

Insights Into the Support Services for Students With Vision Impairment

Poulomee Datta¹ and Carolyn Palmer²

There is a general need for research in Australia on whether the support services provided in schools prove useful for students with disabilities (Datta, 2015; O'Rourke & Houghton, 2006), especially students with vision impairment. This qualitative study aimed to provide insights into the influence of the support services delivered in South Australian schools for students with vision impairments' problem-solving skills, and their family, social, and academic lives. Semistructured, openended interviews were conducted with 14 students with vision impairment (8 adolescents and 6 adults), 5 parents, and 4 teachers. Participating students' age ranged between 15 and 18 years for the adolescent students and between 19 and 25 years for the adult students. Adolescent students were enrolled in mainstream and specialist secondary schools, and adult students were enrolled in vocational courses at TAFE Institutes. The data reflected a range of viewpoints from which to examine the problem under investigation. The interview responses from the 3 groups of participants revealed that the support services positively influenced students' problem-solving skills, their social behaviour, and their academic learning. Although most students with vision impairment felt that the support services had no influence on their family relationships, their parents and teachers considered it had helped in the students' family lives. The interviews were particularly useful in evaluating the support services that students with vision impairment received. These findings have implications for teachers, special educators, policymakers, and a range of professionals in the education and special education sector in highlighting modifications and improvements in the support services for these students. This study has provided a limited basis for generalising to any wider population beyond the participants themselves due to the study's small sample size and diversity of educational settings.

Keywords: support services, students with vision impairment, problem-solving skills, family lives, social lives, academic lives

Students With Vision Impairment

Students who are blind or vision impaired form a heterogeneous group who vary in their abilities and experiences. They face many specific challenges to learning and have unique educational needs that require support from specialist teachers trained to understand the impact of loss of vision on learning. To facilitate access to learning, books

Correspondence: Poulomee Datta, Australian Catholic University, PO Box 456, Virginia, Qld 4014, Australia. Email: Poulomee.Datta@acu.edu.au

143

¹Australian Catholic University, Australia

²Flinders University, Australia

and materials are required in appropriate media, including braille. Also, specialised equipment and technology are required to ensure equal access to the curricula, and to enable students to most effectively compete with their peers in learning and ultimately in society (Hatlen, 2000).

Support Services for Students With Vision Impairment in South Australia

The definition of the term *support services* as it applies in this study includes various government and nongovernment support services for students with vision impairment in South Australia. Support services for the purposes of this study particularly refer to the use of any human support (in the form of teacher aides and support teachers), curriculum support services, adaptive technology, assistive devices, specialised services, localised study support, and academic support provided to students with vision impairment. Support services terminology was discussed, explained, and defined with the participants so that they knew what was meant by the terms.

In South Australia, students with vision impairment are supported by teachers and experienced school service officers (SSOs) qualified in the education of students with vision impairment (Government of South Australia, 2012). The support services include some in-class support, generally in practically orientated areas or where specialised equipment is used. Withdrawal of students from the classroom for specialised tuition is negotiated on an individual basis and is dependent on the student's vision loss and curriculum needs. It may be required for the use of specialised equipment, additional time and support for tests, additional time for work completion, and training in relevant areas of the expanded core curriculum for students with vision impairment (Charles Campbell College, 2012).

The South Australian statewide support services provide resources such as low vision devices, large print books, sloping desktops, dark lined stationery, audio equipment, and specialised materials for braille and independent living (Department of Education and Child Development [DECD], 2012; Government of South Australia, 2012). It also provides alternative braille/tactile, large print and audiotaped materials, talking and large display calculators, special lighting equipment, closed circuit televisions, magnification software and screen reading for computer access, mobility devices (long canes), specialised storage systems, and typing stands, all of which are provided according to individual student needs (Charles Campbell College, 2012).

Students with vision impairment require access to specific areas of the expanded core curriculum, which encompasses the explicit skills and knowledge needed to be as independent as possible in school and postschool life (Charles Campbell College, 2012; Government of South Australia, 2012). The orientation and mobility program, as an example of the expanded core curriculum, includes independence in the school environment, residential travel, route planning and execution, travel planning resources, and use of public transport (Charles Campbell College, 2012).

Need for Research on Support Services

In spite of the provision of these support services to students with vision impairment, there has been a dearth of studies to document the influence of support services on the lives of students with vision impairment. In particular, no prior Australian research studies to date have examined the influence of these support services on the problem-solving skills, family relationships, social relationships, and academic achievements of students with vision impairment in South Australia. Preliminary informal contact with regular schoolteachers who had students with vision impairment in their classes revealed that

there is a need for research on the impact of support services provided for these students. The current research presents findings that will begin to contribute to filling this gap.

