯絡電話：_____

電郵：_____

Appendix I: AVIP intervention program lesson plan – Chinese version (8 lessons)

課堂	主題	培訓目標	AVIP 做個好朋友故事 (課堂一)
一	互相欣賞	孩子能夠透過童謠或口訣幫助記憶，並且參與互動遊戲練習和聆聽老師的即時回饋，學習運用簡單的手勢和句子表達欣賞別人和對別人作出正面的回應(鼓勵)，明白並接納與自己不同的同伴互動交往，建立朋友關係。 孩子能夠： (1) 識別自己在什麼時候要與他人打招呼 -識別自己如何跟他人打招呼 -意識到他人在跟自己打招呼 -識別當他人跟自己打招呼時，可以如何回應 (2)識別各種自己要遵守課堂規則指令的手勢 -識別各種自己對他人表達欣賞和鼓勵時可以運用的回應手勢和字句 -識別各種他人對自己對表示欣賞和鼓勵時會運用的回應手勢和字句 -意識到自己可以使用「紅綠燈平靜歌」來冷靜 -識別他人也可以使用「紅綠燈平靜歌」來冷靜 (3)對各種課堂規則手勢有正確的回應	1a) 當我在(早上/下午)第一次遇見(他人)時，我可以帶着微笑與他打招呼，並說: 「(早晨/午安)!/ XXX, (早晨/午安)!/ (早晨/午安)，XXX，你好嗎? 」 1b) 當(他人) 在(早上/下午)跟我說早晨時，我可以帶着微笑跟他說: 「(早晨/午安)!/ XXX, (早晨/午安)!/ (早晨/午安)，XXX，你好嗎? 」 2a) 當我見到 (老師或他人)用課堂規則指令之手勢時，我可以立刻作出相對的回應，例如: “停止/暫停”(用兩隻手掌造成一個 T 字) “磁石腳” (站立時: 把雙手放在身旁，雙腳站立並緊貼在地上 着坐時: 把雙手放在膝蓋上，雙腳緊貼在地上) “安靜”(豎起食指放在閉合的嘴唇前面) “聆聽”(將打開的手掌放在耳旁) “望着老師”(將 OK 手勢放在兩眼上，假裝帶了眼鏡望着老師) (i-v) 2b) 當我見到 (他人)作了令我欣賞 、擔心或開心的事情時，我可以用欣賞、關心和鼓勵別人的手勢，對別人作出正面的回應，例如: “歡迎你/喜歡你做 xxx”(向着別人微笑和點頭) “加油”(手握拳頭做大力士動作) “俾個叻你/做得好”(雙手向着別人送出豎起的手指公) “關心你”(用兩隻手在心口前面做一個小心) “做得對/做對了”(用食指和拇指做一個剔(√)) “Yeah/完成啦”(用雙手做 V 字) “欣賞你做了 xxx”(向着別人微笑並送出豎起的手指公) “進步”(用雙手做出三角形火箭向上發射) “High Five” (用手掌與別人的手掌作拍掌動作) (i-v) 2c)_當(他人)令我感到憤怒、不安或被打擾時，我可以唱「紅綠燈平靜歌」，讓自己冷靜下來，然後再想如何作出正確的回應。(i-v)

		-運用 2-3 種課堂規則手勢 -運用 2-3 種各對他人的回應手勢和句子 -運用「紅綠燈平靜歌」來冷靜	2d) 當我看見(他人)感到憤怒、不安或被打擾時，我可以建意他唱「紅綠燈平靜歌」來平靜，然後再想如何作出正確的回應。(i-v) 3a) 當(老師/他人) 對我做課堂規則的手勢時，我要作出正確的回應來遵守規則。(i-v) 3b) 當我看見(他人)不遵守課堂規則時，我可以使用課堂規則的手勢提示同學遵守課堂規則。(i-v) 3c) 當我看見(他人)有好的表現，例如:幫助別人、分享玩具、有禮貌、安慰別人、有耐性、守秩序、選擇了正確的答案等等，我可以使用對別人正面回應的手勢欣賞和鼓勵那人。(i-v) 3d) 當我看見別人太開心、大哭或大叫時，我可以對他說：「請你停止(或者做停止手勢)， 要安靜下來。」建議他使用「紅綠燈平靜歌」，待他平靜下來就邀請他做好：「請你(慢慢行 /看圖書 /留心聽 /一起玩)。」有需要時找成人幫忙。(i-v) 3e) 當我太開心、大哭或大叫時，我會提醒自己：「要停止，勿騷擾(他人) 。」並找個安靜地方使用「紅綠燈平靜歌」令自己平靜下來，然後提醒自己做好(慢慢行 /看圖書 /留心聽指示)。有需要時找成人幫忙。(i-v)
	第一節課	**<u>介入活動步驟 (30 mins)</u>** (一)引子 – 唱早晨/午安歌 (3 mins) (二)介紹和練習課堂規則以及對別人正面回應的手勢和句子(15 mins) (三) 以互動遊戲活動應用本課所學的作總結(12 mins) (四) 在校日程延伸訓練	(i)利用 V 圖卡選擇表達(開心)情緒的方式 (V-visual support) (ii)利用 P 歌謠記憶社交故事內容 (P-prompting techniques) (iii)利用 P 口訣做出社交回應 (P-prompting techniques) (iv)利用 I 互相(對唱/找圖卡等)同儕誘導 P 技巧 (I-interaction) (v)利用 A 教師回饋及同儕「正面回應」策略 (A-affirmative responses)

介入活動步驟	教具
(一)引起動機（3 分鐘）：（目標 1） 1. 教師先利用(V1) (早晨/午安)歌影片，讓孩子們看看別人怎樣與他人打招呼的社交情景。，播放指出影片中的小孩與別人說(早晨/午安)時，會(i)望着對方; (ii) 面帶笑容; (iii) 用在室內說話的聲線。 2. 然後提問孩子當中主角與他人打招呼會做什麼? 請孩子回答(孩子可運用 V1 圖片卡來回答)。 3. 然後讓孩子面對面排列成兩行，練習(i)望着對方; (ii)面帶笑容; (iii)並用室內交談的聲線跟對方說早晨，在孩子互相練習的過程中(I)，教師會給予(A)回應及提示。 4. 教師再播放(早晨/午安)歌，讓孩子一起唱(早晨/午安)歌。 **(二)教學過程（15 分鐘）：（目標 2-3）** 5. 唱完早晨歌後，老師請孩子圍半圓坐著，教師以老師口訣示範「課堂規則」的手勢，並讓孩子跟着做，然後給孩子即時(A)回應，讓孩子知道自己是否正確。老師在往後的課堂也運用這些手勢，幫助孩子習慣跟從這些課堂規則。 6. 之後教師播放以(P 口訣)描述配以(A)「正面回應」手勢的影片，示範給孩子看。 7. 然後請孩子跟着做，一同練習運用(A)「正面回應」的手勢。在孩子的練習過程中，教師會給予(A)回應及提示。 8. 選出一至兩對在互相打招呼時(i)望着對方、(ii) 面帶笑容、(iii)用室內交談的聲線的孩子來作示範，請大家一同評分(I)，給(A)「正面回應」予示範的孩子 (教師需提醒孩子運用剛剛學會的手勢) 。 9. 老師邀請個別孩子出來跟老師一起做「正面回應」的手勢，之後讓大家運用剛剛學習的手勢給予這孩子(A)「正面回應」。	(V1) (早晨/午安)歌影片和圖片(包括望着對方、面帶笑容、和用室內交談的聲線跟對方說早晨) 早晨歌歌詞: 早晨，早晨，大家說聲早, 早晨，早晨，我都做得到。 https://youtu.be/XyuCuT53ZUo 午安歌歌詞(愛登士家庭曲譜): 大家午安 (拍手兩下) 各位午安 (拍手兩下) 我們齊齊 互相問好 說聲午安 (午安) (V2) 「課堂規則」的手勢圖片和(P 口訣) 停止/暫停  磁石腳(站立)  望着老師  安靜  **專心聆聽**  老師口訣:小朋友係上課時，要暫停其他活動，用磁石腳坐好或企好，用眼仔望住老師，安靜和專心聆聽老師的說話。 (V3) 「正面回應」的手勢影片、圖片和(P 口訣) 我們都是好朋友 見面時微笑點頭 留心聆聽 叻叻豬 一同學習 齊加油 互助互勉 勤關心

