

Table Of Content

Journal Cover	2
Author[s] Statement	3
Editorial Team	4
Article information	5
Check this article update (crossmark)	5
Check this article impact	5
Cite this article	5
Title page	6
Article Title	6
Author information	6
Abstract	6
Article content	7

**Indonesian Journal of Cultural and
Community Development**

ISSN 2615-6180 (ONLINE)



BROUGHT TO YOU BY

Universitas Muhammadiyah Sidoarjo

Conflict of Interest Statement

The author declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright Statement

Copyright © Author(s). This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/legalcode>

Editorial Team

Editor in Chief

[Dr. Totok Wahyu Abadi](#) ([Universitas Muhammadiyah Sidoarjo, Indonesia](#)) [[Scopus](#)]

Managing Editor

[Mochammad Tanzil Multazam](#) ([Universitas Muhammadiyah Sidoarjo, Indonesia](#)) [[Scopus](#)]

[Rohman Dijaya](#) ([Universitas Muhammadiyah Sidoarjo, Indonesia](#)) [[Scopus](#)]

Member of Editors

[Mahardhika Darmawan Kusuma Wardana](#) ([Universitas Muhammadiyah Sidoarjo, Indonesia](#)) [[Sinta](#)]

[Bobur Sobirov](#) ([Samarkand Institute of Economics and Service, Uzbekistan](#)) [[Google Scholar](#)]

[Farkhod Abdurakhmonov](#) ("[Silk Road](#)" International University of Tourism, Uzbekistan) [[Google Scholar](#)]

[Dr. Nyong Eka Teguh Iman Santosa](#) ([Universitas Islam Negeri Sunan Ampel SURabaya, Indonesia](#)) [[Scopus](#)]

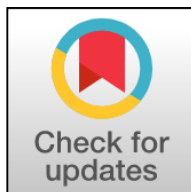
Complete list of editorial team ([link](#))

Complete list of indexing services for this journal ([link](#))

How to submit to this journal ([link](#))

Article information

Check this article update (crossmark)



Check this article impact (*)



Save this article to Mendeley



(*) Time for indexing process is various, depends on indexing database platform

Let's Talk about Sex: Teaching Adolescents with Intellectual Disability about Sexuality Education

Anis Raihan Dzeidee Schaff, raihandzeidee@gmail.com, (1)

*Faculty of Cognitive Sciences and Human Development, Universiti Malaysia Sarawak,
Indonesia*

Fitri Suraya Mohamad, mfitri@unimas.my, (0)

*Faculty of Cognitive Sciences and Human Development, Universiti Malaysia Sarawak,
Indonesia*

(1) Corresponding author

Abstract

This qualitative case study explores the experiences of teachers who are responsible for teaching adolescents with intellectual disability about sexuality education at a secondary school in a special education programme in semi-rural Sarawak. The study investigates the teaching approaches to teach cognitive and social-behavioural aspects of sexuality education. It also documents challenges in teaching adolescents with intellectual disability about sexuality education. Findings revealed that cognitively, the adolescents' comprehension and memory are greatly aided by the use of concrete materials, modelling strategy, and constant repetition; attention and focus in class are obtained by the use of multimedia and storytelling approach; and interestingly, the understanding about sexuality is affected by the language used in content delivery and classroom dialogue. In the social-behavioural aspect, the findings revealed the importance of teachers and students' comfort when talking about sexuality, mixed gender classes, peer guidance, and the adolescents' intrapersonal intelligence. All these aspects are key in ensuring that the adolescents are able to reach an understanding and acceptance towards learning about sexuality education. The study also discovered that limitation of teaching materials, the adolescents' unsupervised usage of the technology, and the sensitivity of sexuality education within the local home setting are among the main challenges faced by the teachers in teaching about sexuality education. The study also uncovered how the adolescents' limited mental capabilities particularly in the social-behavioural domain has resulted in the adolescents displaying tendencies toward sexually risky behaviours which in turn, exposed them to sexually risky situations.