The aim of the present research was to study whether the students themselves, their parents, and their teachers perceived that the support services provided in schools for students with vision impairment influenced these students' problem-solving skills, family relationships, social relationships, and academic achievements.

Method

The purpose of this study was to investigate whether the support services offered at schools for students with vision impairment had any influence on these students' problem-solving skills, and their family, social, and academic lives. The main research question that emerged from the purpose of the study in relation to students with vision impairment is as follows:

• What is the influence of the support services provided in schools for students with vision impairment on students' problem-solving skills, and their family, social, and academic lives?

This investigation was guided by qualitative methodology, with interviews as the method of data collection. Qualitative methodology enables the researcher to tap into participants' thoughts and experiences in order to understand them (Burns, 2000). Open-ended, semistructured interviews were conducted with students with vision impairment, their parents, and their teachers. Interviews of the three participant groups enabled the researchers to collect data from a range of viewpoints and to examine the respondents' perceptions of the influence of the support services on the areas under investigation from different perspectives. Open-ended questions enabled the researchers to delve more deeply into areas of interest, thus affording new insights and allowing for different interpretations from a range of perspectives. Interviewing has a wide variety of forms, including self-administered questionnaires (Denzin & Lincoln, 1998). Such questionnaires were used in this study for the adult students with vision impairment and all parents who had indicated that they did not want to participate in a face-to-face interview. As no earlier research existed on this topic, the interview questions were developed by the researchers, with the goal of gathering extensive data on the perceptions of the three groups of interviewees (i.e., students, parents, and teachers) concerning the support services. The interview questions for students, parents, and teachers were trialled with people known to the researchers in order to refine questioning techniques and question structure prior to the commencement of the formal interviews, a technique also recommended by O'Donoghue (2007). To ensure that no emotional discomfort was experienced by any of the students, parents, and teachers, the interview questions were piloted with all three groups to identify potential problems.

According to Cohen, Manion, and Morrison (2000), much of the interview data could be subject to misrepresentation during the transcription process. To combat this problem, each interview transcript in this study was sent to the relevant interviewees to ensure data reliability and validity, a technique recommended by Poland (1995). The interview analysis followed the themes in the questions raised in the interviews. Data were thematically analysed, and the researchers used a recursive approach to establish similarities and differences among the responses in the form of excerpts and expressions under each of the themes. The interview responses were collected from the three groups of participants (students with vision impairment, their parents, and teachers). The interview data were analysed and reported in relation to the four themes, influence of the support services on students' problem-solving skills, their family, social, and academic lives, that

emerged from the research question for the three groups of participants. The range of viewpoints expressed enabled the researchers to examine the research question from different perspectives.

Participants

The student participants included adolescents and adults with a range of vision loss from 6/18 to better than 3/60 (low vision), and 3/60 and less (blind/no useful sight), and included those with congenital and adventitious vision impairment. The adolescents ranged in age from 15 to 18 years and were in Years 9–12. The adults were aged between 19 and 25 years and attended vocational courses. The adolescent participants were recruited from the mainstream and specialist schools run by DECD, and the adults were recruited from TAFE Institutes, both South Australian Government organisations.

A total of 14 students with vision impairment (eight adolescents and six adults), four of their teachers, and five of their parents participated in this study. To preserve participants' anonymity, each interviewee was given either a numeric or an alphabetic letter for identification purposes. This comprised the prefix VI (for students with vision impairment), followed by a number (VI-1 to 14); T (for teachers) and P (for parents), followed by a letter from a to z (T-a, P-a). Teachers of students with VI are coded T-a to T-d. Parents of students with VI are coded P-a to P-e. The full details of each individual student with vision impairment can be found in Table 1.

