The Social Experiences of High School Students with Visual Impairments

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Structured abstract: *Introduction:* This study explores the social experiences in high school of students with visual impairments. *Methods*: Experience sampling methodology was used to examine (a) how socially included students with visual impairments feel, (b) the internal qualities of their activities, and (c) the factors that influence a sense of inclusion. Twelve students, including three with additional disabilities, completed the Psychological Sense of School Membership (PSSM) questionnaire as a measure of inclusion. They were subsequently asked to complete an in-the-moment survey seven times daily for one week using an iOS device. This survey asked about activities and ratings of internal variables: fitting in, acceptance, loneliness, awareness, and enjoyment. Each student was also interviewed. *Z*-scores were created for internal variables and correlations calculated to examine relationships between experiences, PSSM, and demographic variables. *Results:* This group felt included as measured by the PSSM ($m = 4.24$, $SD = .67$). Students' most frequent activity was classwork. Doing nothing rated most negatively and was described as time wasting. Out-of-class activities were rated most positively. In the three participants with additional disabilities, it appeared that the presence of this additional disability negatively influenced a sense of inclusion ($rb = -.67$, $p \leq .05$), fitting in ($rb = -.86$, $p \leq .05$), enjoyment ($rb = -.65$, $p \leq .05$), and loneliness ($rb = .88$, $p \leq .05$). Interviews revealed a lack of common ground between adolescents with both visual impairments and additional disabilities and their peers. *Discussion and implications for practitioners:* These students worked hard to maintain parity with peers and found school more enjoyable if they fit in. It is important to provide discreet and timely access to the curriculum. Friendships require time, common interests, and reciprocity. There may be potential to further explore out-of-class clubs as a means of supporting friendship development. In addition, findings suggest that students with additional disabilities are not likely to feel included. Because this population comprises the majority of visually impaired students, this result has serious implications for practitioners and should be examined in future research.

Time has been conceptualized as a developmental variable, a proxy variable for the multitude of socialization experiences that develop the social and emotional competencies influencing maturity, mental health, and well-being. The more time spent in an activity context or "experiential niche," the greater the chance to absorb the skills, knowledge, and experiences related to that context (Larson & Verma, 1999).

Adolescents spend almost as much waking time at school as they do at home. School is their prime source of interaction with peers. A positive sense of inclusion in this context is important to mental health (Shochet, Dadds, Ham, & Montague, 2006; Thomas et al., 2015), to motivation (Osterman, 2000), and for good academic outcomes (Department of Science, 2007).

Studies have shown that adolescents with visual impairments can find high school socially challenging (Rosenblum, 2000; West, Houghton, Taylor, & Kia Ling, 2004). Adolescence is a period during which many young people differentiate themselves from family and prioritize relationships with peers (Sylwester, 2007). Visual impairment has a low incidence in this developmental period. A lack of visually impaired peers and role models presents a major challenge to adolescents with visual impairments as they differentiate their identities. These adolescents often have relatively small social networks (Kef, 1997), have challenges keeping pace with the visual nuances of peer interactions, and have to work hard to establish and maintain relationships with sighted peers (Sacks & Wolffe, 1998). In order to fit in at school, some visually impaired adolescents have weighed the social costs of adult- or device-assisted curriculum access. The perceived stigma of this assistance has outweighed its perceived benefit and, as a result, it is often discarded or underutilized (Khadka, Ryan, Margrain, Woodhouse, & Davies, 2012; Söderström & Ytterhus, 2010; Uttermohlen, 1997; Whitburn & O'Connor, 2011).

Few studies have specifically explored the psychosocial aspects of high school from the perspectives of visually impaired students. Whitburn and O'Connor (2011) attributed much social exclusion to chaperoning by support staff. Both Rosenblum (2000) and West et al. (2004) noted the importance of time and strategy in building friendships, perhaps even more time than is required for sighted students. Some students may never establish strong peer relationships, and their school experience may be lonely (Hadidi & Al Khateeb, 2013; Hatlen, 2004; Huurre & Aro, 1998).

