

**SOCIAL INTERACTION
AMONG PRE ADOLESCENTS & ADOLESCENTS
WITH VISUAL IMPAIRMENT**

Social interaction has important role in children who entered middle childhood and adolescents' age, as they spent time mostly with their peers. But, it would be a challenging time for the preadolescents and adolescents with visual impairments; since they had limitation to interact with others. The purpose of this literature review is to find out about social interaction condition in preadolescents and adolescents with visual impairment and how to enhance their social skills. This study used fifteen articles about social interaction in preadolescents and adolescents with visual impairment. Findings indicated that majority of preadolescents and adolescent with visual impairment had a limited social interaction, although they had similar self concept and self esteem with their sighted peers. Preadolescents and adolescents with visual impairment mostly spent their leisure time in home and had a passive activity. Teacher, parents and peers can promote social interaction in visual impairments through create a supportive environment for them.

Key words: *Preadolescents, Adolescents, Social interaction, visual impairment*

INTRODUCTION

Interaction can be defined as a kind of action between two or more people have an effect upon one another. Thus, social interaction is an interaction that happened in social setting or in the community. Social interaction is a dynamic, changing sequence of social actions between individuals and their partners. In other words, individuals interpret what others' meaning, and respond accordingly. When children entered the middle childhood or preadolescents, friends become more important than their family. Preadolescents and adolescents spent less time with family member, thus peers and activities in school become the most important thing. They shared their feelings, problems and many things with their peers. Therefore, social interaction becomes crucial component in their life. Sighted children learn about social interaction from their contact with peers and using visual cues. They can read body language of their peers and react properly from it. They have access and capabilities to joint and involved with any kind of activities. Some experts said that adolescent period is the world of relationship and activities.

According to Carter & Hughes (2005), the impact of peer interaction on the lives of adolescents is substantial, because they practice and refine social skills; access support system, shared activities and companionship; and learn peer norm and values. The extent to which they interact with their peers may be influenced by (a) the social and related skills students possess, and (b) the environmental contexts within which students spend their school day (Brown & Klute, 2003).

For children in middle childhood and adolescents social interaction occurred, especially in school and their home. But, when they entered “gang age” or preadolescents, mostly they spent their time with their friends in school or neighborhood. Even if the interaction occurred in home; they spent their time mostly with their friends instead of their family member.

But, social interaction could be very difficult for individual who had visual impairment, as they could not give a response immediately after actions from their partner happened. Preadolescents and adolescents with visual impairment had limitation to perform as their sighted peers since they had visual vulnerability. A major part of social interchanges is vision, because in social interchanges observation of others should be involved (Hooper, 2004). When we talk with others, we look at the people directly and try to understand not only from the words but also, from gestures and body language.

Preadolescents and adolescents with visual impairment have difficulty to read nonverbal cues from others and it has an effect on the social skills (Vernon, 1993). Whenever they interacted with others they depend on the information about surroundings from their peers. But, sometimes their sighted peers became impatient and excluded them. In addition, people’s attitudes toward individuals with handicap may be negative, especially towards those who have deviations in physique. Visual impaired persons may have deviation in physique because of eye pressing or motor mannerisms or a lack of social skills (Van Haselt, 1983). Many researches in adolescent with visual impairment found that they became lonely and social isolated. They have few friends and small social network that are largely limited to family members, relatives and other handicapped people (Van Haselt, 1983; Eaglestein, 1975; Wesolowski, 1987). Student with visual impairment have difficulties to develop their interpersonal skills because they have fewer friends, fewer opportunities to socialize, and fewer occasions than students who are sighted (Huure & Aro, 2000; Rosenblum, 1998). These condition led adolescent with visual impairment less opportunity to make social interaction with peers and develop their social skills. Tuttle & Tuttle (2004), found that children who are visually impaired are often more socially immature and more egocentric than are sighted children. Since the social interaction become foundation for adolescents to building a mature relationship and it has an effect to emotional development; adolescents with visual impairment should enhance their social skills in order to catch up their limitation.