（三）以互動遊戲活動應用作總結（12 分鐘）：

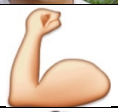
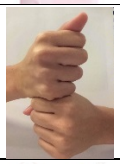
10. 教師在布袋中隨機抽取孩子名字卡後，邀請孩子在白板上選擇會被讚賞的行為的圖片，例如幫助別人、分享玩具、排隊守秩序、坐立姿勢正確，孩子們(I)互動並且運用剛剛學習的手勢的手勢給予這孩子(A)「正面回應」。

11. 教師在布袋中隨機抽取幾個孩子名字卡後，邀請孩子做小領袖，帶着大家重溫一次口訣和「正面回應」的手勢，給予別人讚賞和鼓勵 。

12. 總結課堂重點 (2 分鐘)

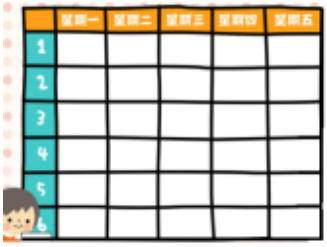
大家都叻 互欣賞

做啱選擇 攞個剔
齊齊進步 Give me five

好朋友	
微笑點頭	
加油	
叻叻豬	
幫助	
關心	
攞個剔	
欣賞	
進步	
Give me five	

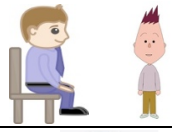
(V4) 會被讚賞的社交情景圖片

- 情景一：小孩幫助同伴收拾玩具
- 情景二：小孩與同伴分享玩
- 情景三: 小孩排隊守秩序
- 情景四: 小孩坐立姿勢正確
- 情景五: 小孩上課時留心望着老師

	(V5) 以「紅綠燈平靜歌」冷靜時的表情圖片卡和(P 紅綠燈歌詞)配以(P 歌謠) 「有只雀仔跌落水」樂譜 紅綠燈歌歌詞: **紅黃綠燈　唔開心 唱紅綠燈 會開心** **深呼吸後　勁放鬆　笑　開心晒** (P 歌謠) <1a&b>與同伴說早晨/午安配以「早晨/午安歌」樂譜 孩子的名字卡 布袋 紅綠燈道具
（四）在校日程延伸訓練 ➢ 在校每當教師看見孩子做到包容、欣賞、聆聽和鼓勵他人的行為就給予印章，作為鼓勵和肯定(A)。 ➢ 每天總結孩子收集印章的情況，並在一個星期最後的一天，統計孩子的印章數量，並分享自己良好的行為表現，給予印章數量前三名的孩子貼紙／10 分鐘玩玩具的時間等，作為獎勵(A)。 ➢ 教師可讓孩子在早上與同伴說早晨配以「早晨歌」樂譜… ➢ 在其他時段適當地做出「正面回應」(P 口訣和手勢) ，孩子可用圖片卡(V)，教師可把圖卡張貼在教室當眼的位置，作為提醒。	(V6)收集印章的表格  樂器:琴/鼓

課堂	單元一 主題:	培訓目標	AVIP 做個好朋友故事 (課堂二至三)
二至三	互相接納情緒表達方式	孩子能夠透過明白並接納以下自己及他人情緒表達方式，學習表達明白並接納他人，並練習如何與不同情緒表達方式的同伴互動交往，與同伴建立朋友關係。 孩子能夠： (1)識別 1-2 種自己表達(開心)情緒的方式 識別 1-2 種自己表達(不開心)情緒的方式 - 識別 1-2 種他人表達(開心)情緒的方式 - 識別 1-2 種他人表達(不開心)情緒的方式 -識別自己在什麼時候使用「紅綠燈平靜歌」來冷靜下來 -識別在什麼時候建議別人使用「紅綠燈平靜歌」來冷靜下來 - 意識到自己和他人在表達(開心/不開心)情緒的方式有分別 (2)指出 1-2 種當自己表達(開心)情緒時期望他人作出明白並接納的回應 -指出 1-2 種當他人表達(開心)情緒時期望自己作出明白並接納的回應 -指出 1-2 種當自己表達(不開心)情緒時期望他人作出明白並接納的回應 -指出 1-2 種當他人表達(不開心)情緒時期望自己作出明白並接納的回應 (3) 指出 1-2 種當自己表達(開心/不開心)情緒的方式令他人感到不安或被打擾時，自己可以做的回應	1a) 課堂二: 當人開心的時候，有人會大笑、有人會手舞足蹈、有人會唱歌、有人會跑來跑去，當你或其他人開心的時候，你或同學們又會怎樣表達？(i-v) 1b) 課堂三: 當人不開心的時候，有人會哭泣、尖叫，有人會打和踢人，有人會在地板上發脾氣滾來滾去，有人需要擁抱，當你或其他人不開心的時候，你或同學們又會怎樣表達？ 2a) 當我見到 (他人) 開心得(大笑或歡呼)的時候，我可以對他說：「XXX, 你在(大笑/歡呼); 我知道你很開心。」使他知道我明白他開心的感受。(i-v) 2b) 當我見到 (他人) 開心得(大笑或歡呼)的時候，我可以望着他微笑，使他知道我明白他開心的感受。(i-v) 2c) 當我見到 (他人) 不開心得(大哭或尖叫)的時候，我可以對他說：「XXX, 你在(大哭/尖叫); 我知道你很不開心。」並用兩隻手在心口前面做一個小心關心他，使他知道我明白他不開心的感受。(i-v) 2d) 當我見到 (他人) 不開心得(大哭或尖叫)的時候，我可以(合口望着他 /輕輕拍他膊頭安慰他說:「冇事啦!」 /給他紙巾/叫他用「紅綠燈平靜歌」)，使他知道我明白他不開心的感受。(i-v) 3a)當我見到 (他人)(這樣…做)來表達(開心/不開心)情緒的方式時，會令我感到(不安/被打擾/不開心)? (i-v) 3b)當(他人)見到我(這樣…做)來表達(開心/不開心)情緒的方式時，會令(他人)感到(不安/被打擾/不開心)? (i-v) 3c)當我見到 (他人)這樣表達情緒，令我感到不安或被打擾時，我可以對他說：「請你停止(或者做

		-指出 1-2 種當他人表達(開心/不開心)情緒的方式令自己感到不安或被打擾時，自己可以做的回應	停止手勢)， 要安靜下來。」建議他使用「紅綠燈平靜歌」，待他冷靜下來就邀請他做好：「請你(慢慢行 /看圖書 /留心聽 /一起玩)。」有需要時找成人幫忙。(i-v) 3d)當我見到 (他人)這樣表達情緒，令我感到不安或被打擾時， 我可以不理會他， 我可以 找個安靜地方，使用「紅綠燈平靜歌」冷靜下來，專心做自己的事情。有需要時找成人幫忙。(i-v) 3e)當我自己表達(開心/不開心) 的方法令(他人)感到(不安/被打擾) 時，我會提醒自己：「要停止，勿騷擾(他人) 。」並找個安靜地方使用「紅綠燈平靜歌」令自己冷靜下來，然後提醒自己做好(慢慢行 /看圖書 /留心聽指示)。有需要時找成人幫忙。(i-v)
	每單元分兩課節舉行(如： 課堂二: 1a-開心 課堂三: 1b-不開心)	**介入活動步驟 (30 mins)** (一)引子 - AVIP 社交情景故事分享(8 mins) (二)社交故事背誦及朋輩互應活動(10 mins) (三) 以互動遊戲活動應用本課所學的作總結(12 mins) (四) 在校日程延伸訓練	(i)利用 V 圖卡選擇表達(開心)情緒的方式 (V-visual support) (ii)利用 P 歌謠記憶社交故事內容 (P-prompting techniques) (iii)利用 P 口訣做出社交回應 (P-prompting techniques) (iv)利用 I 互相(對唱/找圖卡等)同儕誘導 P 技巧 (I-interaction) (v) 利用 A 教師回饋及同儕「正面回應」策略(A-affirmative responses)