The catalyst for this current study was prior research with young visually impaired people (Jessup, Cornell, & Bundy, 2010), during which some recounted social isolation in high school. Their stories echoed the difficulties of students in previous generations. Social isolation in adolescence affects mental health and well-being (Thomas et al., 2015). With this concern in mind, we sought to explore

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whether perceptions of social isolation were widespread among students with visual impairments and to give students a voice. Our research questions were: (a) How socially included do visually impaired students feel at high school? (b) What are the internal qualities of their school activities and interactions? and (c) What are the different influences on social inclusion in high school?

Methods

There are two aspects to social inclusion at high school: participation in activities and relationships and a sense of acceptance, belonging, or satisfaction (Bossaert, Colpin, Pijl, & Petry, 2013). Our challenge was to capture these dual aspects on school grounds and in multiple classes without having a researcher shadowing students, an approach adolescents might not have welcomed. We therefore adopted a well-used approach to capture in-the-moment experiences. The Experience Sampling Method (ESM) (Hektner, Schmidt, & Csikszentmihalyi, 2007) yields data about both objective (participation) and subjective (perception) aspects of experience in the moment by asking participants the same short survey questions on multiple occasions throughout a predetermined period (several days or a week). ESM provides repeated measures in everyday environments. Previous ESM surveys have relied on vision (Bray, Bundy, Ryan, & North, 2010). We developed and piloted an accessible survey application or app, the PIEL (Participation in Everyday Life) survey app (https://pielsurvey.org), as a data collection tool for ESM (Jessup, Bundy, Broom, & Hancock, 2013).

Table 1
Students' age, grade, and PSSM scores.

Student	Age	Grade	PSSM score
William	16	12	5.00
Ethan	17	11	4.94
Emma	16	10	4.89
Cara[a]	14	8	4.61
Drew	15	10	4.56
Bethany	13	8	4.50
Heidi	14	9	4.44
Zac	17	11	4.17
Simon	15	10	3.94
Jasmine[a]	14	9	3.44
Anna	17	12	3.28
Oliver[a]	13	8	3.06

[a] Student with a visual impairment and additional disability.
PSSM = Psychological Sense of School Membership questionnaire.

The participants

This mixed-method study was approved by the University of Sydney Human Research Ethics Committee. In Australia, high school begins in grade 7. To be eligible for this study, students were required to be in or above grade 8 so that they had spent at least one year in high school. Twelve visually impaired high school students (aged 13–17 years) were recruited from 12 high schools in three Australian states (see Table 1). These students had varying degrees of vision loss, ranging from total blindness (four students) to having some functional, but very low, vision. Informed consent was obtained from all participants and their parents. Pseudonyms were used to protect privacy.

Data collection tools

Everyday Inclusion Survey

This purpose-built ESM survey comprised a core set of nine questions designed to elicit information about the

quality of activities and additional branched questions about the quality of any social interactions. Questions were based on literature relating to social experiences of visually impaired adolescents (Cochrane, Lamoureux, & Keeffe, 2008; Rosenblum, 2000), school experiences of students with disabilities (Díez, 2010), and in consultation with service providers for visually impaired adolescents. This survey was administered using the PIEL survey app on iOS devices (iPhone, iPod touch, or iPad). To facilitate smooth, in-the-moment survey flow, all questions were identically formatted, requiring students to select one response from a list. For example, to answer the question, "What is the main thing you were doing?" students could select either: "Work," "Eating," "Extracurricular," "Leisure," "Talk or texting," "Travel," "Watching TV/DVD," "Thinking," "Nothing," or "Other." Students accessed the survey using either (a) VoiceOver (the built-in screen-reading application on iOS devices) with standard gestures, so questions and responses were read out, or (b) text enlargement features on the iOS device. Students using VoiceOver could also use headphones and the iOS device screen curtain to ensure privacy. Students were asked a series of core questions: what they were doing, with whom, and where; they also were asked to rate the extent to which they were aware of what was going on around them and the degree to which they felt lonely and were enjoying themselves. Responses to awareness (no, partly, yes) and loneliness and enjoyment (not at all, a little, quite a lot, heaps) were scored on a 3- or 4-point rank-ordered scale. If students reported they were interacting with someone, they received a series of branching questions: Were they giving or receiving help? How dependent did they feel? To what extent did they feel they fit in and were accepted in the context of the interaction? Responses to dependence were categorical (not at all, comfortably, too). Fitting in and acceptance were rated on a 4-point scale.