Compared with normally sighted children, children with visual impairment interact less during free time and are often delayed in the development of social skills (Erin, Dignan & Brown, 1991). Although many adolescents with visual impairments have best friends, many also struggle with social isolation and must work harder than their sighted peers to make and maintain friendship (Leigh & Barclay, 2000). Students with visual impairments are often not invited to participate in

group activities such as going to ball game or a movie because sighted peers just assume they are not interested. Over time students with visual impairments and their sighted ages mate have fewer and fewer shared experiences and common interests as bases for conversation, social interaction and friendship (Hewad, 2006). Another factor contributing to social difficulties is that the inability to see and respond to the social signals of others reduces opportunities for reciprocal interaction (Frame, 2000 & Kirkwood, 1997). During a conversation, for example, a student who is blind cannot see the gestures, facial expressions, and changes in body posture used by his conversation partner. This inability to see important components of communication hampers the blind student's understanding of the conversation partner's message (Hewad, 2006). The purpose of this review is to summarize the research on social interaction among adolescents with visual impairment, to add the knowledge about social interaction condition in adolescent with visual impairment and how to improve social competence in adolescent with visual impairment.

METHOD

Studies were identified for this literature review through two steps. First, electronic resources were screened to identify articles for possible inclusion in this study. The sources of the articles were the ERIC, EBSCO-Host, Blackwell-Publishing, Science-Direct, PROQUEST, and SAGEONLINE (relevant journals include in those provider, such as: Journal of Visual Impairment & Blindness, British Journal of Visual Impairment, Visual Impairment Research, Special education international journal, etc) using the keywords: *social interaction, social engagement, social competence, psychosocial, social skills, social interchange, social behavior, friendship, visual impairment, visual disability, impaired youth, blindness, visual handicapped, blind youth*. And then, additional search was examined from bibliographic information. After computer search, the articles selected for reviewed base on following criteria.

1. The study, at least have one participant.
2. The participants on the study identified having visual impairment, includes totally blindness or low vision or high vision.
3. At least half of the participants were preadolescents and/or adolescents ranged in age from 9 -18 years old.
4. The study had to report the result of data-based investigation.
5. The focus of the research was on social interaction or how to enhance social skills in preadolescents and adolescents with visual impairment.

Fifteen studies were identified that met the inclusion criteria. Intention of this literature review is to produce a systematic and detailed methodological review. Therefore, each of the articles

was coded and analyzed with respect to the following variables: a) setting, b) sample characteristic, c) method, and d) outcomes.

REVIEW AND DISCUSSION OF THE STUDIES

Setting

The studies that took place in school were 9 of 15 studies (60%). Five studies which conducted in school involved sighted peers as participants. Though they used school as a place for the investigation, only one of nine studies used educational setting as a background which is physical education classroom. Types of the school that used in the studies were general and special school. Six studies conducted in general or public school with inclusive setting and three studies conducted in special school for visual impairment. Only two studies took place in home (13%). The studies conducted in home involved sighted peers for comparison. Three studies (20%) used school and home as a place for investigation and one last study (7%) took place on summer camp. All studies were conducted in home or in school and home involved family members as significant persons for data analysis.

Sample characteristic

Eight hundred and two students with visual impairment and nine hundred and eleven sighted students were included in 15 studies, with a ranged of 1 to 385 participants. All studies reported data on gender. Male students with visual impairment numbered 439 (55%) and 363 (45%) were female with visual impairment. For sighted students there was no clear numbered since one study did not report gender for sighted participants. The types of visual impairments were totally blind, low vision and high vision without additional impairment such as hearing or physical impairment, mental retardation or cerebral palsy that would have impacted on the outcomes of the study. Since there were no exact numbered about types of visual impairment from some studies, thus overall numbered cannot be counted for each type. Participants ranged in age from 6 - 24 years old in 15 studies. Only one study reported that participants come from middle class family.

Method

Nine studies (60%) were used survey as a method in their research with numbered of participants ranged between 6-516 students. Four studies (27%) were used experimental method and last two studies (13%) were used qualitative method. Survey used in the nine studies includes questionnaires, interview (direct and telephone interview) and diary report. Three multiple baseline design were

used in experimental method and last study used pre and post test. Case study and observation were used in qualitative method.