Introduction

Adolescence is a transition phase for children from their childhood into adulthood ¹. The curiosity to explore their bodies, identities and personalities are common to all adolescents, regardless if they are intellectually able or otherwise. These transformational adolescent changes are also experienced by adolescents with intellectual disabilities such as mental retardation, development retardation, Down syndrome, autism, speech and language disorder, emotional and behavioural disorder, hyperactive, and hypoactive ². Despite having cognitive and behavioural impairments, adolescents with intellectual disabilities go through puberty and experience physical changes within the normal parameters as other adolescents ³. Unquestionably, the need for them to have knowledge about their sexuality is vital for themselves and the society because they would eventually be needing answers to questions regarding what is sexuality, the functions of human sexuality to themselves and others, and the responsibilities of the knowledge about sexuality that they have gained ⁴.

In 2016, Malaysia's Ministry of Health recorded a total number of 16,528 teenage pregnancy cases, based on the number of registered pregnant adolescents at government clinics, with $\frac{3}{4}$ of the total cases involving married teens ⁵. The Ministry for Women, Family, and Community Development disclosed a total number of 104 baby dumping cases in 2016, of whom 61 of the babies were found dead ⁶. What is alarming being that the cases of teenage pregnancies are not exclusive to only adolescents who are considered mentally 'normal', but it also applies to adolescents with intellectual disabilities. Adolescents with intellectual disabilities are at high risk of becoming the victims of sexual crimes, oftentimes through rape and abuse, and consequently leading toward unwanted pregnancies. Such incidents occur due to their naivety about their surroundings, together with the lack of personal knowledge of what is right and wrong (UNICEF, 2017). In addition, sexual crimes are high among intellectually disabled adolescents due to lack of knowledge about human sexuality and safe sex, the struggle to think abstractly and understand medical terminology, as well as having difficulty to relate to acquired information about health to themselves and their experiences ⁷. With this, sexuality education is equally, if not more crucial, to adolescents with intellectual disabilities because they have lesser information about human sexuality, due to reasons such as the lack of exposure to sexuality talks with peers and elders and limited reading, due to their disability ⁴.

In Malaysia, sexuality education is introduced as the Reproductive Health and Social Education (PEERS) by the Ministry of Education in 2006 where the contents include topics such as sexual reproductive health, skills, knowledge, and behaviours ⁸. Mohamad Mokhtar, Rosenthal, Hocking, and Abdul Satar synthesised that PEERS is not a typical sex education programme, but rather a syllabus that covers several subjects related to sexual and reproductive health issues which are integrated into subjects such as Science, Biology, Religious and Moral Studies, and Physical Education ⁹. Mohd. Yunus (2008) described that sexuality education is vital to adolescents with intellectual disabilities since they do not have the opportunity to ask their peers, neither do they have the chance to observe, develop good values, and practice a healthy social and sexual behaviour. Besides family members, intellectually disabled adolescents are dependent on the teachers in acquiring information about human sexuality. According to Rosenthal and Smith; Harrison and Dempsey (as cited in Milton teachers are widely recognized as the most credible and trustworthy source of enlightenment about sexual health, hence making them on the top list of young people's preferred source of information ¹⁰. Inevitably, teachers play an important role in recognizing their students' understanding and knowledge acquirement in a specific information about human sexuality. Haignere, Culhane, Balsley, and Legos believed that the success of sexuality education program is mostly dependent of the skills and commitment of the teachers and educators. Consequently, it is crucial to consider teachers' perspectives and attitudes in the development and implementation of sexuality education programme ¹¹.

Individuals with intellectual disability face cognitive delays in various domains such as language development, socio-behavioural considerations, attention, memory, and generalization learning ¹². Individuals with intellectual disability struggle to engage in abstract thinking and have symbolic thoughts which interferes with the normal cognitive developmental stages. They experience cognitive delays which affect their understanding of abstract concepts, hence they struggle to think abstractly about matters related to truth, morality, justice, and existential topics consequently providing alternative views on mentioned matters ¹³. Cognitive impairment among adolescents with intellectual disability are interrelated to other cognitive abilities such as language skills, social skills, attention and memory skills, and generalization. Consequently, teaching sexuality education involves unique approaches because intellectually disabled persons develop cognitively, affectively and physically differently from normal individuals. This study focuses on the approaches done by Special Education teachers, focusing on cognition and social behavioural aspects, in the teaching of sexuality education to adolescents with intellectual disability. The study also investigates challenges faced by the teachers in teaching about sexuality education to the intellectually disabled adolescents.

