Research in Developmental Disabilities 89 (2019) 130–140

Contents lists available at ScienceDirect

Research in Developmental Disabilities

journal homepage: www.elsevier.com/locate/redevdis

Picture my well-being: Listening to the voices of students with autism spectrum disorder☆

Joanne Danker*, Iva Strnadová, Therese M. Cumming

School of Education, University of New South Wales, Sydney, 2052, Australia

ARTICLE INFO

Keywords:
Autism spectrum disorder
Photovoice
Student well-being

ABSTRACT

Background: Student well-being, though widely researched, continues to be a poorly defined concept. Few student well-being studies focus on students with autism spectrum disorder (ASD), who may have a poorer sense of well-being compared to typically developing students.
Aims: The current study aims to explore the conceptualisation, barriers, and ways to enhance the well-being of students with ASD from their perspectives.
Methods and procedures: Photovoice, a participatory research method was used to elicit the views of 16 high school students with ASD to explore the concept of well-being. Data analysis was conducted using a grounded theory approach.
Outcomes and results: Students conceptualised well-being as multidimensional, identified sensory barriers, social barriers, and barriers that were associated with learning, and several external and internal assets that could support their well-being.
Conclusions and implications: To promote well-being, barriers should be mitigated, while external and internal assets developed. Researchers should also consider the use of Photovoice to enable students' meaningful participation in research studies.

What this paper adds?

There is significant literature on student well-being. However, there is a dearth of literature focusing specifically on the well-being of students with autism spectrum disorder (ASD). This study contributes to literature by exploring the notion of and ways to enhance the well-being of students with ASD from the perspective of students themselves. Educational practices that could potentially improve the well-being of these students are discussed. Photovoice as a viable research technique to engage students with ASD in research is also considered.

1. Introduction

In recent years, there has been a considerable amount of attention on student well-being (Simmons, Graham, & Thomas, 2015). This stems from increasing awareness of the impact that well-being has on students' academic performance and their adult outcomes (Alridge et al., 2016). Despite the growing number of research studies dedicated to student well-being, the concept remains poorly defined (Powell & Graham, 2017). Some argue that student well-being refers to a student's satisfaction with school, and experiences

☆ This research received ethical approval from the University of New South Wales Human Research Ethics Committee (Approval #HC14251; SERAP Approval 2014150).

* Corresponding author.
E-mail addresses: j.danker@unsw.edu.au (J. Danker), i.strnadova@unsw.edu.au (I. Strnadová), t.cumming@unsw.edu.au (T.M. Cumming).

https://doi.org/10.1016/j.ridd.2019.04.005
Received 14 November 2018; Received in revised form 13 February 2019; Accepted 5 April 2019
Available online 12 April 2019
0891-4222/

of more positive as compared to negative emotions (Diener, 2009; Hascher, 2003), while others believe that opportunities to pursue meaningful goals in school provide students with a sense of well-being (Keyes & Annas, 2009). The lack of a uniform definition might have impeded efforts to assess and enhance students' well-being (Soutter, O'Steen, & Gilmore, 2014). Similarly, while there is a general agreement that student well-being consists of multiple domains, disagreement exists about the number and type of domains (Danker, Strnadova, & Cumming, 2016). Moreover, there is a significant gap in the literature on the well-being of students with autism spectrum disorder (ASD). Due to characteristics of ASD, such as social communication and restricted and repetitive behaviours (American Psychiatric Association, 2013), it is likely that students with ASD, as compared to their typically developing peers, have different school experiences which could affect their well-being. Greater efforts are needed to better understand the well-being of students with ASD to increase the possibility that they attain successful educational outcomes.

Recognising that children are experts in their own lives, and the rights of all children to have a say on issues concerning them, as articulated in the United Nations (CRC) (1989) and the United Nations (CRPD) (2006), researchers are increasingly consulting students' views in student well-being research (Graham, Powell, & Truscott, 2016). Further, there has been a proliferation of studies indicating that children, including those with disabilities, have the capacity to participate meaningfully in research with the use of appropriate research methods (Cheak-Zamora, Teti, & Maurer-Batjer, 2018; Danker, Strnadova, & Cumming, 2017; Foley et al., 2012). Despite the growing number of student well-being research studies that focused on students' perspectives, to the authors' knowledge, none have sought the views of students with ASD.

The exclusion of students with ASD from research may be due to the difficulties that researchers face in eliciting their views. Researchers using traditional qualitative research methods, such as interviews and focus group discussions, have often cited characteristics associated with ASD as barriers to the students' participation (Harrington, Foster, Rodger, & Ashburner, 2014). Harrington et al. (2014) explored the school experiences of eight mainstream high school students with ASD through interviews and shared that the meaningful engagement of students with ASD in interviews may have been hampered by their difficulties with recalling past events, staying on the research topic, and delays in processing and responding to interview questions. Likewise, recognising that students with ASD might feel anxious during interviews, Humphrey and Lewis (2008) included the use of pupil diaries as a form of data collection in their study on the experiences of students with ASD in mainstream high schools. Subsequently, using student drawings was included as a data collection method, though not initially planned, as the researchers realised that a student's drawings provided a deep insight into his life in school.

Consequently, researchers examining issues concerning students with ASD have often resorted to seeking the perspectives of important adults in students' lives, such as teachers and parents (Mandleco, 2013). Adults' views are undoubtedly important, but without providing an opportunity for students with ASD to have a say about matters concerning them, the validity of the research findings may be at risk, as the interpretations and conclusions drawn from the findings provide only a limited picture of the issues related to students with ASD (Thomson, 2008). Thus, researchers are responsible for understanding the needs of students with ASD and mitigate the barriers preventing their meaningful participation in research (Ellis, 2017).

1.1. Using Photovoice with students with ASD

One possible method of including students' with ASD perspectives in qualitative research studies is through utilising Photovoice. Photovoice may be a viable participatory research method to engage students with ASD meaningfully in research. Participants involved in Photovoice take photographs of their daily lives (Akkerman, Janssen, Kef, & Meininger, 2014). The main goals of Photovoice are: (a) to enable individuals to record and consider community strengths and issues, (b) to stimulate critical dialogue about community issues through photograph discussions, and (c) to engage policy makers and stakeholders (Povee, Bishop, & Roberts, 2014).