Outcomes

Specifically, five studies investigated social skills in students with visual impairment. Two of them used a physical educational class as a setting. They examined related study between physical skills and social competence. In the context of sport and physical activity, participation is often a social activity involving groups of children, such as teams, friends, and clubs, and is viewed as a primary socializing environment for teaching children interpersonal skills and physical competencies (Weis & Duncan, 1992). Adolescents who have difficulty performing sport and physical activity skills often have lower self perception. These poor self perceptions are likely to lead to a reduction in confidence in movement and often extend beyond the athletic domain, resulting in adverse psychosocial consequences (Bouchart & Tetrault, 2000). But, Shapiro et.al (2005) found that though students had low perceptions of their athletic competence, they felt positive about their social competence. This result showed, although student felt negative about their athletic skills, it was not become a barrier for having a positive social competence. The second study found that the structure of the physical activity play a role in social engagement. The study concluded that codependence should exist between physical activity offerings and social outcomes (Oh et.al, 2004).

Three others studies conducted by one author. The studies examined self evaluation and feedback in student with visual impairment to establish and to enhance social interaction skills. According to Weber et.al (1993) self evaluation has been observed to be effective in increasing the social interaction and generalization and maintenance of the social behavior of children with disabilities. Findings from two studies in this literature reviews showed that self evaluation was effective to increase feedback's awareness from others and may help them improve students' social interaction skills. Schlos & Smith (1994) found that feedback is the provision of evaluative information to an individual with the aim of either maintaining present behavior or improving future behavior. Students with visual impairment need verbal feedback for their behavior from others, since they couldn't see others' behavior. But, if the consequences are clear no verbal feedback necessary in students with visual impairment. The findings also suggest feedback from significant people in the environment is a way to help students with visual impairment to develop social skills that require visual cues and that these people should make an effort to provide it accurately and in an appropriate way (Jindal-Snape, 2005).

One study in this literature review tried to compare sighted and visual impaired preadolescents in self esteem, empathy and taking care of pets. Findings from the study suggest that

preadolescents with visual impairments developed social competence in a similar manner to the sighted preadolescents. Another finding was similar with previous study that having a pet positively correlated with feeling of importance, social competence and self esteem (Vidovic, et.al 1999).

Another seven studies in this literature review discussed about elements in social interaction between sighted adolescents and visual impairment adolescents. They found that visual impairment had an impact to a friendship (Rosenblum, 2000); one of the impacts is limited activity that they can spend with their peers. This condition caused adolescents with visual impairments had a smaller social network than sighted students. Adolescents with visual impairment tended to be dependence on their peers; they also had low quality in friendship, especially on spending leisure time together (Lifshitz et.al, 2007). Adolescents with visual impairment spent their time with passive or established activities (such as horse riding, guitar) and they performed fewer activities than sighted adolescents (Kroksmark & Nordell, 2000). But, Huure & Aro (1998) found that adolescents with visual impairment tended to describe their family relation as slightly better than adolescents without visual impairment and mostly they spent their leisure time in home. Another findings from the studies showed that adolescents with visual impairment had similar self concept, self esteem and empathy with sighted adolescents (Liftshitz et al. 2000). One studies showed that if adolescents with visual impairment had a good environment he could have a good quality in social interaction and life (George & Duquette, 2006).

As a conclusion, findings in this literature review similar with results in other studies about social interaction in preadolescents and adolescents with visual impairment. Although they had similar perception with sighted adolescents about their self concept, but their visual vulnerability still become a barriers for blending with their social environment. But, this barrier could be solved as long as they had supportive environment that provide a lot of opportunity to interact with peers and joint with many activities.

LIMITATION

The first limitation of this study is inconsistent with age categorization; one study includes 24 years old as adolescents, one study had 8 years old as a preadolescent and another study includes 8 years old as a youth. The second limitation is most of studies using survey as a method in collecting data, though several studies used an interview, but the bias might be happened and with limited sample the interpretation and generalization should be conscientious.

IMPLICATION FOR RESEARCH

There is still a need for further research on social interaction in preadolescent and adolescent with visual impairment. Particularly, research study about intervention to enhance social skills in adolescents with visual impairment. According to the studies in this literature review, adolescents with visual impairment could have a good social life as long as parent, teacher, peer and also school's system give the opportunity for interaction and support adolescents with visual impairments' activities, but what and how the aspects could be enhance social interaction is still a need further investigation.