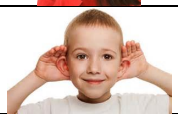
介入活動步驟	教具
(一)引起動機（8 分鐘）：（目標 1） 1. 教師先利用(V1)故事繪本與孩子們分享一個與(開心)相關的社交情景故事。 2. 然後提問孩子當中主角的心情緒如何？孩子怎樣知道? 主角是如何表達(開心)的情緒呢？然後請孩子回答(孩子可運用 V2 圖片卡來回答)。 3. 教師指出故事／影片中的孩子因為(開心)而(大叫…)，也因為(傷心)而(大叫…)來表達自己(開心／傷心)的感受。 4. 教師請二人成一組，(I)孩子們互相提問/猜猜對方是怎樣表達自己的(開心)情緒(孩子可用 V2 圖片卡回答)。然後教師準備孩子的名字卡，放在布袋中，請孩子隨機抽取，孩子抽取名字卡後，要嘗試猜測同伴在開心或者傷心時的表達方法，並做示範出來，再請被抽中的孩子示範自己在開心或傷心時表達。 5. 孩子回答以後，教師嘗試運用用熟悉的歌謠把<1a>配合社交故事作歌詞帶領孩子們唱出來(P 歌謠)。 **(二)教學過程（10 分鐘）：（目標 2-3）** 13. 教師請孩子圍半圓坐著，利用(V3)社交情景的影片與孩子們分享開心／傷心的社交情景。然後請孩子分享<3a-3b>，當遇到身邊的人這樣時，自己有何感受呢？ (孩子可用 V2 圖片卡回答)。 14. 教師利用（V4, V5&V6）「我可以怎樣做? 」社交故事圖片，引導孩子們學習社交故事<2a – 2d 和 3c-3e>。過程中，教師藉着孩子的分享，即時示範當見到他人（開心／傷心）時，可以怎樣做的方法。 15. 教師請孩子分享當自己開心或者傷心時，期望他人怎樣做(孩子可用 V4, V5&V6 圖片卡回答)。當孩子分享了不同的方法時，教師可給予適當的引導或提問，讓孩子思考自己的方法是否正確。當孩子提出的方法是有效的，可給予正面的(A)回饋，鼓勵與讚賞孩子。	(V1) AVIP 故事繪本 (V2)表達情緒圖片卡（教師邀請學生扮出不同的表情樣子，並拍照後製作成圖卡）(例如:快樂、興奮、憂愁、傷心、和憤怒) (V3) 社交情景圖卡/影片 社交情景的內容： 教師扮演孩子開心／不開心時的反應來錄製的短片。 ➢ 影片一：小孩再玩滑梯的時候感到很開心，所以尖叫。 ➢ 情景二：吃茶點時小孩突然狂笑 ➢ 情景三: 小孩在玩積木的時候，車子積木給同伴拿去了，因此感到不開心，並大叫。 ➢ 情景四: 小孩被撞傷時大聲哭 (V4)「我可以怎樣做? 」社交故事圖片<2a – 2d 和 3a-3c>（教師邀請學生扮出不同的情景，並拍照後製作成圖卡） (教師自行繪畫出相關的情景) 2a  2c  2b  2d  (V5) 「課堂規則」的手勢圖片和(P 口訣) 停止/暫停  磁石腳(站立)  望着老師 

（三）以互動遊戲活動應用作總結（12 分鐘）：

1. 將一些有效的方法做成(P 口訣)，請孩子們(I)互相向對方做出來。如：<2a>「XXX, 你在(大笑/歡呼); 我知道你很開心。」「XXX, 你在(大哭/尖叫); 我知道你很不開心。」等。然後請孩子運用（V7）臉譜輪流扮演（開心／傷心），另一位孩子則運用(P 口訣)來與同伴進行互動(I)。

2. 情景扮演:
教師準備不同情景的(V7)短片/故事圖片，例如：吃茶點時有人狂笑，玩玩具時有人尖叫，撞傷時大聲哭等，請孩子扮演在該情景下，(I)應該怎樣做才能幫助有關的同伴。過程中，教師會給予(A)回應及提示，並對孩子的分享給予回饋，當孩子提出了好的方法時，應即時給予讚賞。

16. 教師與孩子總結每個人表達情緒的方式都有所不同，但人人都期望別人包容、接納及關心自己。我們可以用(P 口訣)，令同伴知道我們想和他做個好朋友，並重溫一次口訣。 (2 分鐘)

安靜	
專心聆聽	

老師口訣:小朋友係上課時，要暫停其他活動，用磁石腳坐好或企好，用眼仔望住老師，安靜和專心聆聽老師的說話。

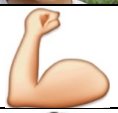
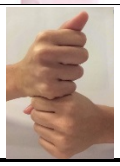
(V6) 「正面回應」的手勢影片、圖片和(P 口訣)

我們都是好朋友
見面時微笑點頭

留心聆聽 叻叻豬
一同學習 齊加油

互助互勉 勤關心
大家都叻 互欣賞

做啱選擇 攞個剔
齊齊進步 Give me five

好朋友	
微笑點頭	
加油	
叻叻豬	
幫助	

	關心  攞個剔  欣賞  進步  Give me five  (V7)開心和傷心的臉譜 (P 歌謠) <1a>社交故事配以「當你知道你好快樂(拍拍手)」樂譜… (P 口訣) <2a – 2d 和 3c-3e>圖片卡 孩子的名字卡 布袋
<u>（四）在校日程延伸訓練</u> ➢ 在校每當教師看見孩子做到包容、欣賞、聆聽和鼓勵他人的行為就給予印章，作為鼓勵和肯定(A)。 ➢ 每天總結孩子收集印章的情況，並在一個星期最後的一天，統計孩子的印章數量，並分享自己良好的行為表現，給予印章數量前三名的孩子貼紙／10 分鐘玩玩具的時間等，作為獎勵(A)。 ➢ 教師可讓孩子在早上與同伴說早晨配以「早晨歌」樂譜 ➢ 在音樂堂唱(P 歌謠) <1a>社交故事配以「當你知道你好快樂(拍拍手)」樂譜(I) ➢ 在其他時段適當時候做出「正面回應」(P 口訣和手勢) ，孩子可用圖片卡(V)，可把圖卡張貼在教室當眼的位置，作為提醒。	(V8)收集印章的表格  樂器:琴/鼓

課堂	單元二主題:	培訓目標	AVIP 做個好朋友故事 (課堂四至五)
四至五	互相認識能力特點	孩子能夠透過認識並欣賞以下自己及他人較強或較弱的能力特點，學習表達認識並欣賞他人，並練習如何與不同能力特點的同伴互動交往，與同伴建立朋友關係。 孩子能夠： (1)識別自己 1-2 個 (較強) 的能力特點 -識別自己 1-2 個(較弱)的能力特點 - 識別他人 1-2 個(較強)的能力特點 -識別他人 1-2 個(較弱)的能力特點 - 意識到自己和他人在能力特點上都有分別 (2)指出 1-2 種情況當自己表現(較強)的能力時，自己期望他人作出認識並欣賞的回應 -指出 1-2 種情況當自己表現(較弱) 的能力時，自己期望他人作出認識並接納的回應 -指出 1-2 種情況當他人表現(較強) 的能力時，他人期望自己作出認識並欣賞的回應 -指出 1-2 種情況當他人表現(較弱) 的能力時，他人期望自己作出認識並接納的回應 (3)指出 1-2 種當自己表現(較強/較弱) 的能力而令	1a) 課堂四: 我們有着不同的能力特點，有些人的數學運算能力比較強(叻)，能夠快速地辨認識數字；有些人的音樂節奏感比較強(叻)，能夠快速地辨認音樂的旋律；亦有些人的記憶力比較強(叻)，能夠清楚地記得看過或聽過的東西。；亦有些人說話表達能力比較強(叻)，能夠清楚地作公開演說。你或同學們又在哪方面會有較強的能力特點呢？(i-v) 1b) 課堂五: 我們有着不同的能力特點，有些人的專注能力比較弱(冇咁叻)，在上課時只能專心聆聽老師說一段很短的話，然後就會想了別的事情，聽不到老師的教導或指示；有些人的語言表達能力比較弱(冇咁叻) ，不能夠流暢地講故事和表達自己的想法；有些人的適應能力比較弱(冇咁叻)，在接觸新事物或遇到突然的轉變時，會感到不安。有些人的體能比較弱(冇咁叻)，不能夠快速地跑步或者跳得很高。你或同學們又在哪一個科目會有較弱的能力特點呢？ 2a) 當我見到 (他人) 在（做數學/音樂感/記憶力）活動中表現突出的時候，我可以對他說：「XXX，你好叻呀，我好欣賞你！」並給他欣賞的手勢(向着別人微笑並送出豎起的手指公)，使他知道我欣賞他的能力特點。(i-v) 2b) 當我見到 (他人) 在（識數）活動中表現突出的時候，我可以望着他微笑，並給他欣賞的手勢（向着別人微笑並送出豎起的手指公），使他知道我欣賞他的能力特點。(i-v) 2c) 當我見到 (他人) 因為能力特點較弱而（未能/準確/較慢）完成活動時，我可以對他說：「XXX，加油呀！我支持你。」並給他加油的手勢(手握拳頭做大力士動作)，讓他知道身邊有人在支持和接納他。(i-v) 3a)當(我/他人)見到 (他人/我)在（學科/專注力/語言表達）有(較強/較弱)的能力特點時，會令我感到(自豪/自卑/敬佩)？ (i-v)