Procedure

This study was approved by the Social and Behavioural Research Ethics Committees of the University of Adelaide and the DECD. The information sheet and consent forms were sent to all three groups of respondents, and the study was conducted with those from whom informed consent was obtained. The investigation of support services offered in schools for students with vision impairment explored the respondents' perception of the impact of support services on these students' problem-solving skills. The perceived impact of the

TABLE 1Details of Students With Vision Impairment Who Participated in This Study

Identification	Gender	Adolescent (1)/ Adult (2)	Type of vision impairment	Interview type
VI-1	Female	1	Blind	Face-to-face
VI-2	Male	1	Low vision	Face-to-face
VI-3	Male	1	Low vision	Face-to-face
VI-4	Female	2	Blind	Via email
VI-5	Female	2	Blind	Via email
VI-6	Female	2	Low vision	Face-to-face
VI-7	Male	2	Low vision	Face-to-face
VI-8	Male	2	Blind	Via email
VI-9	Female	2	Low vision	Via email
VI-10	Female	1	Low vision	Face-to-face
VI-11	Male	1	Blind	Face-to-face
VI-12	Female	1	Low vision	Face-to-face
VI-13	Male	1	Blind	Face-to-face
VI-14	Female	1	Right eye: blind	Face-to-face
			Left eye: low vision	

support on the students' family, social, and academic lives was also explored. To determine the influence of the support services, a set of questions similar in nature were asked of the three groups of respondents: students with vision impairment, their parents, and teachers. The interview questions were as follows:

Questions asked of the students:

'Have the support services in your school influenced you in your approach to solving problems? If so, how?'

'Did the support have any impact on your family life?'

'How has the support you have received helped you in your school or social life?'

'Do you think that the support you received has helped you to be more independent to study and work better? If so, how and in what ways has it helped you?'

Questions asked of the parents:

'Do you think that the support services helped your child to tackle problems? If so, in what ways?'

'Have the support services had any impact on your child's family life?'

'Do you feel that the support services had an impact on your child's social life? If so, in what ways?'

'Do you think that the support services have helped your child to be more independent to study and work better? If so, how and in what ways has it helped?'

Questions asked of the teachers:

'Have the support services influenced students' abilities to tackle problems? If so, in what ways?'

'Have the support services had any impact on students' family life?'

'How have the support services influenced the students' social life?'

'Do you think that the support services have helped your students to be more independent to study and work better? If so, how and in what ways has it helped them?'

Results

The interview responses that emerged from the three groups of respondents in relation to their perception of the influence of the support services on the four aspects — students' problem-solving skills, their family, social, and academic lives — are discussed separately.

Students With Vision Impairment: Influence of Support Services

The student participants with vision impairment were questioned whether they thought the support services influenced their problem-solving skills, family life, social competence, and independent study and work abilities.

Students With Vision Impairment: Perceived Influence of Support Services on Their Problem-Solving Skills

When students were asked whether they thought the support services in school influenced their approach to solving problems, 10 of the students with vision impairment claimed that the support services helped them to solve problems in a better way. One student reported

that the support teachers from the Specialist Vision Support Unit were very cooperative and took time to assist with any difficulties. Another stated that she was provided with help from the teacher aide on a one-on-one basis. The following quotes reflect the comments from two students:

The way the support teachers talk is better than the normal teacher. The support teacher reaches out to me in a better way than the normal teacher on one-to-one appointments. (VI-3)

The staff in the Vision Unit are very cooperative. They will take the time to sit down and help with any problems/difficulties I have. (VI-1)

One of the students believed that spending more time with the support teacher was the key to successful problem-solving in his life:

The support teacher spends more time with me, which is the reason I am able to solve problems. (VI-13)

Another two students commented on the support received that helped them with their academic work and established that the support services, in the form of enlarged print and more time to complete tests and assignments, assisted them to solve many of their academic-related problems. They claimed:

The supports like enlarged print and extensions in assignments have helped me to solve my academic problems. (VI-12)

Yes, the time factor, enlarged print, extensions on assignments has helped me to solve my problems. (VI-6)

One of the students established that greater resources and modified software specially designed for students with vision impairment helped her to solve her day-to-day problems:

Modified laptop access and access to technology and software in greater magnitude helped me to solve my daily problems. (VI-10)

Two other students with vision impairment related successful problem-solving to the development of affective relationships with support teachers based on empathy:

My support teacher has helped me a lot because she told me to take a few deep breaths before acting and just smile throughout life because it builds confidence. She is understanding and sympathetic whenever I discuss problems, no matter what the problem is and it is this good rapport and trust with her that helps me to solve my problems. (VI-4)

Yes, the support teacher has helped me to identify the problem clearly and then discussed strategies to handle the problem. I have found this technique useful in solving my problems when the support teacher is compassionate towards me. (VI-2)

On the other hand, three of the student participants believed that the support services had absolutely no influence on their problem-solving abilities. In fact, one of these students argued that the support services had a negative impact on her problem-solving abilities as it made her life difficult. She commented:

They only made my life harder. They interfered in my life where they shouldn't have. (VI-9)

Students With Vision Impairment: Perceived Influence of Support Services on Their Family Lives

When students with vision impairment were asked about the influence of the specialised vision support services on their family lives, 11 out of the 14 students confirmed that they believed the support services had no impact on their family lives. Two of these 11 students

claimed that the support had a negative impact on their family lives in the form of creating misunderstandings and detachments among family members:

The support caused problems between my mother and me as the support teachers told my mother things that were not supposed to be told about my personal life. (VI-9)

I moved away from my country home to receive more adequate support for my senior high school years creating distance among family members. (VI-5)

Two of the students with vision impairment, however, perceived that the support did play a positive role in their family relationships, as it taught them better conflict resolution strategies to solve arguments between themselves and their family members:

Yes, because it did help me to become better by staying out of conflict. They taught me how to stop myself in becoming angry at things I shouldn't have. They also taught me better strategies how I can solve any arguments between me and my family members. (VI-1)

Yes, the support provided some good techniques to influence my family by mediating arguments between family members. (VI-10)

Another believed that the support from the orientation and mobility instructor helped him to navigate his area with his family members:

Probably, yes, because the mobility instructors helped me to get around my area with my family. (VI-2)

Students With Vision Impairment: Perceived Influence of Support Services on Their Social Lives

When students with vision impairment were asked about the influence of the vision support services on their social lives, 10 of the students believed that the support improved their social life. The students' comments included helping them to interact and engage in conversation, make eye contact, gain confidence, use verbal and nonverbal cues appropriately, and maintain proper gestures and body language. Some selective quotes from students with vision impairment that best represent the previously mentioned comments are featured as follows:

The support taught me how to interact and engage in conversation and how I can interact having eye contact and how to come in the conversation at the right time. (VI-1)

The support teacher helped me to gain confidence in myself and converse well with my peers. (VI-11)

The support helped me to have the right gestures, body language in my interactions with others. (VI-10)

The support has taught me the nonverbal cues that are necessary in a social interaction. (VI-13)

One of the students pointed out that support in the form of orientation and mobility helped him to move around and locate streets, thus assisting him to broaden his horizons and interact with more people:

The orientation and mobility support helped me to navigate the streets. That helped me to interact better with people. (VI-3)

Another believed that the support teachers used the school effectively as an excellent platform to enable them to meet and interact with other students:

Yes, by organising meeting other students from the school. (VI-12)

However, three of the students claimed that the support services had no influence on their social lives and one reported a negative influence. The evidence of this is reflected in the following excerpts from four student interviews:

The support made my schooling harder and impacted on all of my high school friendships and relationships in a negative way. (VI-9)

The support did not help my social life. I feel my sighted peers should have been more educated about my visual condition and that would have made them more understanding towards me. (VI-6)

I never wanted to avail the support services, as I didn't want to show people that I am given extra help. (VI-7)

No influence. (VI-8)

Students With Vision Impairment: Perceived Influence of Support Services on Their Independence and Ability to Study and Work Better

When students with vision impairment were asked about the influence of the specialised vision support services on their abilities to study and work independently, 11 out of 14 reported that the support they received assisted them to be independent, enabled them to work better, and helped them to be more confident and organised in relation to school work. Some felt that the modern day technologies in the form of zooming or magnifying the computer screen (screen magnification software), magnifiers, and the JAWS speech software assisted them to meet their day-to-day demands and challenges in life. These claims of students are displayed in the following quotes:

The support has helped me to become independent by having confidence in myself, thinking before acting, and always showing a smile on my face. (VI-4)

Yes, because of the enlarged print, magnifiers. (VI-12)

Yes, I use an electronic magnifier to read things and that is helpful. (VI-2)

The support has helped me to be independent, as I do not have to struggle to read papers. (VI-10)

The latest and new technology, e.g., zooming or magnifying the computer screen, has helped me to be more independent and work better. (VI-13)

The adapted technology has been particularly useful. I use an electronic magnifier to read things and it has been very helpful. (VI-2)

One of the students further claimed that the support she received helped her to organise and plan her study materials, set up study schedules, and execute time management skills in an effective manner. The following interview response confirms this:

Yes, they did because they provide me with the material and they taught me how to organise the material. They taught me how to plan my study skills, with time management and organisational skills. (VI-1)

In response to the influence of the support services on students' abilities to study and work independently, two of the students responded that the support services had no influence, and one of the students commented that the support had a negative influence and restricted her independent study and work ability. The negative response of this student is presented in the following quote:

No, I was independent before I received the support. The support teachers smothered me and this had a negative influence on my study and work abilities. (VI-9)

Overall, the majority of the students with vision impairment agreed that the support services they received during their school years had a positive impact on their academic lives. Therefore, based on the views of these students, it can be concluded that the support services were generally perceived to be of value and they thought they had a positive influence on their problem-solving skills, academic and social lives, and to a lesser degree on their family lives. Of particular note, it emerged from the interviews that some students did not wish to avail themselves of these support services in the presence of their sighted peers as it simply made them feel awkward, different, and dependent. Therefore, schools need to consider how to offer these support services to students in a much more inclusive and less intrusive manner.

Parents of Students With Vision Impairment: Perceived Influence of Support Services

The parents of students with vision impairment were questioned whether they believed the support services influenced their children's problem-solving skills, family life, social competence, and independent study and work abilities.

Parents of Students With Vision Impairment: Perceived Influence of Support Services on Their Children's Problem-Solving Skills

When parents were asked whether they believed the specialist vision support services in school helped their children to tackle problems, two out of five parents claimed that the support services did help their children with vision impairment to solve problems to a small degree. The views of these two parents are reflected in the following quotes:

Yes, sometimes in the form of availing these services like access to software for students with VI has helped her to solve her problems. (P-a)

Yes, but not always. By seeking help from the school counsellor she can get her problems solved sometimes. (P-b)

Another two parents established that the support services did not have any positive influence on their children's problem-solving abilities, and one of them asserted that the support services actually created more problems in her child's life as her son with vision impairment was too embarrassed to avail the services in the presence of his peers:

Rather I feel that the support services sometimes have even worsened his problems because he is so embarrassed to avail these services in front of his peers. It has only added to his worries. (P-d)

One of the parents, on the contrary, believed that the support teacher assisted her daughter with vision impairment to acquire skills to get her day-to-day problems solved:

The support teacher helps her to solve her problems arising daily. (P-e)

Parents of Students With Vision Impairment: Perceived Influence of Support Services on Their Children's Family Lives

When parents were asked about the influence of the specialised vision support services on their children's family lives, three of them reported that the support produced some useful outcomes. These parents felt secure that their child was taken care of in school and claimed that made parent—child relationships peaceful:

Yes, it has caused me to worry less as I know that my child is being taken care of by the support services. (P-a)

Sometimes I feel secure thinking that my child is looked after. (P-c)

Yes, made us worry less about her ability to cope with mainstream education. (P-e)

However, two other parents confirmed that they thought the support services did not have any positive influence on their children's family lives.

Parents of Students With Vision Impairment: Perceived Influence of Support Services on Their Children's Social Lives

When parents were asked about their perception of the influence of the support services on their children's social lives, three of them commented that the support impacted on their children's social lives in that the children were taught verbal and nonverbal cues, appropriate gestures and body language, and how to make eye contact in a group situation and interact positively with their sighted peers in the mainstream. Two of the opinions of parents on their children's social lives are represented as follows:

The support has an impact on her social life only to the extent of not making her feel incompetent, also keeping her stress levels down and teaching her verbal and nonverbal cues. (P-e)

Yes, sometimes because by using the support services, he is able to go to the mainstream. The support teacher has taught my child the subtleties of body language, how to make appropriate eye contact in a conversation, and how to maintain the right kind of gestures when talking to people in a group. The support teachers through role-plays have demonstrated appropriate social behaviours. (P-c)

However, one of the parents completely denied any positive influence of the support on her child's social life, and another argued that, instead of having a positive impact, in their view the support services had a negative impact because the child was shy and embarrassed to be asked about the services in the presence of his peers. This made the child unsocial and hesitant to interact with his peers, and his social life suffered in an adverse way:

I feel that the support services have made him more unsocial and embarrassed and awkward in front of his friends. (P-d)

Parents of Students With Vision Impairment: Perceived Influence of Support Services on Their Children's Independence and Abilities to Study and Work Better

When parents were asked whether in their opinion the specialised vision support services helped their children with vision impairment to study and work better, all five parents agreed that they had. They believed that support in the provision of large print handouts, magnifiers, screen magnification, and JAWS speech software made new learning more accessible to their children. The following quotations reflect their views:

Yes, definitely the support services have helped my daughter in her learning. Use of the magnifier and enlarged print facilities has made learning for her easier and convenient. (P-a)

Yes, the support services in the form of speech software and screen magnification devices have helped her so much in her day-to-day tasks. (P-b)

Yes, the support services have helped him to learn things quicker without which things would have been so difficult for him. But I still feel these services should be used more extensively at schools to ensure that optimum utilisation of these is being made. (P-c)

Yes, the support services have helped my son to learn easily and quickly, study and work better. (P-d)

The support allows her to work to the best of her ability. (P-e)

However, one of the parents claimed that much still needs to be done by teachers and special educators in the academic arena. The academic dimension was the only area where all parents confirmed that the support did play a positive role.