Typically, there are six stages in Photovoice research (Povee et al., 2014). First, researchers identify a group of individuals who will be undertaking the research. Next, the researchers and participants decide a theme to investigate. Following that, the individuals take photographs related to the theme. Then, the researchers print the photographs and with the participants, select photographs to enable contextualisation. In stage five, the participants and researchers code and determine themes and issues occurring in all photographs. Lastly, researchers and the participants disseminate the research findings to a target audience.

Traditional research methods such as interviews rely heavily on verbal language, and thus may be ill-suited for individuals with ASD, who may have difficulties communicating verbally. For instance, Harrington et al. (2014) reported that one of the participants responded to interview questions with one to three words, and interviewers needed to adjust their communication style by using simple and unambiguous language to suit the participant's communication abilities. Similarly, while pupil diaries such as those used in the study conducted by Humphrey and Lewis do not require participants to communicate verbally, they may need to write. However, research has indicated that many students with ASD dislike writing (Saggers, 2015), hence, other research methods need to be explored. In contrast, Photovoice as compared to interviews and pupil diaries, relies less on participants' verbal fluency and ability to read or write, and has the potential to provide researchers with an authentic view of the research topic by capturing and conveying the point of view of the individual who took the photograph (Jones, 2013). The use of photographs to support communication may be more appropriate for individuals with ASD, as they tend to have visual strengths (Lamb, Firbank, & Aldous, 2014). Photographs could act as concrete and visual prompts in discussing abstract concepts (Mandleco, 2013). Cheak-Zamora et al. (2018) who used Photovoice to explore youth's with ASD perspectives on becoming an adult explained that photographs assisted the discussion by enabling the participants to transition from describing the picture to other aspects of their lives. Photovoice could also foster individuals' with ASD research engagement and participation by actively engaging them during the research process by collecting data for a research study (Danker, Strnadová, & Cumming (2017). Having taken the photographs themselves, they may be more interested

in sharing their views about their photographs and be less likely to digress from the research topic to speak at length about their restricted interests.

Individuals with ASD may experience anxiety and distress when engaging in interviews due to the need to maintain eye contact in conversations with others (e.g., Loyd, 2015), leading to their withdrawal from the study. The use of photographs during photo-elicitation prevents this, as the participant's and interviewer's attention are focused on the photographs (Bugos et al., 2014). Therefore, researchers adopting Photovoice are better able to negotiate the barriers to the participation of students with ASD in research more effectively, providing a greater opportunity for these often-silenced individuals to have a voice.

The current study uses Photovoice to shed light on the well-being of students with ASD. The study was conducted in Sydney, Australia to explore the conceptualisation, barriers, and ways to enhance the well-being of students with ASD from their perspective, as well as that of their parents and teachers. The research questions guiding the part of the study focusing on students' perspectives, which is presented in this article, were:

(a) What constitutes well-being for students with ASD?
(b) What do students with ASD identify as barriers to their well-being?
(c) What do students with ASD identify as internal and external assets of well-being?

2. Method

2.1. The research process

Following approval from (the University of New South Wales Research Ethics Committee and Department of Education, emails were sent to all mainstream high schools in Sydney, Australia. Eight principals consented to collaborating in this study. A teacher who was tasked by the principalin each school to be in charge of coordinating the research, invited teachers of students with ASD, and parents or caregivers of these children to participate. They were assured that participation was voluntary and that no incentives would be provided for their participation. Parents or caregivers provided written consent for their child's participation. The recruitment criteria for a student's participation were as follows: (a) a severity rating of Level 1: Requiring support if the diagnosis was based on DSM-V (American Psychiatric Association, 2013); or Asperger's Disorder if the diagnosis was based on DSM-IV-TR (American Psychiatric Association, 2000), (b) ability to communicate verbally, (c) attend mainstream high schools, (d) own and have the ability to take photographs using devices such as the iPad, smartphone, or digital camera. The ability to communicate verbally was included as a criterion as students would still need to be able to discuss the photographs that they have taken. To the researchers' knowledge, this criterium did not prevent participation as all potential participants were able to communicate verbally. Interviews were carried out in each school once all signed consent forms were returned. Students with ASD were given an easy-to-read participant information statement and consent form during the first meeting with the interview. They provided their verbal and written consent.

A total of 15 boys and one girl from seven mainstream high schools participated in this study (see Table 1 for students' demographics). Pseudonyms are used to ensure anonymity. The participating students' average age was 14.3 years, ranging from 13 to 17 years. Three students were diagnosed with Asperger's Disorder, one was diagnosed with ASD and intellectual disability (ID), another student was diagnosed with ASD and attention-deficit/hyperactivity disorder (ADHD), and the rest had ASD. In total, 10 of them attended all lessons in mainstream classes while the remaining students spent some of their time in support units. On average, the students spent 70% of their time in mainstream classes, ranging from 10% to 100%. Students in this study who spent most of their time in support units were those who were unable to cope with the environmental stimuli in mainstream classes, such as higher noise

Table 1
Demographics of students.

Student's Code	School's Location (Sydney)	School's Code	Age	Gender	Year Level	Diagnosis	Time Spent in Mainstream Classes (%)
Barry	Northern	N3	13	Male	7	ASD	10
Luke	Northern	N3	13	Male	8	ASD	10
Mark	Northern	N4	13	Male	8	ASD	100
Matt	Northern	N4	13	Male	8	ASD	100
Tom	Northern	N5	13	Male	7	Asperger's Disorder	100
Harry	Northern	N5	13	Male	7	ASD	100
John	Northern	N1	14	Male	9	ASD Mild ID	40
Sam	Northern	N1	14	Male	8	ASD	10
Andy	Northern	N2	14	Male	8	ASD and AD/HD	100
George	Northern	N3	14	Male	8	ASD	10
Fred	Northwestern	NW1	14	Male	9	ASD	100
Xavier	Northwestern	NW1	14	Male	8	Asperger's Disorder	100
Jess	Northern	N6	14	Female	8	Asperger's Disorder	100
James	Northern	N1	15	Male	10	ASD	40
Tim	Northern	N4	16	Male	10	ASD	100
Nate	Northern	N4	17	Male	11	ASD	100

levels and having more peers in the classroom than in the support units.