The Psychological Sense of School Membership (PSSM)

This 18-item Likert-scale questionnaire measured students' subjective sense of school belonging or membership, the extent to which students feel accepted, respected, and valued in their academic context (Goodenow, 1993). This scale was used to obtain a global sense of inclusion, in congruence with Prince and Hadwin (2013) that a sense of school belonging is integral to inclusion. The PSSM items are in the form of statements (for example, "I feel like a real part of [name of school]," "I am included in lots of activities at [name of school]," or "There is a teacher or other adult at school to talk to if I have a problem"). Students are asked to rate the truth of each of these statements on a 5-point Likert scale ranging from 1 (not at all true) to 5 (completely true). The PSSM has evidence of satisfactory internal consistency ($\alpha = .80$) (Goodenow, 1993) and a test-retest reliability index of .78 (4-week interval) (Hagborg, 1998), and .56, and .60 for males and females, respectively (12-month interval) (Shochet et al., 2006). It has been used with Australian high school students (Shochet et al., 2006) and students with disabilities (Crouch, Keys, & McMahon, 2014; Hagborg, 1998).

Interviews

All participants were interviewed at least once. As well as clarifying and expanding on ESM responses, interviews further explored the social aspects of school. Students were asked about social inclusion and if they felt included at school. They were also asked their favorite and least favorite subjects and what they would or would not change at school. Finally, they were asked to give advice to younger visually impaired students. Additional information was elicited by text, e-mail, or additional interview.

Procedure

All documents were e-mailed to students in advance. The first author negotiated a suitable week for the survey that was free of exams or atypical events. All students were provided with the PIEL survey app for use on their own iOS device or on a university-owned iOS device. The app randomly signaled students to respond to the Everyday Inclusion Survey seven times daily between 7:30 a.m. and 9:20 p.m. on weekdays, and 8:30 a.m. and 10 p.m. on weekends.

A training session was conducted with each student. Most were familiar with iOS devices and needed only to practice using the app and clarify their understanding of survey questions. During this session, students were administered the PSSM questionnaire. Sociodemographic data were also collected. These included the level of vision impairment according to the classification system of Blind Sports Australia and the Index of Community Socio-Educational Advantage (ICSEA) created by the Australian Curriculum, Assessment, and Reporting Authority, as indicating school socioeconomic status (DET, 2010). At the end of this session, the PIEL survey app was activated to begin collecting data. Students had to answer surveys within five minutes of hearing the alert sound, after which point the survey became unavailable. During the week, the first author phoned the students to enquire as to their survey progress. At the end of the week, students e-mailed their responses to the authors or they returned university-owned iOS devices. An interview was conducted as soon as possible (within one to two weeks) after responses had been scrutinized. Interviews were recorded and transcribed. ESM responses were clarified by asking, for example, "On Thursday at 10 am you were in class, with a friend and enjoying yourself. Can you tell me more about the class and that friend?"

Analysis

The emphasis of this analysis was to provide a rich and deep description of a relatively small sample of students. To answer question 1, "How socially included do visually impaired students feel at high school?" we used PSSM scores. The total score for all 18 items was averaged to produce a single score out of a possible 5 for each student (see Table 1). Hierarchical Cluster Analysis (Everitt, Landau, Leese, & Stahl, 2011), based on each student's responses to individual items, was used to determine student groupings.

To answer question 2, "What are the internal qualities of their in-school activities and interactions?" we used school ESM data and interview data. We created a situational variable (not school or school) in response to the question "Where are you?" and used only the data

gathered at school. Categorical ESM variables were expressed as frequencies and percentages. In ESM studies, since each participant contributes multiple surveys, the use of a *z*-score for subjective responses is recommended (Hektner et al., 2007) to allow for both intrapersonal and interpersonal comparisons of these aspects across differing contexts. This metric offers the advantage of controlling for individual differences in scale usage. Within ESM methodology, *z*-scores are commonly created from rank-ordered or Likert-type scales (Hektner et al., 2007). To answer this particular research question, individual *z*-scores were first created for the subjective dimensions of experience (awareness, loneliness, fitting in, acceptance, and enjoyment) at school so that each student's mean school *z*-score was 0. These were used for the subsequent group calculations.