Teachers of Students With Vision Impairment: Perceived Influence of Support Services

The teachers of students with vision impairment were questioned whether, in their opinion, the support services influenced their students' problem-solving skills, family life, social competence, and independent study and work abilities.

Teachers of Students With Vision Impairment: Perceived Influence of Support Services on Their Students' Problem-Solving Skills

When teachers were asked about their view on the influence of the support services on their students' abilities to solve problems, all four teachers reported that the support services contributed positively to this area. Two of the four teachers indicated that the support services offered one-on-one help to assist these students to solve their problems. According to three of the teachers, support in the form of adapted technologies and devices like CCTVs made the lives of these students much easier. Another teacher indicated that resources were prepared in the form of print alternatives and they were on loan to students with vision impairment around the state. She also noted that the vision support teachers advised students when buying technology. All the teacher participants believed that there were a whole range of visual aids and adapted technologies as well as SSOs who effectively provided support to students with vision impairment. The collective views of teachers are demonstrated in the following quotes:

Yes, definitely, because students with VI receive help on a one-on-one basis from their support teachers, which helps them to solve their problems. (T-d)

Yes, the support has helped students with VI to tackle problems to some extent on their own as support teachers work on a one-on-one basis for them; adapted technologies and supportive devices have definitely made their life easier than what it could have been without these. (T-c)

Definitely, um, with the older students I find they know what they need in the way of their vision aids. So, if they have a test or some work to do, they will actually — can't say 'can I go back to use a CCTV?', because that's what they find it easiest to use. They negotiate with their teacher to always use a laptop. (T-a)

Two of the teachers also reported that the nongovernmental agencies that provide resources, technology, and services to students with vision impairment in the form of paediatric low vision clinics at the Royal Society for the Blind have been found to be extremely useful:

There are several support services, resources, and technology offered to them by RSB, which is also quite handy in terms of solving their varied problems. (T-d)

Students can go with teachers and parents to the paediatric low vision clinics in the RSB, assess their functional vision and determine how that can impact on the school situation. (T-b)

Teachers of Students With Vision Impairment: Perceived Influence of Support Services on Their Students' Family Lives

When teachers were asked about their perception of the influence of the support services on students' family lives, three out of the four teachers indicated that the support did play a positive role in the family lives of students with vision impairment. These teachers reported that the support not only helped students with vision impairment to achieve to a level commensurate with other classmates, they claimed they learnt skills that enabled them to be more independent at home. According to one of the teachers, there were some families who were overprotective of the child with vision impairment and other families who simply failed to understand the visual needs of their child. She believed that the support provided much needed information to families. She further established that as part of the support service, the support teachers also conducted interviews with parents and were able to share and extend a different perspective altogether. She reported:

Some families tend to be more protective or do not understand the students with vision impairment. So the support provides a lot of information to families. The support teachers also have interviews with parents and are able to share a different viewpoint. (T-b)

There were two other teachers who emphasised that as the support assisted students with vision impairment to complete their tasks and homework at school, it left them with more quality time at home to spend with parents:

Yes, in some way I feel that the support has indirectly influenced students with VI's family life since they are well guided at school, they do not take homework home, and that leaves them with some quality time to spend with parents. (T-c)

Also with vision impaired students, if they go home, not exactly knowing what they have to do, that again puts pressure on the parents and the student as well. So, that can be quite unsettling. (T-a)

One of the teachers, however, indicated that the support services did not cast any influence on her students' family life:

I don't think that the support arrangements as such have had any impact on the student's family life. (T-d)

Teachers of Students With Vision Impairment: Perceived Influence of Support Services on Their Students' Social Lives

When teachers were asked for their view regarding the influence of the specialised vision support services on students' social lives, all four teachers agreed that the support included social skills and self-advocacy training, which had enormous benefits on the social lives of students with vision impairment. These teachers believed that the support assisted students to pick up those behavioural, facial, and communication cues that were considered important to establish social links that otherwise would have gone unnoticed with the limited vision these students possessed. Three teachers reported:

I think it can help with their confidence. So, we can sort of gently guide them, recognising things that they don't see visually and some of that is the behaviour and body language cues and what they come out and say when they don't actually know who's around. I don't think they pick up on that and will often ask what we should do in these situations. (T-a)

Well, the support has taught VI students how and when to behave appropriately in public. (T-c)

Yes, I feel in some way the support has a positive influence on VI students' social competence because we teach them overtly proper social behaviour and communication cues. This has

particularly been helpful to blind students as we provide them training as how to behave in public. (T-d)

However, two of the teachers felt that in spite of providing the best kind of support to establish social skills, students with vision impairment failed to establish proper social networks and connections with their sighted peers. According to them, the reason for failure could not be attributed to the support services itself, but to the attitudes of other sighted peers towards these students. They expressed their views that sighted peers should be provided with more information about vision impairment and training in how to include students with vision impairment in all classroom activities:

However, in spite of our efforts, I have found our VI students not able to establish the best kind of social networks with their peers. I feel more than the students with VI, a lot depends on their sighted peers. Sometimes, the sighted peers do not include them in interactions and this becomes a reason for their poor social skills. So there is nothing wrong with the support provided to VI students. Sighted students should also be provided with some training as how to deal with VI students in class and how to make the classroom more inclusive for them. (T-d)

However, in spite of the support, the main thing that is important is that sighted students should receive training to include VI students in their day-to-day activities. (T-c)

Teachers of Students With Vision Impairment: Perceived Influence of Support Services on Their Students' Independence and Ability to Study and Work Better

When teachers were asked about the influence of the support services on students' abilities to study and work independently, all four teachers unanimously agreed that they thought the focus of support for students with vision impairment had been on their learning through assistive technologies. According to three teachers, the support not only helped students with vision impairment to achieve the DECD curriculum but also provided them with assistance to cover the expanded core curriculum. The expanded core curriculum included orientation and mobility training, training in independent living skills, such as eating, cooking, food preparation, and personal care, and other organisational skills to assist students with vision impairment to become more independent in their day-to-day activities. One of the teachers reported that it was often a challenge for support teachers to fit the expanded core curriculum into the general secondary school. Three teachers commented:

The support not only helps students to achieve the DECD curriculum but the support also provides time to cover the expanded core curriculum. It is always a challenge to fit the expanded core curriculum in the general secondary school. (T-b)

Definitely the support arrangements have helped the students to be more independent as we provide them with adapted technologies, one-on-one support, and training in life skills and mobility and orientation, which has immensely helped students with VI to be more independent in life. (T-c)

Yes, I feel that training in independent living skills have helped VI students to be more independent and work better. (T-d)

The only concern raised by one of the teachers was that sometimes the support provided made students with vision impairment too dependent on it:

Sometimes I feel that the support can make some students heavily reliant on it. (T-d)

Discussion

This section presents a discussion of the key findings obtained from the interview responses regarding the participants' perception of the influence of the support services on students

with vision impairment's problem-solving skills, as well as on their family, social, and academic lives. These findings can make a unique contribution to the field of special education, as there are no previous studies that specifically focus on students', parents', and teachers' views of the influence of support services on these areas.

The interview responses obtained from the three groups of participants articulated mixed perspectives on the influence of the support services on students' problem-solving skills, and on their family, social, and academic lives. Ten of the student participants and two of their parents claimed that the support services offered in schools assisted students with vision impairment to solve their daily problems. In the academic lives of students, for example, 11 of the students and all of the parents established that they believed the support provided students with vision impairment with appropriate resources to aid their development in the academic arena and thus were regarded as a positive influence.

Although 11 of the students perceived that the support had no effect on their family lives, three of the parents identified that the support positively influenced family relationships. Parents felt relieved that their child was looked after in the school by the provision of appropriate support services and claimed this made parent—child relationships more calm and secure. This draws our attention particularly to another unique aspect: the trust and faith that parents had in the provision of proper support services by the schools for their children with vision impairment.

In the case of social contexts, 10 of the students and three of the parents recognised that the support services taught students with vision impairment nonverbal cues/communication, appropriate gestures, eye contact and body language, which otherwise they would not have been aware of or able to use effectively. However, a few of the students and their parents believed that the support services had no positive effect on their social lives, as availing themselves of these services in the presence of peers made them feel humiliated and embarrassed. In such instances, the support services were simply creating a distance or barrier between these students and their sighted peers. Therefore, what needs to be noted here is that the support services should be provided to students with vision impairment in a way that does not draw other students' attention to the special provisions as much as possible.