2.2. Meetings with students

There were two individual meetings with each student and the interviewer. The meetings were digitally audio recorded with the student's consent. The objectives of the first meeting were (a) to establish rapport with students, (b) provide an explanation of their involvement in the project, (c) ensure students knew how to take photographs with their own devices (e.g., digital cameras, smartphones, iPods), and transfer the photographs to a USB flash drive, and (d) discuss ethical concerns about photograph-taking in school. These objectives were accomplished by using PowerPoint slides to explain to the students what their involvement would entail, how to take photographs and transfer them to the computer, and rules on taking photographs in school (please contact the authors for copies of the PowerPoint slides). Samples of Photovoice project were also shown to the students (please contact the authors for copies of the sample). These PowerPoint slides were printed and given to the students to ensure that they could refer to them should they wish to. To ensure that students knew how to take photographs with their devices, they were provided with some time during the first meeting to take photographs of objects within their immediate environment. All except one student refused, insisting that they knew how to take photographs. This was not a concern to the researchers as a few students showed the researcher photographs that they have previously taken on their phones, and others explained that they have had the experience of taking many photographs. Although most students knew how to transfer the images onto a USB drive, a few did not know how to do so. In these cases, their teachers or parents willingly assisted them with the process. The students were told that should take no more than 10 photographs of each of the following three aspects: (a) what is a good life in school, (b) what assists them in having a good life in school, and (c) what stops them from experiencing a good life in school. The term 'good life' is a general expression and that enables students to define it in their own ways (Foley et al., 2012; Scott, Foley, Bourke, Leonard, & Girdler, 2014). Hence, it was used in lieu of 'student well-being'. Further, researchers such as Foley et al. (2012) and Scott et al. (2014) have also used the term 'good life' in their study exploring the concept of well-being from the perspectives of children and youth with disabilities. They were asked to transfer the photographs that they took onto a USB flash drive provided by the researcher. Students were assured of the anonymity of their photographs and were to obtain verbal consent before photographing anyone. The students were told that they would be given a week to take the photographs and they should ask for a teacher's permission before taking any photographs. Students were told that they could substitute the photographs with web-based images if they had difficulty taking a photograph. For example, they may wish to take photographs of instances of bullying, however, it may be unsafe for them to do so, and hence, in such cases, web-based images may be accepted. While the purpose of Photovoice is to give vulnerable populations a voice through the photographs that they take, the authors allowed for the use of web-based images as they understand that the protocol needed to be flexible to enable students with ASD to participate more meaningfully in the research study (Ha & Whittaker, 2016).

The second meeting with each student was scheduled between two weeks to two months after the first meeting, depending on the schools' availability. Before the second meeting took place, the first author contacted the teacher-in-charge of the project to ensure that students had taken the photographs and were ready for the second meeting. Photographs were viewed using the interviewer's tablet and they were asked questions such as "What does this photo show?", "What is happening here", "How did you feel at that time?", "Can you tell me more about it?". On average, the students took seven photographs. Three students forgot to take photographs, hence their interviews were conducted without any photographs. Two students chose to use internet images instead of taking their own photographs as they were afraid of unintentionally breaking the rules of taking photographs in school. The same elicitation technique was used for these students as with those who took their own photographs.

Students were asked additional questions (interview protocol available upon request) if they were not discussed during photo-elicitation. The interviews ranged from 16.02 min to 61.32 min and lasted on average 25.92 min. Only four students expressed their interest in reading their transcript for member-checking by providing their emails. However, none responded when their transcripts were emailed to them.

Photovoice was slightly modified in this study to better suit the needs of students with ASD. Instead of working as a group to identify a theme to investigate, students were asked to take photographs related to their well-being, as they were recruited from various schools at different points in time. Working individually may also be more suited for students with ASD, as they may find groupwork stressful due to their communication issues. It was predicted that getting students to code and identify themes derived from their photographs would be too time-consuming. Thus, to prevent this study from interfering with their schoolwork, the students did not code and identify themes. Lastly, as students with ASD may be uncomfortable presenting complex research finding to policy makers, they were assured that their views on their well-being would be conveyed to the school via a report.

2.3. Data analysis

Grounded theory approaches were used to analyse the data. Data collection and analyses occurred simultaneously, with each informing and focussing the other in an iterative process (Bryant & Charmaz, 2007). The first researcher manually transcribed the interviews. Photographs were matched to the students' interviews and inserted into relevant parts of their transcripts (Jurkowski, 2008). The transcripts were thoroughly read before qualitative coding was carried out (Corbin & Strauss, 2015). Coding enabled reflexive data engagement by continuous questioning of what the codes implied, prevented preconceived ideas to be imposed, and focussed the researchers' attention on possible areas to explore in the subsequent data collection (Charmaz, 2017). Open coding, whereby data were broken apart and codes to represent the blocks of raw data, was carried out in the first stage of the coding process. The first and second author independently coded the first student's interview, then compared their codes. Coding discrepancies were

resolved through discussions involving all three authors. Following that, the first author carried out open coding on the rest of the transcripts. The second author then reviewed all the codes and analysis was adjusted to resolve any discrepancies through discussions, until all researchers were satisfied with the codes.

Open and axial coding was conducted in the second stage of the analysis process. In this stage, sub-categories were identified by relating codes to one another (Corbin & Strauss, 2015). For example, a student spoke of liking his teachers, "I do like the teachers. They're nice". This excerpt was coded as *likes teacher*. Another student explained why he likes his teachers, saying, "She's just funny and helpful". This excerpt was coded as *reasons students like teachers*. Therefore, the codes *likes teachers* and *reasons students like teachers* were related and placed into the sub-category *favourite teachers*.

Categories were then created in the third stage by grouping sub-categories that were related to a topic together. For instance, the sub-categories *favourite teachers* and *having friends* formed the category *social network at school*. This was followed by the creation of sub-themes by grouping categories that were related together and themes that comprised of sub-themes that were related. For example, the categories *social network at school* and *social interactions* formed the sub-theme *social well-being*. Similar to the first stage, the second author reviewed all the sub-categories, categories, sub-themes, and themes to increase credibility of this study. Memos were written and shared throughout the coding process by the first and second authors. This enabled sustained data engagement, refinement and improvement of codes, and critical examinations of the researchers' assumptions (Charmaz, 2014). Additionally, diagrams were utilised to allow the data to be conceptualised visually and demonstrated how sub-themes, categories, and sub-categories related to one another (Corbin & Strauss, 2015). To triangulate data interpretation, the diagrams that were created were shared among the researchers of this study.