Neisser (1967) defined cognition as "the mental process which external or internal input is transformed, reduced, elaborated, stored, recovered, and used" (as cited in Brandimonte, Bruno, & Collina, 2006) In the cognition aspect, there are several cognitive skills that an individual must possess in order to be able to defend themselves in vulnerable situations in which they need to protect themselves. Any individual, in general, with or without intellectual disabilities, must have knowledge, skills and information about protecting themselves. In the context of this study, sexuality education provides individuals with intellectual disability with knowledge and skills to defend themselves in high-risk situations. According to Kakayand (2006), learners with intellectual disability have difficulties with metacognition and memory, specifically short-term memory which causes delays in their ability to

arrange, evaluate, and organize information (as cited in Javan, Framarzi, Abedi and Nattaj (2014)). In addition, learners with intellectual disability have problems with attentiveness, concentration, and behaviours, thus affecting their ability to perceive, retrieve, learn, and form concepts and information¹⁴.

In learning about sexuality education, or any topic of study, learners are required to be able to utilize their memory and attention skills in order to be able to learn, retrieve, and apply the information that they have acquired into real-life situations¹⁵. advocated that students with intellectual disability should be taught sexuality education by presenting information in small chunks, using simple and concrete terms, as well as using repetition, practice, and frequent reviewing methods. Sweeney further added, educators should be ready to make modifications when delivering information about human sexuality when needed, especially for students who have other added disability such as physical ability in order to make the learning process a successful one. Sweeney's instructional approaches have been practiced in several studies to explore about educators' experiences in teaching sexuality education to individuals with intellectual disabilities including children and adolescents. One of such is a study conducted in South Africa which reported how Special Education teachers suggested that teaching materials such as simplified pictures with colours and use of visuals such as pictures and posters helped in the learners' understanding towards subjects related to sexuality education¹⁶.

Howard-Barr, Rienzo, Pigg and James reported that Special Education teachers believed that personal skills and relationships topics are more important than topics on physical growth such as reproduction, body image, and anatomy in sexuality education¹⁷. A study done in South Africa recommended that sexuality education should be inclusive and mandatory, just as life skills and HIV and AIDS education¹⁸. Sweeney (2007) proposed that sexuality education for those with intellectual disability should include education about sex, relationships, and appropriate sexual expressions. Sweeney also suggested that sexuality education should not be restricted to only sexual facts but a reinforcement in social skills and relationship should also be included. Löfgren-Mårtenson recommended that adolescents should be given the opportunity to reflect and process ideas, thoughts, and values about human sexuality from the information that they have gained from the teachers¹⁹. Löfgren-Mårtenson also put forward that such opportunities would ensure that the intellectually disabled adolescents are given the chance to explore their "inner compass" which is defined as one's sense of direction in life. The approach to encouraging adolescents with intellectual disability to use their intrapersonal skills is vital in teaching sexuality education because the students will be able to know about themselves better which helps in improving their learning process on sexuality education.

In the context of teacher-student interaction, a study done in Sweden by Löfgren-Mårtenson has reported that half of the intellectually disabled adolescents would prefer to be taught sexuality education by the people whom they are familiar with such as their teachers while the remaining preferred outside educators. In addition, Louw, Kosciulek, and Chen suggested that Special Education teachers' role in ensuring the sexual health of students with any type of disabilities is significant in maintaining the students' positive lifestyle²⁰. A study done by Waller, Ken, and Johnson suggested that Special Education teachers can create "secret words" and habit reversal whenever a targeted negative behaviour is shown during lessons however not indicating specifically on lessons regarding sexuality education. This builds a bond between the teacher and the adolescent because there is something that they share and in "secret" such as the "secret word" strategy²¹.

Teaching the intellectually disabled about sexuality education is never easy because some may perceive and comprehend information differently than how the "typically abled" does due to their intellectual constraints. Correspondingly, a study done in Florida by Howard-Barr, Rienzo, Pigg, and James implied that the informants who are among Special Education teachers experience various reactions from learners with intellectual disability which are sometimes shocking. A study done in South Africa by Louw reported that teachers find adolescents with intellectual disability's cognitive ability in comprehending newly acquired knowledge as one of the major challenges. Accordingly, teachers may need a longer time in making sure the information is efficiently delivered because intellectually disabled adolescents have difficulty in acquiring a certain information for the first time due to their attention and memory impairments²².