To answer question 3, "What influences perceptions of social inclusion in high school?" we used each student's data across the entire seven days. We calculated each student's overall *z*-scores for loneliness, acceptance, fitting in, enjoyment, and awareness to allow for person-level comparisons; the mean *z*-score for each item for each individual was thus 0. We then extracted the *z*-scores for school only (Hektner et al., 2007) and entered those into subsequent calculations. These data were not normally distributed. Thus, we employed nonparametric tests, Kendall's tau-b and biserial correlations (Field, 2009) to examine relationships between ESM and demographic variables (gender, age, grade, presence of additional disability, vision level, and ICSEA) and PSSM score.

Results

All students completed their week of surveys. Their mean response rate was 69%. There were 401 surveys returned. Of these, 106 were completed at school.

How included do the students feel?

The mean PSSM score was 4.24 out of 5 ($SD = .67$) (see Table 1), which indicates the students felt very included and had a positive sense of belonging. The highest-scoring items were: "There is a teacher or other adult at school to talk to if I have a problem" ($M = 4.83$, $SD = .39$), and "People know I can do good work" ($M = 4.67$, $SD = .78$). Hierarchical cluster analysis (Everitt et al., 2011) confirmed two groups of students, a group of nine with relatively high scores and a group of three with relatively lower scores. Two of the three students with additional disabilities were in this lower group. The scores of the lower group indicated they felt different from most other students, were not included in many activities, and had difficulty being accepted. In interviews, they also reported feeling a lack of inclusion at school. Oliver commented that his good work was not noticed because it was in braille, "They don't know I do good work unless I tell them."

What are the internal qualities of their activities and interactions?

Table 2 shows the ratings of internal dimensions associated with school activities. Students reported feeling "a little" or "quite" lonely almost one-third of the time, and enjoyed themselves "quite a lot" or "heaps" just over half the time. They felt accepted and fitted in "quite a lot" or "heaps" over 80% of the time and

Table 2
Ratings of internal dimensions as a percentage of self-reports.

Everyday Inclusion Survey item	Not at all (No)	A little (Partly)	Quite a lot (Yes)	Heaps
Did you feel like you fit in? (Q5)	1.3	13.9	39.8	45.0
Did you feel accepted? (Q7)	1.3	11.4	42.2	45.0
Were you lonely? (Q17)	71.2	24.8	4.0	0.0
Were you enjoying yourself? (Q18)	8.5	37.6	25.4	28.5
Did you know what was going on around you? (Q4)	2.9	20.7	76.4	—

Numbers represent the percentages of group responses. These were calculated by first calculating individual student averages.

felt fully aware of what was going on around them three-quarters of the time.

The variations in the frequency and internal dimensions of the students' interactions and most common activities is presented in Table 3. It shows that schoolwork was the most frequent activity, followed by talking and then equally by doing nothing and doing extracurricular activities (noncompulsory additional activities). Interestingly, no student selected "thinking" as an activity. The nature of the students' extracurricular activities was elicited during the interviews. These included choir, excursions, sports (10-pin bowling), Student Leadership Council meetings, and braille lessons.

The majority of school interactions (see Table 3) were with classmates and staff. In interviews, the visually impaired students described feeling different from their sighted peers. They had to work hard to keep up in class and, as Simon explained, they "might need to spend a little more time on things." The students differentiated between classmates and

Table 3
Comparison of internal variables by interaction and activity.

Variable	Number of self-reports (N = 106)	Aware[a]	Fit in[a]	Accepted[a]	Lonely[a]	Enjoying[a]
Interaction						
Classmates	35	0.1	−0.1	−0.2	0.1	0.0
Staff members	19	0.2	−0.2	0.1	−0.1	−0.3
No one	17	−0.3			0.3	−0.1
Group of friends	16	−0.1	0.4	0.5	0.1	0.3
One friend	14	−0.1	−0.1	−0.3	−0.1	0.0
Student(s) in other classes	5	0.4	0.3	0.2	−0.8	0.5
Activity						
Working	60	0.1	−0.1	−0.1	0.0	−0.2
Talking or texting	12	0.0	0.4	0.2	−0.5	0.7
Nothing	9	−0.4	−0.7	−1.0	0.7	−0.7
Engaging in extracurricular activities	9	0.2	0.2	0.6	−0.3	0.8
Eating	8	−0.2	0.4	0.3	0.4	0.1
Watching TV or DVDs	2	0.0	0.4	0.3	−0.2	0.7

[a] Mean z-score.

friends by whether or not they shared interests out of class. Reported student interactions varied widely. Oliver had no peer interactions (with friends or classmates). All his interactions were with staff. In his interview, he revealed he had no friends and felt his classmates did not want to work with him. In contrast, William, who was totally blind, reported no staff interactions. He was in year 12 and his staff support had tapered over time: "I'm pretty right with my stuff, but if there's stuff in math to go over like maps and things they help me."