3. Results

In total, the students provided 114 images. Of these, 24 were web-based, while the rest were photographs taken by the students. Data analysis led to the identification of 507 codes, 131 sub-categories, 31 categories, 12 sub-themes, and four themes. The first theme "Domains of student well-being" describes the domains of student well-being as conceptualised by the 16 students. The second theme "Barriers to student well-being" is about the factors that the students perceived as obstacles preventing them from experiencing a sense of well-being. The third theme "Supporting students with ASD to enhance their well-being" details places, activities, things, people, and school that contribute to students' well-being.

3.1. Theme 1: domains of student well-being

The students perceived well-being at school as multidimensional consisting of four domains, namely, emotional well-being, social well-being, academic well-being, and well-becoming. Emotional well-being describes the positive and negative emotions that students face in school and ways to cope with negative emotions. Social well-being focuses on the student's social network in school. Academic well-being refers to students' learning in school, while well-becoming describes students' plans for the future and their ambitions.

3.1.1. Emotional well-being

A total of four photographs and one web-based image were identified to depict their emotional well-being. Six students thought that experiencing positive emotions, such as having fun and happiness in school, was crucial. Harry took a photograph of a dog, expressed that dogs were always happy and he wanted to be "that happy" in school. John explained that if he was happy he "can be educated more". Many students enjoyed school and six students indicated that they preferred going to school to staying at home. Their preference for school was due to the increased opportunity to learn, obtain support from school community members and socialise with their friends. Further, George reasoned that his current enjoyment of school is because he understands that attending school and receiving an education could help him in future:

> … you've got to learn, you've got to get a career, so if I have to go to school, I would just – I do go to school because it will give me a job, application, a good degree to get a job ahead of me.

Two students could not articulate the reasons for enjoying school, while four students preferred staying at home, and two students preferred attending their kindergartens and primary schools. Four students shared that a high workload, bullying by peers, and studying subjects that were not useful for post-school life contributed to their dislike of school.

Three students discussed negative emotions and the strategies used to cope with them. Mark shared that playing truancy helped him to manage his mental breakdowns and suicidal thoughts. Other strategies mentioned included confiding in someone and calming down through the use of time-out cards, listening to music, and watching "helicopter leaves" spin. George photographed "helicopter leaves" and said, "You get a bunch, and throw it in the air, and they spin like a helicopter. Like a propeller…It's nice. It's relaxing." A few students also found several places in school such as the school garden and library useful in generating calmness. Contrarily, Tom did not find any places in school that could effectively alleviate overwhelming feelings. He photographed his room, explaining that he had to retreat to his room when he came back from school, "…because it's somewhere to be by myself if there's too much, so I can just come home and be like…(exhales) phew". The students thus used a plethora of strategies to cope with their negative emotions.

3.1.2. Social well-being

All except one student spoke of their social network at school. In total, seven photographs and two web-based images were

identified to depict their social well-being. While nine students reported having friends in school, Mark indicated that he would like to have friends who were "other than the teachers". Students' concept of a friend was someone who was kind, supportive, and made them laugh. Jess photographed her shoes and her peers' in a circle to depict the importance of a group of supportive friends. Friends were important to students, lessening their sense of loneliness. Tim explained that friends assisted "in getting through school a lot more comfortably, because you have someone else that you can do it with, and who is close by". Students appreciated the time they were allowed to spend with their friends in school doing various activities such as playing games on their Smartphones or simply chatting with one another.

Teachers were also a significant part of their social network in school and 12 students spoke of their favourite teachers, while three students photographed their teachers. Students were fond of teachers who were helpful, engaging, and possessed good classroom management skills, and they disliked those who were overly strict.

While discussing their social network, two students shared that they had issues interacting with others, which impeded their ability to form friendships. George explained:

> I'm a bit shy to meet other people, because I don't really know what to say after saying, "Hello, nice to meet you." I don't know how to keep the conversation going fully, so it's difficult to meet new people.

Two students revealed that they usually spend recess alone on their Smartphones or laptops. Mark shared that he interacted better with teachers, older or younger aged peers, and others with ASD.

3.1.3. Academic well-being

All students spoke of their learning in school such as the various lessons in school, their favourite subjects, homework, and ways in which they learnt best. In total 24 photographs and three web-based images were identified to depict their learning in school. In particular, six students shared that "good" lessons were fun and engaging. Sam photographed his mathematics workbook with handouts provided by his teacher as an example of a good lesson. Students were more likely to enjoy a subject if they liked the teacher. Five students took photographs of their textbooks, teachers, and specialty rooms to indicate their favourite subjects. In regards to homework, only two students indicated that they did not have any homework. Nate claimed that "all the smarter classes get the most homework" and one of the "perks of being in the lower class" was that he received "little to no homework". There were certain conditions that assisted with students' learning, which included being equipped with necessary stationery, having ample working space, and studying in air-conditioned classrooms.

3.1.4. Well-becoming

Well-becoming was identified as a domain of student well-being as several students discussed their plans for the future, and spoke of their ambitions. A total of two photographs and two web-based images depicted the domain *well-becoming*. Students explained that attaining good grades in school was important and frequently did their own revisions not merely because they contributed to their sense of accomplishment, but also essential for their future careers. George explained:

> … because in future time, when you want to get a job, they look at your application and sees how… the person that hires you sees how good you are at maths, how good at cooking… and sees how you've done these past years.

Therefore, students were focused on improving their grades in a subject even if they did not enjoy the subject. Besides grades, Matt believed that making right choices in school had an impact on his future:

> Basically, having the right choices without, shall we say, the really big consequences. Yeah. So, like, you'll have good friends, great education, lots of fun; and the alternative is being a bully, growing up, having no job, all that stuff.

Thus, while students were concerned about their present lives in school, they were also invested in the future.

3.2. Theme 2: barriers to student well-being

All but one student spoke of the barriers to their well-being. These barriers were categorised into: (a) sensory barriers, (b) social barriers, and (c) barriers that were associated learning.

3.2.1. Sensory barriers

A total of nine photographs and three web-based images were identified to depict the sensory barriers. Noise and echoes in school posed a barrier to half of the participating students. Students disliked noisy classrooms and echoes from canteens and school bells. George photographed a school bell (see Fig. 1) claiming that it was too "loud and echoey", likewise Matt felt that echoey school bells caused migraines. Noise also interfered with students' learning and ability to concentrate. Matt explained how he is affected by noise:

> Because my brain seems to, like, just start pulling itself apart when there's loud noises, because I try to think of something, like I'll do a mathematics question, and everyone's yelling. I'm, like, wait! No! I for(get)! Grrr! I'll forget things because I'm trying to block out the noise.