Another type of challenge is regarding the curricula content. A study done by Howard-Barr, Rienzo, Pigg, and James in Florida reported that informants who are among Special Education teachers described that there is a lack of curriculum regarding sexuality education specifically created for students with intellectual disability. Meanwhile, in Malaysia, a research has been done regarding sexuality education module for secondary school students with learning disability entitled "*Pembinaan Modul Pendidikan Seksualiti Masalah Pembelajaran Peringkat Menengah: Satu Kajian Berdasarkan Analisis Keperluan*" by Ang Chai Tin which has been completed in August 2014. However, the success, or failure, of the learning module has yet to be reported.

In the psychosocial context, a conceptual study done in Malaysia by Ang and Lee expressed how parents of intellectually disabled learners are conservative and uncomfortable about the idea of sexuality education given to their children. Furthermore, Ang and Lee described that teachers' attitude towards teaching sexuality education for students with intellectual disability is still at an alarming level due to the clash in the teachers' own moral, attitude, and religious beliefs. It is similar to findings of a conceptual study done in South Africa by Louw which reported that talks about sex and sexuality creates an uncomfortable feeling for both parents and educators. Louw also reported that parents did not agree on the sexuality education given to their children because the topic about human sexuality is often regarded as taboo.

Methods and Materials

To understand the contentions and challenges faced by teachers who are entrusted to educate intellectually disabled learners, this study is constructed to respond to these questions:

1. How does Special Education teachers deliver the information and content of sexuality education in the aspects of cognition and social behavioural interactions to adolescents with intellectual disability?
2. What are the challenges that Special Education teachers face throughout their experience of teaching sexuality education?

The study was conducted at a government secondary school that offers Special Education program (*Program Pendidikan Khas Integrasi*) for adolescents aged 13 to 19 who have intellectual disabilities which is situated in a semi-rural town in Sarawak. Three Special Education teachers agreed to be recruited as informants. These Special Education teachers were interviewed individually to find out their experiences in terms of the approaches done and the challenges they have faced throughout their journey of teaching subjects related to sexuality education to adolescents with intellectual disability.

The data collection techniques used in this study were in-depth interviews, document review, and participation observation. Each informant was asked the same set of semi-structured questions to ensure consistency in context of the data collected. The construction of interview questions for the teaching approaches were based on the (i) cognition aspect such as memory, attention, and language domains, (ii) social behavioural aspect where the questions were focused on the intrapersonal and interpersonal skills of the adolescents with their teachers and peers and lastly, (iii) teaching challenges in terms of pedagogical approach, materials, dialogue and engagement. Data collected from document review and field observations are aligned to the interview questions, to maintain consistency and relevance.

Data obtained from this study were analysed by using thematic analysis technique. After the data from informants were collected, the audio recordings of the interview were transcribed and translated from Malay to English. Data retrieved from document review and observations were compiled and matched to items and patterns identified in the interviews. During the first stage of the data analysis process, data familiarisation was done by rereading the transcripts twice, to ensure that all relevant data were captured. During the third reading, the coding process was initiated, by identifying and jotting down key points. The key points were then grouped into relevant categories. Labels for each category are defined. The findings of the data are consequently reported.

Results and Discussion

In the first instance, the informants provided descriptions about their use of concrete materials in teaching about sexuality. They remarked that the materials helped learners to understand and remember better. Additionally, they found that the use of concrete materials aids such as Barbie dolls or any anatomical Science model when explaining about the basic human body parts helps in the learners' understanding about sexuality. Modelling is also used, and multimedia aids are incorporated to explain contents of lessons about sexuality. It was reported that for some learners, using hands-on modelling helps them to better understand concepts related to cleanliness, hygiene, and health, especially when theoretical lessons did not work. Consistently, all three informants acknowledged the necessity to use repetition to foster memory and comprehension when teaching contents on sexuality education.

Focus and attention are crucial in any learning. Two informants described their use of storytelling as a pedagogical approach to attain and maintain focus and attention. One of the informants explained:

"I use a lot of storytelling... I will use, let's say an hour class, I will not be spending that one hour to teach. I will use almost 30 to 40 minutes to tell them stories before I go into the last 10 minutes to teach. But in the form of discussion. Even though we do discussions, we will tell stories during the discussion." (Informant 1, 28th March 2018, 00:07:24).