Extracurricular activities (see Table 3) were rated most positively in terms of internal qualities (awareness, fitting in, acceptance, loneliness, enjoyment). In contrast with other activities, students experienced doing nothing as very negative; when they indicated they were "doing nothing," students were least aware of what was going on, enjoyed themselves least, were most lonely, felt they fitted in least, and felt accepted least. In interviews, students elaborated on doing nothing. Jasmine and Drew described sitting on the sidelines throughout sport or physical education (P.E.). Jasmine felt "kind of lonely," and Drew felt frustrated: "They don't understand that it's really frustrating when I have to sit there for an hour and a half and not do anything." Cara felt bored, and Drew described feeling annoyed and frustrated, doing nothing in class because the teacher was using inaccessible pedagogies; writing on a board and talking too rapidly; using PowerPoint; or showing movies. Cara, a braille user, had trouble comprehending her mathematics topic, "linear stuff . . . can't work out what the stupid textbook is saying" and hence did nothing in and felt bored during mathematics. William described how he and a friend were doing nothing in their class while the "smart kids" were taking exams. He felt his time could be better spent elsewhere. Cara complained about doing nothing in her compulsory weekly assembly*:* "I wasn't doing anything, I wasn't enjoying myself at all . . . feeling very, very lonely." She was with her friend who has Asperger's syndrome.

Eating as an activity was reported as having an element of loneliness. In his interview, Oliver described eating by himself every day because he had no friends. Anna described feeling lonely eating with her group as she did not regard them as her real friends: "I've got friends outside of school that I actually enjoy spending time with, a lot more than the people that I do spend time with at school." Zac also felt lonely eating with his group. He was relatively new to his school.

There were not huge variations in internal dimensions of the different companions in activities. In general, the students enjoyed interactions most that were with students from other classes. These interactions involved schoolwork, eating, or extracurricular activities. Students fitted in most and felt most accepted doing activities with a group of friends. Having a single friend as a companion in activities did not rate very positively. Students enjoyed activities the least that they did with staff.

In terms of helping interactions and dependence, if students were interacting with someone, they were asked to rate their dependence (not at all, comfortably, too dependent) and whether or not they were helping or being helped. In class,

Table 4
Relationships between demographic and internal variables.

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	—											
2. Age	−.25	—										
3. Grade	−.36	.86**	—									
4. ADDIS	.19	.77*	.84*	—								
5. VISCLAS	.10	.25	.14	−.38	—							
6. ICSEA	.03	.21	.11	.00	.05	—						
7. PSSM	−.06	.21	.21	−.67*	.05	.24	—					
8. Going on	−.11	.02	.03	.46	−.17	.20	−.14	—				
9. Fitting in	−.09	.33	.37	−.86*	.11	.04	.40*	.13	—			
10. Accepted	.21	.26	.33	−.45	−.30	.18	.37	−.17	.28	—		
11. Lonely	.06	.05	−.07	.88*	−.09	−.14	−.42*	.24	−.46*	−.11	—	
12. Enjoying	−.14	.16	.36	−.65*	.00	−.17	.20	−.19	.57**	.24	−.56**	—

ADDIS = presence of an additional disability, 0 = no, 1 = yes; ICSEA = Index of Community Socio-Educational Advantage; PSSM = Psychological Sense of School Membership questionnaire; VISCLAS = Blind sports classification (B1, B2, B3), higher score equates with better vision. In all measures, higher scores are in the direction of the construct being measured. * $p \leq .05$, ** $p \leq .01$.

students received unreciprocated help in 44% of their interactions, the majority of which (62%) came from staff. The rest came from peers (27%) and friends (12%), respectively. Most of the time (90%) students felt comfortable, or not at all dependent with this help. Students reciprocated by helping with other students in only 8% of their in-class interactions. Heidi elaborated on her reciprocity. She was helping a group with French vocabulary. There was only one self-report of a student actually providing unreciprocated help: Jasmine was helping a classmate with a disability with work. Students received unreciprocated help in 20% of their out-of-class interactions.