Five students shared that to cope with noise, they ignored it, got away from the source of the noise by using a time out card (photographed by Matt), and listened to music on their media player (photographed by Mark).

A few students disliked stuffy environments because it "makes it hard to stay awake… hard to think". Additionally, students did

Fig. 1. Photograph taken by George depicting noise as a sensory barrier.

not like being in chaotic environments such as classrooms where teachers exerted little control on students. A few students expressed that they initially felt that high schools were more chaotic and confusing than primary schools.

3.2.2. Social barriers

In total, seven students felt that mean and annoying peers were barriers to their well-being in school. A total of three web-based images and one photograph was identified to depict the social barriers. Mark explained, "They think of me as a piece of shit, basically… I can tell, literally. I walk into anything, they just tell me to eff off". Bullying was also a barrier, and which included being teased, and having their money stolen. To cope with the bullying, six students shared that they ignored it, put up with it, informed their parents, and "minimised" themselves to avoid noticing by their peers. Tim prevented being bullied by his peers by establishing good relationships with them.

3.2.3. Barriers associated with learning

In total eight photographs and five web-based images depicted the barriers associated with learning. A main barrier associated with learning was boredom. Andy expressed that, "there isn't really much to do in high school except for learning" and suggested more activities to be conducted during recess and lunch. Others wanted more variety in their lessons instead of focusing on the same topic for a few weeks. Uninteresting lessons with significant amounts of teacher talk, or carried out by teachers whom they did not like, or was not engaging was another source of boredom. To cope with boring lessons, students counted down to the end of the lesson or focused on the task at hand to distract themselves. For instance, Sam photographed a clock to explain that "when things get too boring, you look at the clock and hopefully you know how long it takes" for the lesson to end. Other barriers associated with learning included homework (photographed by Xavier, and a web-based image provided by Matt), which resulted in less leisure time, and disliking subjects that they found difficult.

3.3. Theme 3: supporting students with ASD to enhance their well-being

All students discussed the things, places, activities, and people in school that contributed to their well-being. These were categorised into: (a) what helps with a good life in school, and (b) who helps with a good life in school.

3.3.1. What helps with a good life in school

The students took a total of 10 photographs and one web-based image to show what helped them to experience a good life in school. In total 12 students felt that having access to technology positively impacted their well-being in school. Half of the participating students had access to computers or laptops in school, and four students brought their own laptops to school. Three students photographed their laptops to explain that access to their laptops enhanced their sense of well-being. Students enjoyed having access to laptops and deemed computers fun to use, and a tool that helped overcome their writing issues as it was quicker to type than write. Additionally, a few students enjoyed having access to Smartboards and Google classrooms. Technology was also a means for students' social interactions. Mark explained, "Computers are often a fun way of sharing with my friends. We look at things and we comment about it".

A few students perceived non-academic clubs as having a positive effect on their well-being by enabling them to establish friendships. Matt said, "We often go there, because it's like quiet – people that you know are there, and you just play with blocks and stuff like that… it works very well. I met some of my friends there".

Several students attested that food contributed to their well-being in school and a few students took photographs of food, the school canteen, and the menu to indicate their love for food. However, five students complained that the food prices in school were too high and called for a reduction in food pricing.

The students also took 16 photographs depicting their favourite places and activities in school. Seven students discussed their favourite places in school, which included playgrounds, gardens, and library. For instance, John and James photographed a

playground with a merry-go-round in their school and explained that they felt happy "spinning around" and getting themselves "dizzy" on it, while George and Nate took photographs of their school library. Students would often visit their favourite places during lunch and recess. All but one student spoke of their favourite activities in school. These included taking a bus, listening to music, drawing, playing basketball, reading, writing, and joking. Half of the students enjoyed playing computer games. Engaging in their favourite activities made students happy.

Additionally, most of the students shared what they would like to have in school in order to experience a sense of well-being. A total of 10 photographs and 3 web-based images were identified to depict students' wishes. These were varied and included having: (a) a dog, (b) access to a timetable, (c) access to seniors' only area, (d) opportunity to help their teachers, and (e) ASD awareness programs. Half of the students also expressed their desires for school upgrades such as refurbishment of halls and basketball courts, repainting and installation of air-conditioning in classrooms, new computers, and more cubicles in the toilet. Further, half of the students wanted a quiet school environment. Nate took a photograph of a computer lab and declared that he wanted to have better computers in school.

In discussing the factors that contributed to their well-being, students also discussed the importance of their own awareness of disability. Half of the students were aware that they have ASD. No photographs or web-based images were provided by the students to depict this sub-theme. However, their understanding of ASD varied. Some believed that ASD was a learning disability, others thought that it made them "different in a good way", a few felt that ASD affected their social interactions with peers without ASD. Mark explained:

> They say everybody's wired to a red frequency, or something, and they're all the red wires, but then some people are sometimes born with a disorder that changes their frequency from red, say, to blue. And blue interacts with other blues, but when interacting with red, the red has to understand the blue to be able to connect, otherwise it just turns away.

While four students felt that ASD did not affect their school life, others thought that awareness of ASD provided them with strategies to overcome their challenges associated with ASD and enabled them to understand why they felt different from their peers without ASD. Students differed on their decisions to disclose their disability to their friends. A few who disclosed shared that doing so stopped teasing from peers, while others felt that it did not change how their friends treated them. Mark and Fred chose not to disclose, believing that when "you're seen as different in this society, you are targeted and bullied".

3.3.2. Who helps with a good life in school

In total, two photographs and one web-based image were identified as depicting the people who helped the students to experience a good life in school. Most of the students expressed that school community members such as counsellors, peers, staff members from the learning support department, parents, and teachers contributed to their well-being in school. Teacher aides assisted students during class work, while parents took care of their daily necessities and helped with their homework. In total 10 students shared that teachers promoted their sense of well-being by helping them academically. Several students suggested that teachers could better facilitate their well-being if they provided students with additional time to complete assignments, made more adjustments, and had better awareness of when students needed help.

All except three students believed that certain internal assets could contribute to their sense of well-being. These included being funny, confident, and open-minded. Matt provided a description of an open-minded student: "Being able to accept things, like people might have a problem; I accept that, or I might be wrong. I accept that. Like, I'm dyslexic. I accept it. And I'm lucky that my friends accept it, too". Two students believed that it was crucial to be mature. Having good communication skills was also vital, according to Tim, "there's a wide variety of people there at school…" and "to be able to, work on certain projects with people, you need to have a decent sense of communication to be able to converse with them about the thing, or about anything".