Through storytelling, the informants reported a more significant value in interest when mystery stories were used in storytelling; using vocal tones to create emotions such as suspense, fear, joy and sadness, added the learners' interest in lessons. One of the informants explained:

"It is from the way we tell the stories. If we tell them about something... Well, the students like mystery stories... And if we tell them in a tone of suspense... they would want to know... they will be interested..." (Informant 2, 4th April 2018, 01:14:14).

The informants also talked about using technology in teaching. They found that multimedia helped capture and sustain learners' interest and attention. Moving objects, narration, music and cinematic effects played a role in creating understanding about the contents they learn in class. The findings from the study are in alignment with previous studies which looked at the use of technology to teach intellectually disabled learners. The advances in the

uses of technology for learning today should be capitalised to Hasselbring and Goin (1993) recommended that Special Education educators should emphasize on using technology effectively to enhance learning through the acquisition and maintenance of new skills over time, the development of fluency and proficiency, and the generalization skill used towards new situations. Ahmad (2015) reported that the application of using practical tools in teaching and learning is based on the principles of cognitive theory in which, assistive technology connects a learner's cognitive abilities to an educational opportunity that may be inaccessible before due to intellectual disability. For instance, a learner who has difficulty in the decoding of texts can utilize a text-to-speech screen reader as the 'bridge' between the written texts and a learner who struggles in thoughts sequencing can use the tool graphic outlining software as the 'bridge' to visual processing skills (Hernández, 2003). Ahmad (2015) believes that an effective integration of assistive technology into the learning environment of learners with special needs are helpful in making them accomplish tasks that could not be accomplished before or could accomplish but with great difficulty. In the context of sexuality education, (Love, 2013) stated that integrating technology in the teaching and learning process is a fun way to encourage the learners who own different learning styles and preferences, to be more active in class instead of the educators just delivering the information because the learners are more familiar with especially in this current era. Gilbert, Sawyer, and McNeill (2011), the use of audio-visual materials is efficient because audio and visual is useful in grabbing learners' attention in class as well as in introducing a topic before an educator starts further delivery about a topic.

On the use of language for presenting content and dialogue in their lessons about sexuality, all three informants acknowledged the importance to use appropriate language in order to avoid misunderstanding. All three informants used Malay Language as the main medium to communicate in class, and it is interspersed with vocabulary and expressions from local dialects. The use of language in delivering the content of sexuality education is also crucial as it is known that individuals with intellectual disability face delays in the language department. Learning in a language and at a pace they understand would help individuals with intellectual disability to benefit if the medium of content delivery (i.e. language used) is done suitable to the learners' capabilities. Kioko (2015) advocated the use of the language spoken at home in teaching because it will make learners become more involved in the learning process and increase the speed of development of basic literacy skills that leads to a better educational outcome. To add to the merit of recommendation, a Malaysian study by Jaafar (2015) described how to use of the mother tongue language (Bahasa Melayu) in the teaching-learning process results in a better understanding and acceptance among learners. Although Jaafar's study was conducted on learners who have normal intellectual capabilities, nevertheless, it is necessary to consider how learners with intellectual disability develop their language skills differently from the normal ones and that some may require additional materials to aid the teaching-learning process (Smith, Polloway, Patton, & Dowdy, 2006).

Additionally, the three informants described the necessity to use proper scientific or medical terms when discussing human body parts. Although they found that some learners may not understand the proper scientific terms in the first place, explanation in the local language will be made until each learner have understood and later, the use of proper scientific terms will be used throughout the lesson. All informants concluded that they needed to be direct and clear when teaching about sexuality to avoid misunderstanding. The findings were in alignment with the data analysis done on documents collected from the informants, which evidenced their lesson plans and materials used for teaching sexuality to the intellectually disabled learners.

A teacher-student's social behavioural interaction is one of the themes that has been identified in the data collected in this study. All informants explained how important it was to be comfortable when presenting content and engaging in dialogue about sexuality. Informant 2 and Informant 3 specifically recommended that teachers should not feel shy when talking about sexuality as the lack of confidence in teachers would inevitably affect learners' confidence in learning and accepting lessons about sexuality.

"I've never felt uncomfortable before. If the teachers are not comfortable, how can we deliver the knowledge?" (Informant 2, 4th April 2018).