		他人感到氣餒/氣憤時，自己可以做的回應) -指出 1-2 種情況當他人在不同的領域中，表現(較強/較弱) 的能力時，而令自己感到氣餒/氣憤時，自己可以做的回應	3b)當(我/他人)見到(他人/我)在（學科/專注力/語言表達）有(較強/較弱)的能力特點時，會令(他人)感到(自豪/自卑/敬佩)？ (i-v) 3c)當我見到 (他人) 在（學科/專注力/語言表達）的能力特點(較強)時，我可以請教他，對他說：「XXX，請你教我做，好嗎？」待他應允後，與他一起進行活動，完成後說：「做到了(並可使用 Yeah 的手勢，以雙手做 V 字) ，真好！謝謝你！」(i-v) 3d)當我見到 (他人) 在（學科/專注力/語言表達）的能力特點(較弱)時，我可以鼓勵(他人/自己)繼續努力，專心做好自己的事情，對他說：「XXX，加油(並手握拳頭做大力士動作)！需要找人幫忙嗎？」(i-v) 3e)當我自己在（學科/專注力/語言表達）的能力特點(較強/較弱)時，令我感到自豪或自卑時，我會提醒自己：「加油！」並提醒自己(專心做/不要打擾他人/慢慢說/留心聽指示/有需要時找成人幫忙)。(i-v)
	每單元分兩課節舉行(如：課堂四: 1a 較強 課堂五: 1b 較弱)	**介入活動步驟 (30 mins)** (一) 引子 - 社交情景故事分享(8 mins) (二) 社交故事背誦及朋輩互應活動 (10 mins) (三) 以互動遊戲活動應用本課所學的作總結(12 mins) (四) 在校日程延伸訓練	(i) 利用 V 圖卡選擇表達(開心)情緒的方式 (V-visual support) (ii) 利用 P 歌謠記憶社交故事內容 (P-prompting techniques) (iii) 利用 P 口訣做出社交回應 (P-prompting techniques) (iv) 利用 I 互相(對唱/找圖卡等)同儕誘導 P 技巧 (I-interaction) (v) 利用 A 教師回饋及同儕「正面回應」策略 (A-affirmative responses)

介入活動步驟	教具
(一)引起動機（8 分鐘）：（目標 1） 6. 教師先利用(V1)故事繪本與孩子們分享一個與（能力特點）相關的社交情景故事。 7. 然後提問孩子當中主角的能力特點如何（較強/弱）？孩子怎樣知道? 主角是如何表現有關的能力呢？然後請孩子回答(孩子可運用 V2 圖片卡來回答)。 8. 教師指出（A）故事/影片中的孩子在(學科中)的能力特點較強，也在(專注力/語言表達) 的能力特點較弱，原來自己和他人在能力特點上都有分別。 9. 教師請二人成一組，(I)孩子們互相分享自己的（較強/弱）的能力特點(孩子可用 V2 圖片卡回答)。然後教師準備孩子的名字卡，放在布袋中，隨機抽取一張名字卡，然後請孩子選擇分享較強或較弱(孩子可用 V3 圖片卡協助)方面的能力特點(孩子可用 V2 圖片卡回答)，並說出 (較強或較弱)方面的能力特點情況。 10. 提問/猜猜同伴在不同能力方面的表現情況(孩子可用 V2 圖片卡回答)。教師拿出放有孩子名字卡的布袋，請孩子輪流隨機抽取，孩子抽取名字卡後，要嘗說出同伴在不同方面的表現能力。 11. 孩子回答以後，教師嘗試運用用熟悉的歌謠把<1a>配合社交故事作歌詞帶領孩子們唱出來(P)。 **(二)教學過程（10 分鐘）：（目標 2-3）** 17. 教師請孩子圍半圓坐著，利用(V4)社交情景故事內容，播放有關的影片與孩子們分享人在不同學科方面的表現能力（較強/較弱）。然後請孩子分享<3a-3b>，當自己或他人的表現能力較（他人或自己）表現得較強/較弱時，自己有何感受	(V1)AVIP 故事繪本 (V2)不同能力特點的圖片(search on web)  (V3) 表達能力較強和較弱的圖卡  (V4) 社交情景圖卡/影片 社交情景的內容： 教師扮演孩子較強/較弱時的表現來錄製的短片。 ➢ 影片一：片中小孩很喜歡數字，在數學方面的能力很高，所以在數學活動中，都能快而準的完成活動，並對教師求額外的數學活動。 ➢ 影片二：同伴與他聊天，片中小孩很少作出回應，很像不懂如何用言語表達。 ➢ 情景一：小孩在玩記憶卡遊戲時，配對要相同的圖卡 ➢ 情景二：小孩在台上演說天文方面的知識 ➢ 情景三：小孩在上美術課時，只畫了數字，而同伴的畫中有很漂亮的圖畫。 ➢ 情景四：小孩在上課時，不專心到處看東西。 ➢ 情景五: 小孩懂得玩各樣的運動。 ➢ 情景六：小孩在玩記憶卡遊戲時，忘記圖卡的位置。 （V5）表達情緒圖片卡（教師邀請學生扮出不同的表情樣子，並拍照後製作成圖卡） (例如:快樂、興奮、憂愁、傷心、和憤怒)

呢？ (孩子可用 V5 圖片卡回答)

18. 教師利用（V6）「我可以怎樣做? 」社交故事圖片，引導孩子們學習社交故事 <2a – 2d 和 3c-3e>。過程中，教師藉着孩子的分享，即時示範當見到他人在（學科/專注力/語言表達）方面表現得較強/較弱時，可以怎樣做的方法(孩子可用 V6, V7&V8 圖片卡回答)，教師（A）即時給予回應。

19. 教師請孩子分享當自己在（學科/專注力/語言表達）方面表現得(較強/較弱)時，期望他人怎樣做(孩子可用 V8 圖片卡回答)。當孩子分享了不同的方法時，教師可給予適當的引導或提問，讓孩子思考自己的方法是否正確。當孩子提出的方法是有效的，可給予正面的(A)回饋，和用「正面回應」的手勢鼓勵與讚賞孩子。

（三）以互動遊戲活動應用作總結（12 分鐘）：

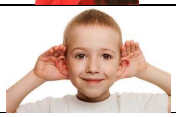
3. 將一些有效的方法做成(P 口訣)，請孩子們(I)互相向對方做出來。如：<2a> 「XXX，你好叻呀，我好欣賞你！」「XXX，加油呀！我支持你。」等。然後請孩子抽出(V4)的圖卡，另一位孩子則運用(P 口訣)來與同伴進行互動。