4. Discussion

Photovoice was used as a research method to elicit the views of students with ASD to explore the conceptualisations of the well-being students with ASD, and identify the barriers to and assets of their well-being. Student well-being was conceptualised as multidimensional, which supports the literature on student well-being (Danker et al. 2016; Clement, 2010). The domains that were identified were emotional well-being, social well-being, academic well-being, and well-becoming. All except well-becoming have been identified in the literature as a domain of the well-being of typically developing students. For instance, in the literature review Danker et al. (2016) examined 12 studies to identify the domains that makes up student well-being. All 12 studies included the domain positive emotions, and four studies discussed the domain negative emotions. Positive and negative emotions could be likened to emotional well-being. Likewise, the domain engagement which refers to students' love of learning, and effort spent on school activities was identified from nine studies. Thus, engagement is similar with academic well-being. Further, the domain relationship which encompasses relationship with peers, teachers, and parents was inferred from 10 studies. Therefore, relationship resembles social well-being. Further research needs to be conducted to explore the possible reasons why well-becoming has been identified as a domain of well-being for students with ASD, but not typically developing students.

Sensory barriers, social barriers, and barriers that were associated with learning were found to prevent students with ASD from experiencing a sense of well-being in school. The students in this study also spoke of ways that could support their well-being. These could be classified into external and internal assets. External assets included an inclusive school community with members who are educated about ASD, a physical environment that eliminates or reduces aversive sensory stimuli, a learning environment with technological tools that caters to the needs of these students, and reasonably priced food. Internal assets include being funny,

confident, open-minded, matured, and having good communication skills.

4.1. Implications for schools

Researchers viewing well-being from a hedonic perspective believe that well-being is characterised by the presence of more positive emotions as compared to negative emotions (Henderson & Knight, 2012). Positive emotions of having fun and being happy were central to students' emotional well-being, which in turn enhanced their overall well-being in school. Similar to the students who participated in the studies conducted by Saggers (2015), students who participated in this study attained happiness and enjoyment from spending time with their friends in school, and engaging in lessons of their favourite subjects carried out by teachers they liked. However, a few students in this study also experienced negative emotions such as anxiety and feeling overwhelmed due to their sensory sensitivities, workload, and bullying. This finding was consistent with those of Lindsay, Proulx, Scott, and Thomson (2014) exploring the inclusion of students with ASD in mainstream schools. In order to develop their emotional well-being and in turn their overall well-being, the sensory barriers, social barriers, barriers associated with learning must be mitigated. As students with ASD may feel overwhelmed by noisy and chaotic environments, these sensory barriers may be reduced or removed by allowing students to calm themselves down through the use time-out cards or listening to music on their media players.

An effective method to prevent bullying of students with ASD is to ensure that the school community, including typically developing students are educated about ASD. This increases the acceptance of students with ASD in school while preventing typically developing students from rejecting students with ASD because they are do not understand the challenging behaviours displayed by the latter group of students (Lindsay et al., 2014).

To decrease students' anxiety from a high workload, teachers need to communicate with one another to reduce the likelihood of students having homework in different subjects on the same day. Teachers also need to be educated about ASD and the ways to make adjustments to cater to the needs of students. This could support the students' learning in school, one domain of their well-being. Another strategy that could assist with students' learning is to incorporate students' interests, vary learning activities, and integrate technology in lessons, to overcome boredom while increasing engagement.

Relationships have been frequently identified as a domain of student well-being (Danker et al., 2016). To promote the social well-being of students with ASD and subsequently their overall well-being, it is necessary to ensure that these students have good relationships with their peers and teachers, as these two groups of individuals make up their social network in schools. Schools could do this by providing opportunities for students to socialise with their peers by organising more non-academic clubs during recess and lunch. Teachers should also build a good rapport with these students. This may positively influence their social well-being as well as learning in school, as the students shared that they were more engaged in classes where lessons were taught by their favourite teachers.

Well-becoming was identified as a domain of student well-being, as the students were future-oriented and striving for good grades in school to achieve their career goals and ambitions during adulthood. The students not only viewed themselves as "beings" who were actively constructing their childhood, but also "becomings" who were thinking of themselves as adults in future (Adams, 2013). As such, it is imperative that while students' experiences in school are important for their well-being, efforts are also put in place to help students with ASD be productive citizens during adulthood by developing skills that are necessary for post-school life. Students should be supported in developing internal assets that could prepare them for the future. For instance, in order for students to be open-minded and accept their disability, it is necessary that they first have an awareness of it. Being aware of their disability, having an understanding of it, and how they learn best, may then enable them to self-advocate (Doren & Kang, 2016). They could then communicate their needs to school community members to better support their well-being in school, and in future, advocate for themselves when their parents are no longer around to advocate for them (Able, Sreckovic, Schultz, Garwood, & Sherman, 2015).

5. Reflections on using Photovoice

Researchers have increasingly raised concerns about the rigour in the way Photovoice is applied (Gubrium & Harper, 2013). Similar with other research that used Photovoice with children with ASD, the authors had to modify the way they used Photovoice in this study to suit the needs and abilities of these students, and for practical reasons (Ha & Whittaker, 2016). While this could be perceived as problematic from the rigour of a method application perspective, it was necessary for several reasons. Firstly, the logistics of bringing all 16 students from geographically distant locations to work on their Photovoice project as a group made it almost impossible to adhere to the generally accepted six main stages of this method. Secondly, participants' characteristics related to their ASD diagnosis dictated that Photovoice be employed on an individual basis, allowing the participants to share more openly their perceptions. This is consistent with Liebenberg (2018), who, in her state of the method article, highlighted that,

> If we are to promote the aims of research approaches such as, but not limited to, critical theory, postcolonial theory, social justice research, through the use of photovoice, we have an ethical imperative as researchers to ensure that the ways in which we engage in research with communities honour their wisdom and expertise (p.1).