Observations on site also fostered the input from the teachers about their comfort about the teaching sexuality. Being in a country whose culture and values are predominantly cautious about speaking about sexuality, the informants appeared to have personally overcome the uncomfortable caution to engage in dialogue with their learners about sexuality. For the purpose of this study, they were willing to share their years of experiences teaching subjects related to sexuality education. Two informants clearly gave praises and words of encouragement when engaging in dialogues with their learners, a pedagogical strategy they found necessary to boost confidence in learners to comprehend concepts and issues related to human sexuality. The informants did reveal a feeling of discomfort among learners at the earlier instance of learning about sexuality; however, when the informants began to use positive words to encourage and motivate the learners, the discomfort began to fade. The learners, in turn, began to gradually show acceptance toward the learning about sexuality. In addition, Informant 3 described her use of one-to-one dialogue with the learners, when presenting topics about sexuality. She found that the learners who have shown tendencies to be at risk of engaging in sexual activities, were more receptive to learning about sexuality when dealt with personally. Such relative proximity enabled the informant to understand and listen to her learners better, allowing space and opportunity for justification, rationalisation and reflection:

"As a teacher, we have explained so many times to her, we have advised so many times. Aaa, secondly, we try to slow-talk her. We tell her... we ask her... their feeling when doing it... If she says she feels excited, why does she feel excited. Then, she says that she feels excited, why does she choose to do that. She will answer - nobody cares about her. Ha, that's it." (Informant 3, 5th April 2018, 00:17:15).

A good learning environment is crucial in making sure the learning process is a success. Teaching in a mixed gender class poses challenges for the Special Need teachers. According to all three informants, mixed-gender classes on sexuality education is unavoidable as both genders need to obtain the same knowledge about human sexuality. Informant 3 revealed how she would opt to separate the learners according to gender when there is a need to elaborate on practical approaches:

"If theoretically, we will mix them (the students). Practically, we will separate. If... we need to get into details, like we want to tell about very private things - then we will separate the students. For example, we used to invite... brands like Kotex, Libresse, to come. We will not mix them. We will get the female students together to listen to the explanation from... brands like Kotex, Libresse, all the sanitary pads brands - and they will explain everything, from A to Z. So, during (the talk), the male students will be seated with the male teachers and the male teachers will explain detailed information (to the male students)." (Informant 3, April 5, 2018, 00:25:00).

In a study done on primary mainstream school teachers in Australia, it is found that the teachers believe teaching sexuality education in a mixed gender environment would benefit the learners more since the girls and boys would be able to learn from one another as well as create a respectful environment for both genders. Although this is the case, Lenderyou and Ray and Hilton argued that sexuality education is better taught in a single sex classes to enable the youngsters to learn about human sexuality in a 'comfortable' atmosphere. Nonetheless, the result reported by Milton in 2003 is supported by Swango-Wilson who conducted the study in also suggest that sexuality education should be delivered in the form of classes that are of mixed gender that focus on practical ways to improve relationships. Additionally, Löfgren-Mårtenson reported his Finnish study that has illustrated how young adults and adolescents with intellectual disabilities preferred to be taught sexuality education in a small group, comprising of mixed genders.

Peer guidance is an advantageous teaching strategy for sexuality education. Informants reported that peers' guidance is helpful to concretise understanding. Informant 2 further explained that some learners tended to show better comfort when with their friends rather than the teachers. Therefore, learners who were more able than their peers would be asked to guide their peers in doing exercises on topics related to sexuality:

"Those who are slower in understanding... actually, they are much more comfortable with their peers. Um... because teachers, well, sometimes we are, fierce... and all. There are some whom the students don't feel comfortable with... One of the ways is that I'll ask their own peers to guide them. The weaker ones, we'll have to see, like I said just now... the smarter ones will guide their own friends." (Informant 2, 4th April 2018).

Interpersonal intelligence is another discovery found from the interviews with the informants. All three informants believed that learners' motivation in learning about sexuality is important because it affects their acceptance towards learning about human sexuality. Two informants described how adolescents with intellectual disability were aware of their sexuality as a human. Through dialogue, the informants were able to determine that their learners were generally aware about development of emotions for others and desires to be in a romantic relationship with other. Informant 3 explained her observations about these learners, who were capable to develop their own opinions and beliefs about sexuality:

"They have their own understanding. There are those who ask - "teacher, if we kiss will we get pregnant?" They do have their own beliefs that - if two people kiss, they will get pregnant, that once you are married you will get pregnant. They have their own understanding. Touching too... They do not learn in detail on how pregnancy occurs. But they do have their own beliefs." (Informant 3, 5th April 2018, 00:35:10).