4. 情景扮演:
教師準備不同情景的(V4)短片/故事圖片配合(V2)的圖卡進行角色扮演遊戲，例如：美藝活動時，發呆；喜歡分享天文方面的知識；同伴與他聊天，他不回應別人等，請孩子扮演在該情景下，(I)應該怎樣做才能幫助有關的同伴。過程中，教師會給予(A)回應及提示，並對孩子的分享給予回饋，當孩子提出了好的方法時，應即時給予讚賞。

20. 教師與孩子總結每個人在不同方面的能力特點都有所不同，有些人的表現較

（V6）「我可以怎樣做? 」社交故事圖片 <2a – 2d 和 3c-3e>

(V7) 「課堂規則」的手勢圖片和(P 口訣)

停止/暫停	
磁石腳 (站立)	
望着老師	
安靜	
專心聆聽	

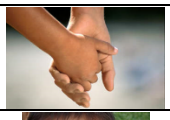
老師口訣:小朋友係上課時，要暫停其他活動，用磁石腳坐好或企好，用眼仔望住老師，安靜和專心聆聽老師的說話。

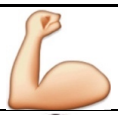
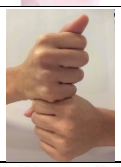
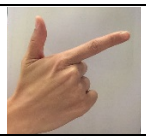
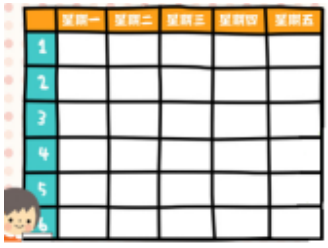
(V8) 「正面回應」的手勢影片、圖片和(P 口訣)

我們都是好朋友
見面時微笑點頭

留心聆聽 叻叻豬
一同學習 齊加油
互助互勉 勤關心
大家都叻 互欣賞

做啱選擇 攞個剔
齊齊進步 Give me five

好朋友	
微笑點頭	

強，有些人的表現較弱，大家都期望得到別人欣賞和接納，因此，我們要學習欣賞別人的長處，接納他人的短處。我們可以用「正面回應」的手勢和(P 口訣)，令同伴知道我們懂得欣賞和接納。(2 分鐘)	加油  叻叻豬  幫助  關心  擺個剔  欣賞  進步  Give me five  (P 歌謠) 「我都做得到」樂譜… https://www.youtube.com/watch?v=_uec6fKwJw8 (P 口訣) <2a – 2d 和 3c-3e>圖片卡 孩子的名字卡、布袋
（四）在校日程延伸訓練 ➢ 在校每當教師看見孩子做到包容、欣賞、聆聽和鼓勵他人的行為就給予印章，作為鼓勵和肯定(A)。 ➢ 每天總結孩子收集印章的情況，並在一個星期最後的一天，統計孩子的印章數量，並分享自己良好的行為表現，給予印章數量前三名的孩子貼紙／10 分鐘玩玩具的時間等，作為獎勵(A)。 ➢ 教師可讓孩子在早上與同伴說早晨配以「早晨歌」樂譜	(V9)收集印章的表格  樂器:琴/鼓

➢ 給予孩子在較強能力方面有不同展現的機會，如:展示孩子的繪畫作品，並給予鼓勵（A）。 ➢ 在日常課堂中，可請在該方面能力特點卓越的孩子擔任小老師協助其他同伴，並給予欣賞（A）。 ➢ 在音樂堂唱(P 歌謠)「我都做得到」樂譜(I) ➢ 在其他時段適當時候做出「正面回應」(P 口訣和手勢)，鼓勵孩子之間互相幫助能力較弱、欣賞和鼓勵的同伴（A）。教師可把圖卡(V)張貼在教室當眼的位置，作為提醒。	

課堂	單元三主題:	培訓目標	課堂活動(課堂六至七)
六至七	互相包容行為表現	孩子能夠透過識別以下自己或別人所作出會令他人喜歡或不喜歡的行為表現，增加心智解讀的能力，學習了解別人的想法，並練習與不同行為表現的同伴互動交往，與同伴建立朋友關係。 孩子能夠： (1)識別 1-2 個自己所作出會令他人(喜歡)的行為 - 識別 1-2 個自己所作出會令他人(不喜歡)的行為 - 識別 1-2 個他人所作出會令自己(喜歡)的行為 - 識別 1-2 個他人所作出會令自己(不喜歡)的行為 - 意識到自己和他人所作的行為，會令他人喜歡或不喜歡 (2) 指出 1-2 個當自己作出令他人(喜歡)的行為表現時，期望他人作出喜歡並接納的回應 -指出 1-2 個當自己作出令他人(不喜歡) 的行為表現時，期望他人怎樣作出接納的回應 -指出 1-2 個當他人作出令自己(喜歡)的行為	1a) 課堂六: 我們都有不同的行為表現，有些行為會令他人(喜歡)，例如:對他人友善、關懷、幫助、有禮貌、尊重和分享，你或同學們又會有怎樣的行為表現令他人喜歡呢？ 1b) 課堂七: 我們都有不同的行為表現，有些行為會令他人(不喜歡)，例如:說話時不望着對方，打噴嚏或咳嗽無蓋口，上課時喃喃自語或突然大叫， 別人跟你說時不回應，和別人交談時自顧說自己喜歡的話題，你或同學們又會有怎樣的行為表現令他人不喜歡呢？ 2a) 當我見到同伴做出令他人(喜歡)的行為(對他人友善、關懷、幫助、有禮貌、尊重和分享)的時候，我可以對他說：「XXX，你懂得 (對他人友善、關懷、幫助、有禮貌、尊重和分享)；我很欣賞你。」並給他讚賞或欣賞的手勢（向着別人送出豎起的手指公/用食指和拇指做一個√/用食指和拇指放在下巴前面做一個剔(√)），使他知道我明白他做了令人喜歡的行為。(i-v) 2b) 當我見到同伴做出令他人(喜歡)的行為(對他人友善、關懷、幫助、有禮貌、尊重和分享)的時候，我可以用手勢讚賞或欣賞他(向着別人送出豎起的手指公/用食指和拇指做一個剔(√)/用食指和拇指放在下巴前面做一個剔(√))或者告訴教師他剛才做了的好事，使他知道他做了值得人欣賞的行為。(i-v) 2c) 當我見到同伴做出令他人(不喜歡)的行為的時候，我可以對他做停止的手勢(用兩隻手掌造成一個 T 字)，並說：「XXX，你這樣做會令他人不開心，應該停止，然後跟別人道歉。」使他知道他做了令人不喜歡的行為。(i-v) 2d) 當我見到同伴做出令他人(不喜歡)的行為的時候，我可以(合口望着他做出安靜的手勢(豎起食指放在閉合的嘴唇前面)／輕輕搖擺手作不要的動作／做出留心的手勢(將 OK 手勢放在兩眼上，假裝帶了貓頭鷹眼鏡)，提醒他重新專注課堂活動)，使他知道他做了令人不喜歡的行為，需要立刻停止。(i-v) 3a) 當我見到同伴做出令他人(不喜歡)的行為時，會令我感到(不安/被打擾)? (i-v)