Thirdly, gatekeepers prevented the rigorous application of Photovoice in this study. None of the students in this study were involved in verifying the findings, as teachers acted as gatekeepers, governing students' participation. Several teachers failed to arrange a meeting for students to verify the findings, even though students indicated that they were interested in doing so. A possible reason for this could be that the verification of the findings was conducted during the examinations period, it was also the end of the school term, which tends to be busy for teachers. Another reason could be that although the school leaders were motivated by the

research, the teacher tasked to coordinate the study lacked time, commitment, and interest in the study. Collings, Grace, and Llewellyn (2016) recommended that researchers identify advocates within the organisation who is likely to be invested in the research, and to communicate the potential contributions of the study to them to reduce gatekeeping encounters such as those experienced in this study. The findings of this study were emailed to all participants, and asked if they agreed with the findings or had any questions. All agreed with it and did not have any questions. Additionally, researchers should consider sharing the findings with the teacher who coordinated the research even if they did not participate in it. It should also be noted that not all of the students took photographs. A few forgot while others preferred to use internet images. Researchers could collaborate more closely with teachers and parents to enlist their support in reminding students to take photographs before the second meeting with researchers. To allay the fears of unintentionally breaking the rules by taking inappropriate photographs in school, researchers could provide more examples of acceptable and non-acceptable photographs. There is also a higher number of males than female students in this study and by limiting the participants to those who have the skills to take photographs may have inadvertently excluded students who may be less technologically savvy.

While there are challenges in using Photovoice in research, when utilised with fidelity, it may be used to obtain students' feedback on curriculum and learning goals. It may also be used as a tool to engage students in counselling and therapy (Smith, Bratini, & Appio, 2012). Further, Photovoice has a greater potential to elicit the views and engage students with ASD as compared to methods such as interviews. A common issue in interviews with students with ASD is their tendency to speak at length about their topic of interest (Harrington et al., 2014). In this study, the interviewer easily directed the students back to the interview topic by pointing to the photographs that they have taken and asking questions about the photographs. Additionally, anxiety that students with ASD often experience during interviews were abated through the use of Photovoice. The students were engaged with the research study and readily shared and discussed the photographs that they had taken with the interviewer.

6. Conclusion

Educational bodies and policy makers are increasingly aware of the short- and long-term effects of student well-being. This has led to a rise in the number of research studies on student well-being. However, the concept of student well-being is still poorly understood, and the well-being of students with ASD remains largely unexplored. Recognising the rights of all students, including those with ASD to have a say on issues concerning them, Photovoice was used to elicit the views of students with ASD regarding their well-being. Through its use, students with ASD were able to participate meaningfully in the research, and their perspectives on the concept of well-being, barriers, and ways to facilitate their well-being in school were gained. While the authors highly recommend the use of Photovoice to researchers whose aim is to ensure the authentic voices of students with ASD could be heard, aspects of it may need to be modified to suit the needs and abilities of students with ASD, as well as for practical reasons.

Acknowledgements

The authors' sincere gratitude belongs to: (a) the participating students with autism spectrum disorder, (b) the participating carers and teachers of these students, and (c) the principals of schools who supported us in recruiting the families.

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

Able, H., Sreckovic, M. A., Schultz, T. R., Garwood, J. D., & Sherman, J. (2015). View from the trenches and student supports needed for full inclusion of students with ASD. *Teacher Education and Special Education, 38*, 44–57. https://doi.org/10.1177/0888406414558096.

Adams, K. (2013). Childhood in crisis? Perceptions of 7–11-year-olds on being a child and the implications for education's well-being agenda. *Education 3-13, 41*, 523–537. https://doi.org/10.1080/03004279.2011.613849.

Akkerman, A., Janssen, C. G. C., Kef, S., & Meininger, H. P. (2014). Perspectives of employees with intellectual disabilities on themes relevant to their job satisfaction. An explorative study using photovoice. *Journal of Applied Research in Intellectual Disabilities, 27*, 542–554. https://doi.org/10.1111/jar.12092.

Alridge, J. M., Fraser, B. J., Fozdar, F., Ala'I, K., Earnest, J., & Afari, E. (2016). Students' perceptions of school climate as determinants of wellbeing, resilience and identity. *Improving Schools, 19*, 5–26. https://doi.org/10.1177/1365480215612616.

American Psychiatric Association (2000). Diagnostic and statistical manual of mental disorders: DSM- IV-TR. Washington, DC. *American Psychiatric Association*.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Bryant, A., & Charmaz, K. (2007). Grounded theory research: Methods and practices. In A. Bryant, & K. Charmaz (Eds.). *The SAGE handbook of grounded theory* (pp. 1–28). Thousand Oaks, California: Sage Publications Inc.

Bugos, E., Frasso, R., FitzGerald, E., True, G., Adachi-Mejia, A. M., & Cannuscio, C. (2014). Practical guidance and ethical considerations for studies using photo-elicitation interviews. *Preventing Chronic Disease, 11*, 1–9. https://doi.org/10.5888/pcd11.140216.

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). London: Sage.

Charmaz, K. (2017). Special invited paper: Continuities, contradictions, and critical inquiry in grounded theory. *International Journal of Qualitative Methods, 16*, 1–8. https://doi.org/10.1177/1609406917719350.

Cheak-Zamora, N. C., Teti, M., & Maurer-Batjer, A. (2018). Capturing experiences of youth with ASD via photo exploration: Challenges and resources becoming an adult. *Journal of Adolescent Research, 33*, 117–145. https://doi.org/10.1177/0743558416653218.

Clement, N. (2010). Student wellbeing at school: The actualization of values in education. In T. Lovat, R. Toomey, & N. Clement (Eds.). *International research handbook on values education and student wellbeing* (pp. 37–62). Dordrecht, Netherlands: Springer.

Collings, S., Grace, R., & Llewellyn, G. (2016). Negotiating with gatekeepers in research with disadvantaged children: A case study of children of mothers with intellectual disability. *Children & Society, 30*, 499–509. https://doi.org/10.1111/chso.12163.

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Thousand Oaks, California: Sage Publications, Inc.

Danker, J., Strnadová, I., & Cumming, T. M. (2016). School experiences of students with autism spectrum disorders within the context of student well-being: A review and analysis of the literature. *Australasian Journal of Special Education, 40*(1), 59–78. https://doi.org/10.1017/jse.2016.