Teachers had different views when compared to those of students with vision impairment and their parents. All teachers perceived that the support services made a positive contribution to the lives of students with vision impairment and added positively to the development of the students' problem-solving skills. A majority (three) of the teachers perceived that the support helped them to learn skills to be independent at home and provided practical information to families about the conditions of their child's state of vision. It can be inferred from the teachers' responses that such useful information about a students' disability should be provided to the other students in the class as well, in order for the classroom to be more inclusive of all. All of the teachers reported that the support provided effective social skills training for these students. They claimed that the students' difficulties in establishing appropriate social networks in the classroom were due to the negative attitudes sometimes displayed by their sighted peers and had nothing to do with the support services. According to the four teachers, the academic aspect was the area where students obtained the maximum benefit from support services in the form of expanded core curriculum and assistive technology. They explained that the expanded core curriculum provided students with vision impairment with orientation and mobility and independent living skills training.

However, in spite of the positive influence of the support services in the academic arena perceived by the three groups of participants, there were some specific concerns

in relation to the support services. These were multifaceted and overlapping. For example, the three groups of participants felt students with vision impairment did not make optimum use of the support services, or were too embarrassed to avail themselves of these services in the presence of their peers. It was also reported that sometimes services were not provided to the students at the right time (during examinations or when new learning needed to take place), or teachers had not received adequate training to effectively use some of the software for these students. At other times, there was a lack of coordination between support teachers, subject teachers, and students with vision impairment.

Conclusion

Respondents reported that specialist vision support services assisted students with vision impairment in a number of areas. It emerged from this study that they further believed that specialist support services should be provided to students with vision impairment in ways that reduce embarrassment and enable them to avail themselves of these services more in private. The students in this study reported that they did not like receiving support services in front of their peers because it drew attention to their differences. They would much rather receive this support in private. This apprehension with overt support perhaps interferes with the student perception of valued support. Future research needs to be conducted on which type of services should be delivered in this mode. The range and magnitude of the support services should be extended to ensure that students are able to make optimum use of them.

The emphasis on the relatively unexplored area of the influence of the support services on these students' problem-solving skills, their family, social, and academic lives has opened the way for further investigation. Future thorough exploration is essential to ensure that educational and support services more satisfactorily meet the needs of these students and provide them with the knowledge and abilities to successfully interact in society and attain the highest quality of life possible. In the decades ahead it is important that research continues in this field.

References

Burns, R. B. (2000). Introduction to research methods (4th ed.). Thousand Oaks, CA: Sage.

Charles Campbell College. (2012). Vision Impairment Support Program. Retrieved November, 5, 2012, from http://www.ccc.sa.edu.au/student-services/support-services/vision-impaired

Cohen, L., Manion, L., & Morrison, K. (2000). Research methods in education (5th ed.). New York, NY: Routledge.

Datta, P. (2015). An exploration into the support services for students with a mild intellectual disability. International Journal of Inclusive Education, 19, 235–249. doi:10.1080/13603116.2014.929185

Denzin, N. K., & Lincoln, Y. S. (1998). *Collecting and interpreting qualitative materials*. Thousand Oaks, CA: Sage.

Department for Education and Child Development. (2012). South Australian School for Vision Impaired. Retrieved November 8, 2012, from http://www.sasvi.sa.edu.au/support_services.htm

Government of South Australia. (2012). Seaview High School: Vision Support Program. Retrieved from http://web2.seaviewhs.sa.edu.au/specialist-programs/vision-support-program

Hatlen, P. (2000). Historical perspectives. In M. C. Holbrook & A. J. Koenig (Eds.), Foundations of education: History and theory of teaching children and youths with visual impairments (Vol. 1, 2nd ed., pp. 1–38). New York, NY: AFB Press.

- O'Donoghue, T. (2007). Planning your qualitative research project: An introduction to interpretivist research in education. Milton Park, UK: Routledge.
- O'Rourke, J., & Houghton, S. (2006). Students with mild disabilities in regular classrooms: The development and utility of the Student Perceptions of Classroom Support scale. *Journal of Intellectual & Developmental Disability*, 31, 232–242. doi:10.1080/13668250601050310
- Poland, B. D. (1995). Transcription quality as an aspect of rigor in qualitative research. *Qualitative Inquiry*, 1, 290–310. doi:10.1177/107780049500100302