		表現時，期望自己作出喜歡並接納的回應 -指出 1-2 個當他人作出令自己(不喜歡)的行為表現時，期望自己怎樣作出接納的回應 (3) 指出 1-2 個當自己作出令他人(不喜歡)的行為表現而令他人感到不安或被打擾時，自己可以做的回應 -指出 1-2 個當他人作出令自己(不喜歡)的行為表現而令自己感到不安或被打擾時，自己可以做的回應	3b)當(他人)見到我做出令他人(不喜歡)的行為時，會令(他人)感到(不安/被打擾)? (i-v) 3c)當我見到 (他人)這樣的行為時，令我感到不安或被打擾時，我可以對他說：「請你停止(或者做停止手勢)， 要安靜下來。」建議他使用「紅綠燈平靜歌」，待他冷靜下來就邀請他做好：「請你(慢慢行 /看圖書 /留心聽 /一起玩)。」有需要時找成人幫忙。(i-v) 3d)當我見到 (他人) 這樣的行為時，令我感到不安或被打擾時，我可以不理會他，找個安靜地方，使用「紅綠燈平靜歌」令自己冷靜下來，然後專心做自己的事情。有需要時找成人幫忙。(i-v) 3e)當我自己做出令 (他人)感到不安/被打擾時，我會提醒自己：「要停止，勿騷擾(他人)。」並找個安靜地方冷靜自己，使用「紅綠燈平靜歌」令自己冷靜下來，然後提醒自己做好(慢慢行 /保持安靜/留心聽指示)。有需要時找成人幫忙。(i-v)
	每單元分兩課節舉行(如： 課堂六: 1a 喜歡 課堂七: 1b 不喜歡)	**介入活動步驟 (30 mins)** (一) 引子 - 社交情景故事分享(8 mins) (二) 社交故事背誦及朋輩互應活動(10 mins) (三) 以互動遊戲活動應用本課所學的作總結(12 mins) (四) 在校日程延伸訓練	(i) 利用 V 圖卡選擇表達(開心)情緒的方式 (V-visual support) (ii) 利用 P 歌謠記憶社交故事內容 (P-prompting techniques) (iii) 利用 P 口訣做出社交回應 (P-prompting techniques) (iv) 利用 I 互相(對唱/找圖卡等)同儕誘導 P 技巧 (I-interaction) (v) 利用 A 教師回饋及同儕「正面回應」策略(A-affirmative responses)

<table>
<tr><th>介入活動步驟</th><th>教具</th></tr>
<tr><td>

<u>(一)引起動機（8 分鐘）</u>：（目標 1）
12. 教師先利用(V1)故事繪本與孩子們分享一個與(行為表現)相關的社交情景故事。

13. 然後提問孩子當中主角的行為如何？孩子怎樣知道？主角有哪種的行為表現令他人(喜歡／不喜歡)呢？然後請孩子回答(孩子可運用 V2 圖片卡來回答)。

14. 教師指出故事／影片中的孩子因為(懂得關心他人)而做出(令他人喜歡的行為)，也因為(不能控制自己)而做出(令他人不喜歡的行為)，他們都有不同的行為表現。

15. 教師請二人成一組，(I)孩子們互相提問/猜猜對方有哪種表現(令他人喜歡／不喜歡) 的行為(孩子可用 V2 圖片卡回答)。

16. 接著，教師以音樂傳球的方式，請當音樂停止時手持球的孩子，在布袋中抽出取出一張同伴的名字卡，請孩子說出該同伴有哪些行為（令他人喜歡／不喜歡) (孩子可運用 V2 圖片卡來回答)，並做示範出來，再請被抽中的孩子示範自己（令他人喜歡）的行為。

17. 孩子回答以後，教師嘗試運用用熟悉的歌謠把<1a>配合社交故事作歌詞帶領孩子們唱出來(P)。

<u>(二)教學過程（10 分鐘）</u>：（目標 2-3）
21. 教師請孩子圍半圓坐著，利用(V3)社交情景故事與孩子們分享兩個令他人不喜歡的社交情景影片。然後請孩子分享<3a-3b>，當遇到身邊的人出現這樣的行為時，自己有何感受呢？ (孩子可用 V4 圖片卡回答)。

</td><td>

(V1)AVIP 故事繪本

(V2) 人物行為表現的圖卡(search on web)

<u>(V3)社交情景的內容</u>：
教師扮演孩子所做令他人(不喜歡)的行為來錄製的短片。
➢ 情景影片一：小孩說話時不望着對方，別人跟他說時也不回應。
➢ 情景影片二：小孩在上課時喃喃自語，及玩聲
➢ 情景圖卡一: 小孩在上課期間快速地跑到黑板前拿東西玩
➢ 情景圖卡二: 小孩在上課時望著光／風扇
➢ 情景圖卡三：小孩在語無倫次地向人說話
➢ 情景圖卡四： 小孩在重複說自己感興趣的話題
➢ 情景圖卡五： 小孩在搶了他人手中的玩具（自己喜歡的玩具）
➢ 情景圖卡六： 小孩經過時，撞跌了同伴的積木

(V4) 表達情緒圖片卡
(例如:快樂、興奮、憂愁、傷心、和憤怒)

(V5)「我可以怎樣做? 」社交故事圖片<2a－2d 和 3c-3e>

(V6) 「課堂規則」的手勢圖片和(P 口訣)

<table>
<tr><td>停止/暫停</td><td>  </td></tr>
<tr><td>磁石腳
(站立)</td><td>  </td></tr>
<tr><td>望着老師</td><td>  </td></tr>
</table>

</td></tr>
</table>

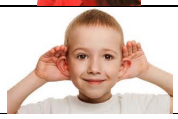
22. 教師利用（V5）「我可以怎樣做? 」社交故事圖片，引導孩子們學習社交故事<2a – 2d 和 3c-3e>。過程中，教師藉着孩子的分享，即時示範當見到他人做出令自己（喜歡/不喜歡）的行為時，可以怎樣做的方法。

23. 教師請孩子分享當自己做了令(他人)（喜歡/不喜歡）的行為時，期望他人怎樣做？當孩子分享了不同的方法時，教師可給予適當的引導或提問，讓孩子思考自己的方法是否正確。當孩子提出的方法是有效的，可給予正面的(A)回饋，鼓勵與讚賞孩子。

<u>（三）以互動遊戲活動應用作總結（12 分鐘）</u>：

5. 將一些有效的方法做成(P 口訣)，請孩子們(I)互相向對方做出來。如：<2a>「XXX，你懂得 (對他人友善、關懷、有禮貌、尊重)；我很欣賞你。」<2b>「XXX，你這樣做會令他人不開心，應該……。」等。然後兩位孩子一組，請其中一位孩子運用（V2）人物行為表現的圖卡，扮演令(他人喜歡/不喜歡的行為)，另一位孩子則運用(P 口訣)（V4 的提示圖卡）來與同伴進行互動(I)。

6. 情景扮演:
教師準備不同的情景圖卡(V3)，例如：上課期間快速地跑到黑板前拿東西玩，上課時望著光／風扇，上課喃喃自語，搶他人手中的玩具（自己喜歡的玩具）等，請孩子扮演在該情景下，(I)應該怎樣做才能幫助有關的同伴(孩子可用 V5/6/7 圖卡回答)。過程中，教師會給予(A)回應及提示，並對孩子的分享給予回饋，當孩子提出了好的方法時，應即時給予讚賞。

安靜	
專心聆聽	

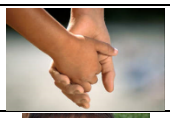
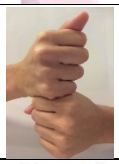
老師口訣:小朋友係上課時，要暫停其他活動，用磁石腳坐好或企好，用眼仔望住老師，安靜和專心聆聽老師的說話。

(V7) 「正面回應」的手勢圖片和(P 口訣)
我們都是好朋友
見面時微笑點頭

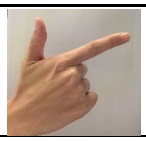
留心聆聽 叻叻豬
一同學習 齊加油

互助互勉 勤關心
大家都叻 互欣賞

做啱選擇 攞個剔
齊齊進步 Give me five

好朋友	
微笑點頭	
加油	
叻叻豬	
幫助	
關心	

24. 教師與孩子總結：每個人都有不同的行為表現，有些人做了令人喜歡的行為，但有些人，因為自控能力弱，而做了一些令人不喜歡的行為，但大家都期望別人能包容、接納及提醒自己。我們可以用(P 歌謠-我們都是好朋友)，令同伴知道我們想和他做個好朋友，並重溫一次歌詞。 (2 分鐘)

擺個剔	
欣賞	
進步	
Give me five	

(P 歌謠) 「我都做得到」歌曲
https://www.youtube.com/watch?v=_uec6fKwJw8
「我都做得到」 樂譜:
https://www.youtube.com/watch?v=_uec6fKwJw8