IMPLICATION FOR PRACTICE

Teacher and parents can use this emerging body of research to promote social interaction in adolescents with visual impairment. Especially for the parents, according to the studies in this literature review adolescents with visual impairments spend their time mostly in home and they tended to have better relationship with their parents. For teacher, since feedback becomes one factor to enhance social interaction, they could provide feedback for students with visual impairments' behavior. One study found that adolescent with visual impairments gain more positive experiences in public school with sighted peers than residential or special school for the blind. This finding suggests that interaction with sighted peer is good opportunity to increase social interaction in students with visual impairment.

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*Asterisks denote articles that were included in this review

Table 1
List of the study

No	Study	Setting	Sample Characteristic	Method/ Design	Outcomes
1.	Kef, 1997	Home	316 participants with visual impairment; ranged in age from 14-23 years old	Survey (Interview)	The size and range of the personal networks of the blind and visually impaired adolescents in this study were smaller than those of sighted adolescents. Parents were listed as the most important source of emotional and practical support. Friends were more important for female participants than for male participants, especially for relational support.
2.	Rosenblum , 1997	school	40 visual impairment adolescents without additional disabilities and theirs best friends. Ranged in age from 13-19 years old	Survey (incl. telephone surveys and interview)	Visual impairment negatively impacted the friendship, the source of the problem involved activities that often are challenging for individuals with visual impairment. Adolescents with visual impairment and best friends mostly spent time in home and then the second most frequently to spend time together was in school. Even though adolescent with visual impairment does play a role in the friendship, generally speaking, the friends adapt to the limitation and have established an intimate, reciprocal friendship.
3.	Rosenblum , 1997	School	22 students with visual impairment; Ranged in age from 13-19 years old	Survey	Study found that there was a higher level of intimacy in the friendship of the female participants than of the male participants. Talking (mainly about people and relationship and joint activity) was a popular way that the participants spent time with their friends, as was sharing hobbies. The study also found that adolescents with visual impairment who have established best friendships experience intimacy in the friendship.
4.	Huure & Aro, 1998	School	54 visual impairment student (40 boys, 14 girls), 385 sighted students (172 boys, 213 girls); Age mean 14.0	Survey	Social network of visually impairment students smaller than sighted students (the differences did not reach statistical significance); girl students with visual impairment have more difficulties in the social relations compared with their normally sighted peers; more students with visual impairment reported difficulty in making friends; Self esteem was lower among girls with visual impairment than among girls without visual impairment; adolescents with visual impairment tended to describe their family relation as slightly better than adolescents without visual impairment;
5.	Rosenblum , 2000	School	10 visual impairment adolescents without	Survey(interview)	The adolescent with visual impairment were often outsiders in the hierarchy on the school culture and did not view themselves as being part of the popular group.

			additional disabilities and theirs best friends; Ranged in age from 13-17 years old		Nevertheless, they had experienced firsthand the benefits of having friends. Thus, it is important to recognize that a child can be an outsider and still have beneficial and meaningful social relationships.
6.	Kroksmark & Nordell, 2001	School & Home	6 adolescents, 4 congenital low vision and 2 sighted. Ranged in age from 15-16 years old.	Survey (Diary report)	<p>Everyday – Activity context : Adolescents with low vision spent more time in passive activities and engaged in those activities for long periods; adolescents with low vision went to the established activities while the sighted engaged in established and spontaneously initiated activities; adolescents with low vision slept much more than those who were sighted; adolescents with low vision spoke on the phone less often than their sighted peers; adolescents with low vision has few activities that involved the manipulation of their hands.</p> <p>Geographic Context: Adolescents with low vision provided by a car to go to another place even they lived in a neighborhood with good public transportation; they spent most of their leisure time at home. If they visited friends, they often did so because of a goal directed activity.</p> <p>The adolescents with low vision performed fewer activities than did their sighted peers, engaged primarily in passive or pre established activities, did not regularly spent time with friends, and were dependent on their parents for transportation.</p>
7.	Oh, Oztruk & Kozub, 2004	School (Physical education class)	3 visual impairment students, 4 low vision students & 12 high vision students; age mean 12.58	Qualitative (Observation)	No significant relationships between level of vision and social engagement in physical education class; the structure of the lesson and the nature of the activities offered play a role in social engagement; some codependence should exist between physical activity offerings and social outcomes (e.g. scooter activities demonstrated the highest mean physical activity counts while yielding the lowest mean social engagement scores)
8.	Jindal-Snape, 2004	School	2 visual impairment students; Ranged in age from 9-11 years old.	Experimental /multiple baseline design	Feedback was necessary to facilitate self evaluation and to develop social skills; direct feedback related to behavior is essential only for skills that require visual cues and is required before self evaluation, so children aware of this feedback and help her/him pick up on it; self evaluation is effective in generalizing and maintaining social skills and in enhancing social interaction.
9.	Kef and and	Home	178 adolescents with a visual impairment (98	Survey (incl. interview)	Adolescents with a visual impairment experience less support (especially support from peers) than adolescents without impairment. At the same time, peer support