What are the influences on perceptions of inclusion?

The PSSM was used as a global measure of inclusion. Correlations (see Table 4) indicated strong relationships between the presence of an additional disability and PSSM, fitting in, and loneliness. These relationships indicated that visually impaired students who had additional disabilities were more likely to not feel included, not enjoy school, feel as if they did not fit in, and feel lonely. In her interview, Jasmine, one of these students, reported being proud of not fitting in at school. She, unlike her peers, had survived a life-threatening illness. She felt she had a better appreciation of life than they did. However, she also described having difficulty making friends at school. Cara and Jasmine both felt they did not fit in when their need for quiet to concentrate on schoolwork conflicted with others in the class "talking and not wanting to do their work."

Correlations (see Table 4) also indicated moderate relationships between PSSM scores and in-the-moment fitting in and loneliness. Students with higher PSSM scores were more likely to fit in and not feel lonely. This global sense of inclusion was independent of in-the-moment enjoyment, acceptance, or

awareness. There were also moderate relationships between fitting in, enjoyment, and loneliness. Students who did not feel like they fitted in were more likely to feel lonely and not enjoy themselves. There were no significant correlations with gender, age, grade, level of vision, and ICSEA, and internal variables. Significant correlations between age and additional disability ($rb = .77$) and grade and additional disability ($rb = .84$) reflected a sampling issue.

Discussion

The results of this small-scale study suggest that the majority of students felt included in their respective schools and concur with Gray's (2009) survey of special needs co-coordinators. These educators felt that most visually impaired students had good relationships with peers and teachers and were fully engaged in school life. The PSSM item that our participants rated highest related to having an adult to talk to if problems arose and reinforces previous findings (Crouch et al., 2014) on the importance of good student-staff relationships to be included for high school students with disabilities. "People know I can do good work" was another PSSM item that participants rated very highly. Perhaps for these students, public acknowledgement and recognition of competence, which counter stereotypical assumptions of disability, are important parts of feeling included. Oliver seemed to experience particular difficulty here. He perceived that his academic competence was not recognized or acknowledged because he used braille, a medium foreign to his peers. Although most students felt included, there was a group of students, primarily students with additional disabilities, who struggled socially, feeling lonely, not included, and as if they did not fit in.

On the Everyday Inclusion Survey, activities that seemed to involve a greater degree of choice or freedom were described more positively than routine or compulsory activities. Activities with a single friend as a companion did not rate as positively as did those with a group of friends (with the exception of eating) or with students in other classes. Students together with a single friend were doing schoolwork or doing nothing, not situations with a high degree of choice. In contrast, groups of friends congregated outside class times to talk and joke and do leisure activities over which they had relatively more choice and freedom. Students in other classes were companions in extracurricular activities, also associated with more choice and freedom.

Our results quantify the effect of doing nothing in relation to other activities at school, highlighting lack of participation, lack of awareness, loneliness, not fitting in, and lack of acceptance. In many of these instances, students were forced into doing nothing because class activities were inaccessible. Inaccessible pedagogy has been identified previously (Whitburn, 2014). Math, P.E., and sports were subject areas listed by our participants and were also previously identified as problematic for visually impaired students (Gray, 2009). The gaps our students described were substantial. In some cases they encompassed an entire lesson. It is clear from this study and other research that visually impaired students have to work hard to maintain parity with peers, and the everyday activities of life often take longer (Gale & Cronin, 1998; Sacks

& Wolffe, 1998). Doing nothing wasted valuable time. This indicates that staff need more awareness of the importance of time to visually impaired students and the imperative to provide access to all aspects of the curriculum.

There was a mild but fairly frequent element of loneliness at school. Students reported loneliness about one-third of the time, although they never reported being "heaps" lonely. Historically, the prevalence of loneliness has been higher in visually impaired students than for peers who are sighted (Hadidi & Al Khateeb, 2013), girls in particular (Huurre & Aro, 1998). We found no relationship between gender and loneliness but identified doing nothing and eating as activities in which students felt most lonely.