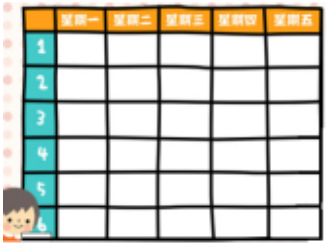
(P 口訣) <2a – 2d 和 3c-3e>圖片卡

- 音樂、球、
- 孩子的名字卡、布袋

（四）在校日程延伸訓練

- 在校每當教師看見孩子做到包容、欣賞、聆聽和鼓勵他人的行為就給予印章，作為鼓勵和肯定(A)。
- 每天總結孩子收集印章的情況，並在一個星期最後的一天，統計孩子的印章數量，並分享自己良好的行為表現，給予印章數量前三名的孩子貼紙／10 分鐘玩玩具的時間等，作為獎勵(A)。
- 教師可讓孩子在早上與同伴說早晨配以「早晨歌」。
- 在音樂堂唱(P 歌謠)「我都做得到」(I) 。
- 在其他時段適當時候做出「正面回應」(P 口訣和手勢)，鼓勵孩子之間互相幫助、欣賞和鼓勵同伴（A）。教師可把圖卡(V)張貼在教室當眼的位置，作為提醒。

(V8)收集印章的表格



樂器:琴/鼓

課堂	單元四主題:	培訓目標	課堂活動(**課堂八**)
八	互相做朋友	孩子能夠透過識別以下「好朋友」的特徵，了解一般好朋友溝通的模式， 學習怎樣與別人成為好朋友，並練習與別人對話的技巧，提升與別人溝通的能力，與同伴建立友好的關係。 孩子能夠： (1)識別 1-2 個自己對「好朋友」會做的好行為 -識別 1-2 個他人對「好朋友」會做的好行為 - 意識到自己和他人會對「好朋友」做的好行為都有分別 (2)指出 1-2 個當自己對他人做了好朋友的行為時，期望他人作出接納與自己成為好朋友的回應 -指出 1-2 個當他人對自己做了好朋友的行為時，**期望**自己**作出**接納與他人成為好朋友的回應 (3)指出 1-2 個當自己對他人做了好朋友的行為，但是他沒有作出接	(1) 課堂八: 「好朋友」是怎樣的? 有些好朋友會做以下的好行為，例如:互相幫助、互相關心、 互相欣賞、互相聆聽、互相分享(喜愛的玩具或遊戲) 、和有禮貌， 你或同學們的「好朋友」又是怎樣的呢? 2a) 當(他人)幫助我的時候，我可以說：「唔該 XXX! /Thank you!/謝謝你。」，或**者**用手勢作出讚賞或欣賞他的回應(向着他人送出豎起的手指公/用食指和拇指做一個剔(√))，使他知道我喜歡他的幫助。(i-v) 2b) 當(他人)關心或欣賞我的時候，我可以說：「Thank you XXX!/Thank you!/謝謝你。」，或**者**用手勢作出讚賞或欣賞他的回應(向着他人送出豎起的手指公/用食指和拇指做一個剔(√))，使他知道我喜歡他的關心或欣賞。(i-v) 2c) 當(他人)專心聆聽我的說話時候，我可以對他微笑或**者**用手勢作出讚賞或欣賞他的回應(向着他人送出豎起的手指公/用食指和拇指做一個剔(√))，使他知道我喜歡他聆聽我的說話。(i-v) 2d) 當(他人)和我分享(喜愛的玩具或遊戲)的時候，我可以**快樂地與他一同玩樂**，並輪流**一同**玩自己比較喜歡的玩具，使他知道我喜歡他與我分享。(i-v) 2e) 當(他人)對我有禮貌的時候，例如: (i)和我打招呼，我可以**對**他微笑; (ii)**對我說**唔該，**他期望我對**他微笑並說：「唔使唔該/唔使客氣。」; (iii)讓我先作出選擇，**他期望我對**他微笑並說：「Thank you XXX!/Thank you!/謝謝你。」，使他知道我喜歡他對我有禮貌。(i-v) 3a)當**我**對(他人)做了好朋友的行為，但是他沒有作出接納與自己成為好朋友的回應，會令**我**感到不安或不開心? (i-v)

		納與自己成為好朋友的回應而令自己感到不安或不開心時，自己可以做的回應 -指出 1-2 個當他人對自己做了好朋友的行為時，但是自己沒有作出接納與他成為好朋友的回應而令他感到不安或不開心時，自己可以做的回應	3b)當(他人)做了好朋友的行為，但是**我**沒有作出接納與他成為好朋友的回應，會令他感到不安或不開心? (i-v) 3c) 當**我**對(他人)作了好朋友行為而沒有被他人接納或回應，令**我**感到不安或不開心時，我可以對自己說：「唔緊要，或者他不知道我剛想和他做朋友。」並且可以找個安靜地方，使用「紅綠燈呼吸法」令自己冷靜下來。(i-v) 3d) 當 (他人) 對**我**作了好朋友行為而**我**沒有回應，令他感到不安或不開心時，我可以對自己說：「對不起/sorry，我剛才不知道了你想和我做朋友。」並且可建議他使用「紅綠燈呼吸法」冷靜下來，舒緩不安或不開**心的情緒**。有需要時找成人幫忙。(i-v) 3e) 當 (他人) 對**我**作了好朋友行為而**我**沒有回應，令他感到不安或不開心時，我可以對自己說：「對不起/sorry，我剛才忙着(跟 XXX 說話/完成習作/聆聽老師的說話…)，沒有回應你。」並且可建議他使用「紅綠燈呼吸法」冷靜下來，舒緩不安或不開**心的情緒**。有需要時找成人幫忙。(i-v)
	第八節課	介入活動步驟 (30 mins) (一)引子 - AVIP 社交情景故事分享(8 mins) (二)社交故事背誦及朋輩互應活動 (10 mins) (三) 以互動遊戲活動應用本課所學的作總結(12 mins) (四) 在校日程延伸訓練	(i)利用 V 圖卡選擇表達(開心)情緒的方式 (V-visual support) (ii)利用 P 歌謠記憶社交故事內容 (P-prompting techniques) (iii)利用 P 口訣做出社交回應 (P-prompting techniques) (iv)利用 I 互相(對唱/找圖卡等)同儕誘導 P 技巧 (I-interaction) (v) 利用 A 教師回饋及同儕「正面回應」策略(A-affirmative responses)

<table>
<tr><th>介入活動步驟</th><th>教具</th></tr>
<tr><td>
(一)引起動機（10 分鐘）：（目標 1）
18. 教師先利用(V1)故事繪本與孩子們分享一個與(好朋友)會做的好行為相關的社交情景故事。

19. 然後提問孩子當中主角的行為是一個怎樣的朋友？孩子怎樣知道? 主角做了哪些令人感到主角跟他的朋友是好朋友呢？然後請孩子回答(孩子可運用 V2 圖片卡來回答)。

20. 教師指出故事中的孩子因為對同伴做了好朋友的行為，而令同伴知道孩子關心、欣賞、愛護和重視他，被視為好朋友。

21. 教師請二人成一組，(I)孩子們互相分享自己會對好朋友做的行為(孩子可用 V2 圖片卡回答)。

22. 孩子回答以後，教師播放「你是我的好朋友」歌曲，帶領孩子們一起學習唱這首歌(P) 。

(二)教學過程（10 分鐘）：（目標 2-3）
25. 教師請孩子圍半圓坐著，利用(V3)社交情景故事影片與孩子們分享在與朋友相處過程中出現問題的社交情景。然後請孩子分享<3a-3b>，當遇到身邊的人這樣時，自己有何感受呢？ (孩子可用 V4 情緒圖卡回答)。

26. 教師利用（V5）「我可以怎樣做? 」社交故事圖片，引導孩子們學習社交故事<2a－2e 和 3c-3e>。過程中，教師藉着孩子的分享，即時示範當他人說了自己(有興趣/沒有興趣)的話題時，可以怎樣做的方法。
</td><td>
(V1)AVIP 故事繪本