	Dekovic, 2004		males, 80 females) and 338 adolescents without impairment (170 males, 168 females); Ranged in age from 14-18 years old.		seems to affect well-being of adolescents with a visual impairment stronger than the well-being of the sighted group; effort should be made to increase the social skills of adolescents with a visual impairment in order to improve their peer relation.
10.	Shapiro et al., 2005	Summer camp	43 visual impairment students; ranged in age from 8-21 years old.	Experimental/ pre experimental one group pre test purposive sampling	The students in the study felt more positive about their social competence, though they had low perceptions of their athletic competence. These findings suggest that children and youths who are visually impaired may think they have acquired the social skills necessary to interact and function in social setting but these social skills may not have translated into inclusion in group physical activity.
11.	Shirley & Nes, 2005	School, home	71 visual impairment students, 88 sighted students; age mean: 11 years old	Survey	Children with visual impairments in this study appeared to have developed socially in a similar manner to the sighted children, and study found that having a pet is positively correlated with the feeling of importance, social competence and self esteem.
12.	Jindal Snape, 2005	School	1 visual impairment students, 4 sighted students; Age: 9 yrs old.	Experimental/ Multiple baseline design	Social interaction between student with visual impairment and his peers increased considerably. Self evaluation was shown to be effective in generalizing skills and interaction across participants and settings. Modeling the provision of feedback and information about the social environment is feasible and those teachers need to provide more feedback and information to children who visually impaired, so that other children may model the teacher and will start providing feedback and information without any formal training. Feedback from significant people in the environment is a way to help student who are visually impaired to develop social skills that require visual cues and that these people should make an effort to provide accurately and in an appropriate way.
13.	Jindal Snape, 2005	School	4 students; 1 totally blind, 3 sighted students. Age 9 yrs old.	Experimental/ Multiple baseline design	Verbal feedback was effective in enabling student to self evaluate social skills that required visual cues. After significant others in the environment provide initial feedback, children who are visually impaired can generalize and maintain their behavior even in the absence of these significance others. If such feedback and information are provided by teacher in everyday situation, students may model it, which could lead visually impaired students to more rapid and natural development of social skills and an increase in social interaction.
14.	George & Duquette,	School & home	1 low vision student; Age: 11 yrs old.	Qualitative (Case study)	Students with low vision may not always be compromised by limitation of or perceptions of visual impairment and that these students may not, inevitably, have

	2006				difficulty with peer relation. As long as parent, teacher, and peers worked cooperatively to create supportive environment.
15.	Lifshitz, Hen & Weisse, 2007	School	40 visual impairment students & 41 sighted students; ranged in age from 13-18 years old.	Survey	The score for the students with visual impairments on confrontation and betrayal and spending leisure time together were significantly lower than were those of the sighted students. The social relations of individuals with visual impairments involve a certain amount of dependence. The lower level of confrontation and betrayal found in this group may reflect their fear of losing their friends. When choosing a friend, they preferred an independent blind friend who is competent and well adjusted to a dependent friend with a low vision. Student in public school have a bigger opportunity to make social interaction with sighted peer, thus their score in behavioral category higher than students in residential school.