The reason eating seemed to be a time when students felt lonely is unclear. Regularly eating alone reinforced perceptions of isolation for Oliver. Eating with a group of friends was also lonely for some. This may reflect the quality of the group relationships. Anna, who felt lonely eating in a group, did not regard her group of friends at school as real friends. Eating with them, however, might have been preferred to eating alone. Alternatively, feeling lonely when eating in a group could reflect challenges in keeping pace with subtle group interactions. Unlike their sighted peers, it may not be easy to attend to the details of eating (such as locating, unwrapping, and steadying food), while keeping up with the banter and spontaneity of group conversation.

Almost half (44%) of all class interactions involved students receiving unreciprocated help. This degree of frequency seems higher than that given to sighted peers, yet for the most part students felt comfortable being helped. Staff provided the majority of help, and although these interactions were not enjoyable, they were not particularly disliked either. Our participants did not seem to experience the degree of tension reflected in other studies that have noted dilemmas between the need for adult assistance and a dislike of the social perceptions this assistance or chaperoning creates (West et al., 2004; Whitburn & O'Connor, 2011). Tension may still exist, however, since doing nothing as an alternative is even less enjoyable (see Table 3). Help may be the lesser of two evils or, alternatively, perhaps our results simply speak well to the discretion and sensitivity of these staff.

The presence of an additional disability negatively influenced perceptions of inclusion. The proportion of students in our group who had additional disabilities was 25%, whereas these students now comprise 65% of visually impaired students (Hatton, Ivy, & Boyer, 2013). Further research may be needed into this lack of inclusion. Perhaps the energy and time required to attend to health-related needs as well as academic tasks leaves little time and energy to focus on developing or maintaining social connections. Or perhaps, as Jasmine articulated, some of these students may have a perspective on life that does not resonate with the more commonly appreciated experiences of teenagers. These students may find it difficult to negotiate the balance between their personal and social identities: staying true to themselves and also connecting with the more popular interests and values of peers. These students were among the youngest in this sample of adolescents. Although no relationships were found (see Table 4) between grade

or age and the internal variables, perhaps students with additional disabilities need more time alone than other visually impaired peers do to find common ground with sighted peers.

The more these students perceived they fit (see Table 4), the more enjoyable and less lonely was their experience of school. This suggests, as has been found in other studies (Khadka et al., 2012), that students will gravitate towards practices that emphasize similarity with sighted peers. This may at times create tension between students and the adults who seek, from a long-term perspective, to guide them towards particular educational or vocational outcomes. Social pursuits may take precedence over academic tasks, and equipment deemed "clunky" may not be utilized. Some students may be reluctant to use braille in class if they perceive it creates a social barrier, as alluded to by Oliver in this current study.

There may be the potential for schools to utilize clubs and extracurricular activities as developmental resources for visually impaired students. Experiences in activities that provided relative choice and freedom were rated most positively by students. Judiciously facilitated interest groups could provide time and opportunities for visually impaired students to develop their personal and social identities, share interests, and reciprocate with peers (Jessup et al., 2010; Rosenblum, 2000). Douros (2015), who is visually impaired and has additional disabilities, valued clubs as a way of developing friendships. They provided opportunities for reciprocity and consequent respect for her within her school. These opportunities may be particularly important if there are few opportunities for students to share interests, display competence, or reciprocate elsewhere.

Limitations

As the data obtained are from a relatively small sample, care needs to be exercised when extrapolating beyond this group of students. This study should be regarded as exploratory, providing evidence for consideration and direction for further research. As previously noted, this group of participants had a lower proportion of visually impaired students with additional disabilities than is representative of this population of adolescents. As participants were self-selected, there may be a higher degree of students struggling at school than is represented here.

Conclusion

This study has both provided encouragement and highlighted concerns in regard to the inclusion of visually impaired high school students. Most students whose only disability is visual impairment reported feeling included. It would be instructive to understand how these students' social experiences in high school compare with those experiences out of school.

The school experience is more enjoyable if visually impaired students perceive they fit in with their peers. Practitioners can facilitate fitting in by ensuring both discreet and timely access to all aspects of the curriculum. Gaps still exist in curriculum access, many of which seem preventable. The value of time to these students needs to be respected as essential to both academic parity and friendship development. There may also be potential for schools to utilize extracurricular clubs for some of these students so they can

develop common ground with peers. The social challenges that still exist for some students, including those students with additional disabilities, are concerning because of the now-well-established links between social experience and mental health. Future research may need to focus more closely on the school social experiences of these students.

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