Informant 3 further added that when learners' beliefs on sexuality were contradictory with the truth, the teacher has to play an important role in rectifying the learners' understanding by talking about the repercussions of doing sexual actions. In contrast, Informant 1 believed that adolescents with intellectual disability do not have their own beliefs and understanding towards sexuality. Informant 1 elaborated that the learners were generally confused with values associated with sexuality, and many other life concepts, as they were unable to comprehend the abstract concepts, figuratively and literally.

The challenges that the teachers face when teaching sexuality education were also uncovered in this study. The

informants expressed their worry of the use of mobile phones among the learners, as they have observed abuse of access among the learners. The learners' lack of ability to determine values, rules and judgments would put them at risk of being influenced by materials they watch on the mobile phones. Without supervision, they are at risk of engaging in communication with people who may deceive and take advantage of their vulnerability and expose them to act and behave in sexually risky situations. Presence and participation in social media expose these learners to sexual contents, as they are able to explore readily-available content related to sex on the internet.

Sex is still a taboo topic in many Asian cultures. Two informants explained how such value affect their teaching about sexuality, because the teachers find it difficult to find relevant teaching materials to use for teaching the topics about sexuality. The informants explained challenges to find a balance between teaching sexuality as a natural life development in all humans, and as a topic frowned upon in public because of the cultural taboo. The lack of appropriate materials led to a risk of creating misunderstanding and misconception among the intellectually disabled learners:

"Challenges... the first one is... the taboo. This thing is hard to teach. This is because, the students... they will think of other nonsensical things, dirty things. So, we want to pull that kind of mindset from them, that this is not dirty, this thing is normal, and that everyone will face it, eventually." (Informant 3, 5th April 2018, 00:37:00).

During each interview session, the informants shared their experiences of dealing with learners who were already involved in sexually risky situations. Two informants shared how individuals with intellectual disability have the tendency to be overly affectionate even with strangers. There is a higher tendency among these learners to display public behaviours of affection, even to strangers:

"There are those (students) who are overly affectionate, we cannot stop them because they're too affectionate. They do not have the intention to do anything, they just want to hug - they like hugging. There's this one boy - Down syndrome. If you see - if you sit next to him, he will hug you." (Informant 2, 4th April 2018).

To add, the on-site observation further demonstrated the informants' rhetorics about the limited inhibition to display affection to strangers. During one of the interviews, one male learner with Down Syndrome ran into the interview location, shook hands with the interviewer, and hugged her. The actions were unprovoked and uninitiated, as the interviewer has never met with the learner before the incident. In another scenario, Informant 2 shared her experience of teaching a learner with hypersexual disorder who needed to rely on medications to control his disorder. The informant described her experience at a school where a boy who is diagnosed with hypersexual disorder was caught being intimate with a girl at the school's orchard. However, the teacher clarified that none of the teachers blamed the learner for acting out his sexual behaviour because it was triggered by his rare disorder. The next course of actions taken was to provide counselling to provide opportunities for the learner to understand his inhibitions better.

Such cases are not in unusual. Informant 1 also described that there are also several learners who tend to portray provocative behaviours. For example, there was a case they encountered where a female learner laid down on classroom tables in a classroom full of male students.

"The second one... female student - she herself offers- She herself look for guys. It happened, last year, here. She encourages people to come to her. When there are male students, she will lay down on the table." (Informant 1, 28th March 2018, 00:24:25).

Such provocative behaviours were also displayed at the learners' living quarters. Male students were found to sleep together and began touching each other's genitals. Other sexually risky situations also occur when learners who are mentally superior than their peers use or threaten others to carry out sexual harassments. Informant 2 described that a learner who displayed higher mental capabilities than his peers was caught using another weaker student to harass their female friends. The harassing was done in the form of slapping the female learners' backsides. Such behaviour of harassing others by touching private parts is alarming as it may lead to harmful consequences. Another revelation shared by Informant 3 was a trend they detected among learners who came from families which are broken or unstable economically. They found that the intellectually disabled learners from these types of family backgrounds tended to be exposed to sexually risky situations. For instance, an experience in dealing with a learner with intellectual disability who came from a broken family brought the informant to learn about how the learner became sexually active by hiring prostitutes after he observed his own father bringing back prostitutes back to their family home.