(V2) 各種好朋友會做以下的好行為
<table>
<tr><td>關心他人
  </td><td>幫助他人
  </td></tr>
<tr><td>與別人打招呼
  </td><td>待人有禮
  </td></tr>
<tr><td>說謝謝、感激他人
  </td><td>欣賞他人
  </td></tr>
</table>
(V3)社交情景的內容：
教師扮演孩子對朋友做的不好的行情景來錄製的短片。
➢ 情景影片一：小孩與同伴說話時，只說自己喜歡的數字，而不理會和聆聽同伴的說話。
➢ 情景影片二：同伴幫助小孩找回他在體育課時留下了的水壺，小孩拿了水壺，沒有跟同伴說:「謝謝你的幫忙!」便走了。
➢ 情景圖卡一: 小孩在上課幫助同伴完成習作。
➢ 情景圖卡二：同伴在哭，小孩關心同伴。
➢ 情景圖卡三：小孩在課堂上，欣賞同伴的作品。
➢ 情景圖卡四：小孩在小息時，專心聆聽同伴的說話。
➢ 情景圖卡五：小孩在小息時，分享喜愛的玩具和遊戲。
</td></tr>
</table>

27. 教師請孩子分享當自己對(他人)作了好朋友行為而沒有被他人接納或回應時，期望他人怎樣做? 過程中，教師可給予適當的引導或提問，讓孩子思考自己的想法是否正確。當孩子提出的方法是有效的，可給予正面的(A)回饋，鼓勵與讚賞孩子。

<u>（三）以互動遊戲活動應用作總結（10 分鐘）</u>：

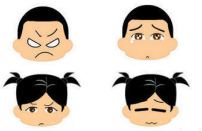
7. 將一些有效的方法做成(P 口訣) 或**者**用「正面回應」的手勢，請孩子們(I)互相向對方做出來。如：<2a>「唔該 XXX! /Thank you!/謝謝你!」<2c>對他微笑或**者**用手勢作出讚賞或欣賞他的回應(向着他人送出豎起的手指公/用食指和拇指做一個√)等。然後，教師請孩子運用（V2）的情景圖卡分別扮演對(他人)作好朋友行為，另一位孩子則運用(P 口訣) 或「正面回應」的手勢來與同伴進行互動(I)，及做出合宜的回應。

8. 情景扮演：
教師準備不同情景的(V3)短片/故事圖片，例如：同伴幫助小孩找回他在體育課時留下了的水壺，小孩拿了水壺，沒有跟同伴說:「謝謝你的幫忙!」便走了，請孩子扮演在該情景下，(I) 該小孩應該怎樣做才能對同伴作出好朋友行為。過程中，教師會給予(A)回應及提示，並對孩子的分享給予回饋，當孩子提出了好的方法時，應即時給予讚賞。

9. 教師與孩子總結每個人在與人相處和溝通時，有機會作了令他人感到不安或不開心的行為，但大家都期望別人能聆聽自己、包容和接納自己。我們可以用(P 口訣)和(P 歌謠)「你是我的好朋友」，令同伴知道我們想和

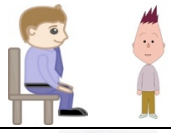
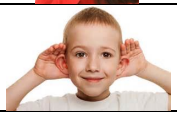
➢ 情景圖卡六：小孩有禮貌對待同伴。

(V4) 表達情緒圖片卡
(例如:快樂、興奮、憂愁、傷心、和憤怒)



(V5)「我可以怎樣做? 」社交故事圖片 <2a – 2e 和 3c-3e> (教師製作出相關情景的方法)

(V6) 「課堂規則」的手勢圖片和(P 口訣)

停止/暫停	
磁石腳(站立)	
望着老師	
安靜	
專心聆聽	

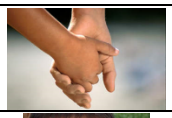
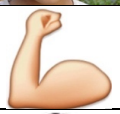
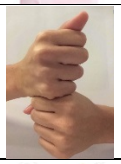
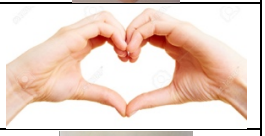
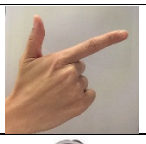
(V7) 「正面回應」的手勢圖片和(P 口訣)

我們都是好朋友
見面時微笑點頭

留心聆聽 叻叻豬
一同學習 齊加油

互助互勉 勤關心
大家都叻 互欣賞

<table>
<tr>
<td>他做個好朋友，不介意他在溝通時的表現，並重唱「你是我的好朋友」歌曲。(2 分鐘)</td>
<td>做啱選擇 攞個剔
齊齊進步 Give me five

<table>
<tr><td>好朋友</td><td>  </td></tr>
<tr><td>微笑點頭</td><td>  </td></tr>
<tr><td>加油</td><td>  </td></tr>
<tr><td>叻叻豬</td><td>  </td></tr>
<tr><td>幫助</td><td>  </td></tr>
<tr><td>關心</td><td>  </td></tr>
<tr><td>攞個剔</td><td>  </td></tr>
<tr><td>欣賞</td><td>  </td></tr>
<tr><td>進步</td><td>  </td></tr>
<tr><td>Give me five</td><td>  </td></tr>
</table>

(P 口訣) <2a – 2d 和 3c-3e>圖片卡

(P 歌謠) 「我們都是好朋友」歌曲</td>
</tr>
<tr>
<td><u>（四）在校日程延伸訓練</u>
➢ 在校每當教師看見孩子做到包容、欣賞、聆聽和鼓勵他人的行為就給予印章，作為鼓勵和肯定(A)。</td>
<td>(V7)收集印章的表格</td>
</tr>
</table>

➢ 每天總結孩子收集印章的情況，並在一個星期最後的一天，統計孩子的印章數量，並分享自己良好的行為表現，給予印章數量前三名的孩子貼紙／10 分鐘玩玩具的時間等，作為獎勵(A)。 ➢ 教師可讓孩子在早上與同伴說早晨配以「早晨歌」。 ➢ 在音樂堂唱(P 歌謠) 「你是我的好朋友」歌曲。 ➢ 在分享時段，請孩帶故事書與同伴分享。 ➢ 在其他時段適當時候做出「正面回應」(P 口訣和手勢)，鼓勵孩子之間互相幫助、欣賞和鼓勵同伴（A）。教師可把圖卡(V)張貼在教室當眼的位置，作為提醒。	 樂器:琴/鼓

Appendix J: AVIP intervention program storybooks (5 books)

A.V.I.P.
做個好朋友

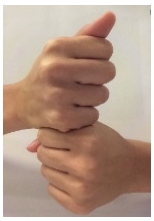
A.V.I.P.
做個好朋友

A.V.I.P.
做個好朋友

Appendix K: AVIP intervention program theme songs lyrics – The Value Song

欣賞鼓勵歌

我們都是　好朋友
見面時微　笑點頭
留心聆聽　叻叻豬
一同學習　齊加油 [1,2]



[1] 互助互勉　勤關心
你我都叻　互欣賞

[2] 做啱選擇　擺個剔
齊齊進步　Give me five

Appendix K: AVIP intervention program theme songs lyrics – The traffic light calms down song

Appendix K: AVIP intervention program theme songs lyrics – The Friendship song

1

成為好朋友

當你知道你好快樂　拍拍手 (哈哈)
當我知道你好快樂　也拍手 (哈哈)

大家開心都拍手 人人開心快樂
大家一起開心成為好朋友(High Five)

當你知道你好快樂　哈哈笑 (哈哈)
當我知道你好快樂　也大笑 (哈哈)

當你碰到暢快事　都會歡呼大叫
嘻嘻哈哈開開心心做朋友 (High Five)

Appendix L: Classroom reward chart

A.V.I.P.做個好朋友- 獎勵記錄版

A組	 A:接納 V:欣賞和鼓勵 I:包容 P:做個好朋友	B組	 A:接納 V:欣賞和鼓勵 I:包容 P:做個好朋友
何XX		林XX	
張XX		張XX	
鄺XX		李XX	
施XX		盧XX	
謝XX		張XX	
梁XX		鄧XX	
麥XX		葉XX	
梁XX		林XX	
王XX		梁XX	
黎XX		鄭XX	
潘XX		陳XX	
譚XX		黃XX	
梁XX		鄺XX	