Danker, J., Strnadová, I., & Cumming, T. M. (2017). Engaging students with autism spectrum disorders in research through participant-driven photo-elicitation research technique. *Australasian Journal of Special Education, 41*, 35–50. https://doi.org/10.1017/jse.2016.7.
Diener, E. (2009). Subjective well-being. In E. Diener (Vol. Ed.), *The science of well-being: The collected works of Ed Diener (Social indicators research series): Vol. 37*, (pp. 11–58). New York: Springer.
Doren, B., & Kang, H. J. (2016). Autonomy, self-realization, and self-advocacy and the school-and career-related adjustment of adolescent girls with disabilities. *Career Development and Transition for Exceptional Individuals, 39*, 132–143. https://doi.org/10.1177/2165143415574875.
Ellis, J. (2017). Researching the social worlds of autistic children: An exploration of how an understanding of autistic children's social worlds is best achieved. *Children & Society, 31*, 23–36. https://doi.org/10.1111/chso.12160.
Foley, K.-R., Blackmore, A. M., Girdler, S., O'Donnell, M., Glauert, R., Llewellyn, G., et al. (2012). To feel belonged: The voices of children and youth with disabilities on the meaning of wellbeing. *Child Indicators Research, 5*, 375–391. https://doi.org/10.1007/s12187-011-9134-2.
Graham, A., Powell, M. A., & Truscott, J. (2016). Facilitating student well-being: Relationships do matter. *Educational Research, 58*, 366–383. https://doi.org/10.1080/00131881.2016.1228841.
Gubrium, A., & Harper, K. (2013). *Participatory visual and digital methods.* Walnut Creek, CA: Left Coast Press.
Ha, V. S., & Whittaker, A. (2016). 'Closer to my world': Children with autism spectrum disorder tell their stories through photovoice. *Global Public Health, 11*, 546–563. https://doi.org/10.1080/17441692.2016.1165721.
Harrington, C., Foster, M., Rodger, S., & Ashburner, J. (2014). Engaging young people with autism spectrum disorder in research interviews. *British Journal of Learning Disabilities, 42*(2), 153–161. https://doi.org/10.1111/bld.12037.
Hascher, T. (2003). Well-being in school: Why students need social support. In P. Mayring, & C. von Rhöneck (Eds.). *Learning emotions: The influence of affective factors on classroom learning* (pp. 127–142). Frankfurt, NY: Lang.
Henderson, L. W., & Knight, T. (2012). Integrating the hedonic and eudaimonic perspectives to more comprehensively understand wellbeing and pathways to wellbeing. *International Journal of Wellbeing, 2*, 196–221. https://doi.org/10.5502/ijw.v2i3.3.
Humphrey, N., & Lewis, S. (2008). 'Make me normal': The views and experiences of pupils on the autistic spectrum in mainstream secondary schools. *Autism, 12*, 23–46. https://doi.org/10.1177/1362361307085267.
Jones, T. (2013). Through the lens of home-educated children: Engagement in education. *Educational Psychology in Practice, 29*, 107–121. https://doi.org/10.1080/02667363.2012.755614.
Jurkowski, J. M. (2008). Photovoice as participatory action research tool for engaging people with intellectual disabilities in research and program development. *Intellectual and Developmental Disabilities, 46*(1), 1–11. https://doi.org/10.1352/0047-6765.
Keyes, C. L., & Annas, J. (2009). Feeling good and functioning well: Distinctive concepts in ancient philosophy and contemporary science. *The Journal of Positive Psychology, 4*, 197–201. https://doi.org/10.1080/17439760902844228.
Lamb, P., Firbank, D., & Aldous, D. (2014). Capturing the world of physical education through the eyes of children with autism spectrum disorders. *Sport, Education and Society, 21*, 1–25. https://doi.org/10.1080/13573322.2014.941794.
Liebenberg, L. (2018). Thinking critically about photovoice: Achieving empowerment and social change. *International Journal of Qualitative Methods, 17*, 1–9. https://doi.org/10.1177/1609406918757631.
Lindsay, S., Proulx, M., Scott, H., & Thomson, N. (2014). Exploring teachers' strategies for including children with autism spectrum disorder in mainstream classrooms. *International Journal of Inclusive Education, 18*, 101–122. https://doi.org/10.1080/13603116.2012.758320.
Loyd, D. (2015). Gaining views from pupils with autism about their participation in drama classes. *British Journal of Learning Disabilities, 43*(1), 8–15. https://doi.org/10.1111/bld.12078.
Mandleco, B. (2013). Research with children as participants: Photo elicitation. *Journal for Specialists in Pediatric Nursing, 18*(1), 78–82. https://doi.org/10.1111/jspn.12012.
Povee, K., Bishop, B. J., & Roberts, L. D. (2014). The use of photovoice with people with intellectual disabilities: Reflections, challenges and opportunities. *Disability & Society, 29*, 893–907. https://doi.org/10.1080/09687599.2013.874331.
Powell, M. A., & Graham, A. (2017). Wellbeing in schools: Examining the policy-practice nexus. *Australian Educational Researcher, 44*, 213–231. https://doi.org/10.1007/s13384-016-0222-7.
Saggers, B. (2015). Student perceptions: Improving the educational experiences of high school students on the autism spectrum. *Improving Schools, 18*, 35–45. https://doi.org/10.1177/1365480214566213.
Scott, M., Foley, K.-R., Bourke, J., Leonard, H., & Girdler, S. (2014). "I have a good life": The meaning of well-being from the perspective of young adults with Down syndrome. *Disability & Rehabilitation, 36*, 1290–1298. https://doi.org/10.3109/09638288.2013.854843.
Simmons, C., Graham, A., & Thomas, N. (2015). Imagining an ideal school for wellbeing: Locating student voice. *Journal of Educational Change, 16*, 129–144. https://doi.org/10.1007/s10833-014-9239-8.
Smith, L., Bratini, L., & Appio, L. M. (2012). "Everybody's teaching and everybody's learning": Photovoice and youth counselling. *Journal of Counselling and Development, 90*, 3–12. https://doi.org/10.1111/j.1556-6676.2012.00001.x.
Soutter, A. K., O'Steen, B., & Gilmore, A. (2014). The student well-being model: A conceptual framework for the development of student well-being indicators. *International Journal of Adolescence and Youth, 19*, 496–520. https://doi.org/10.1080/02673843.2012.754362.
Thomson, P. (2008). *Doing visual research with children and young people.* London: Routledge.
United Nations (CRC) (1989). *United Nations convention on the rights of the child.* New York: United Nations.
United Nations (CRPD) (2006). *United Nations Convention on the rights of persons with disabilities.* Geneva, Switzerland: Author.