After the three informants shared their experiences of encountering learners who are involved in sexually risky situations, the informants did as well share the approaches in dealing with such learners and scenarios. Firstly, all informants consistently stated that the first thing to do is to inform the parents about their child's behaviour. The involvement of the police would be done if there is agreement from the parents; otherwise, some cases could not be pursued as police cases without parental consent.

"If the parents want to cooperate, we will take them straight to the hospital or the clinic to have a check up on... their private parts. If they are a rape victim or anything. Or, we bring them straight to the police. Lodge a report. But the problem is, parents do not want to cooperate. So, if parents do not cooperate, it ends there." (Informant 3, 5th April 2018, 00:16:49).

Other than that, all informants stated that constant reminder of the implications of certain behaviours will be done in order to avoid and minimize such behaviours from happening in the future. Informant 3 described that she uses the rationalizing method with the learners in order to gain understanding towards the learners' actions.

"As a teacher, we have explained so many times to her, we have advised so many times. Secondly, we try to slow-talk her. We tell her... we ask her... their feeling when doing it... If she says she feels excited, why does she feel excited. Then, she says that she feels excited, why does she choose to do that. She will answer - nobody cares about her. Ha, that's it." (Informant 3, 5th April 2018, 00:17:15).

It was found that the modelling strategy is a useful approach when it comes to teaching adolescents with intellectual disability about sexuality. Similarly, a study done by Brude and Kroese had shown that in teaching about protective behaviours, one of the elements of sexuality education, modelling is an essential approach to use to ensure effective learning. This enables the adolescents, especially those with limited writing and reading skills, to comprehend the lessons taught on sexuality. This type of approach is supported by the Social Cognitive Theory, a theory by Bandura where he stated that by observing another person, an idea is formed in which this idea will later serve as a knowledge that guides the learner in carrying out relevant actions. Another important finding from this study is the use of concrete materials when teaching about sexuality. The use of concrete objects is crucial because individuals with intellectual disability take a longer time to understand abstract concepts. Concrete materials serve as a useful teaching aid in teaching about sexuality to adolescents with intellectual disability because according to Paivio, Walsh, and Bons, the human memory is designed to recall concrete facts rather than abstract ones. The use of concrete materials can be simultaneously used as the teaching aid in modelling concepts to the adolescents. Nevertheless, no matter how much information is demonstrated to the adolescents, without constant repetition, the adolescents will eventually forget due to their disability in the memory aspect. Thus, Aristotle's Law of Frequency stated that the more frequent two events are linked together, the strength between the two events will also increase - and this is in line with the finding that constant repetition is needed in making sure the adolescents could recall the content taught about sexuality education.

Presenting the adolescents with multimedia materials via technology such as pictures, videos, and online games or quizzes when teaching about sexuality has been found to result in the adolescents to become more engaged and interested during lessons since the medium used to deliver the information is familiar to them rather than solely explaining information in the form of words. This is in line with the Anchored Instruction theory which advocates the use of guided technology-based learning with multimedia materials which are anchored to the learning objectives to enable learners to experience active learning by motivating and challenging the learners. A study done in the South Africa by Louw reported that teaching materials such as visuals with simplified pictures and posters can help learners to understand topics related to sexuality better. On the contrary, one informant expressed her disagreement in using multimedia when it comes to teaching about sexuality due to the difficulty of finding suitable and appropriate materials. Nonetheless, another approach that the informants found efficient in improving the adolescents' focus is the storytelling approach. This approach is useful when discussing about real-life situations and examples that are related to sexuality education. This approach allows the adolescents to learn in a formal setting but in a relaxed manner.

The language used when teaching about sexuality education is important, what more to adolescents with intellectual disability since they are known to have some limitations in the language aspect. Firstly, when talking about sexuality with the adolescents, the language used must be direct and clear. Additionally, when discussing about reproductive health topics the terms used must be scientific and correct to avoid confusion among the adolescents. This finding is similar to a literature by Sweeney where she stated that information about sexuality must be delivered by using direct and clear terms as well as in small blocks of information to students with intellectual disability in which the finding is supported by the Behaviourist theory. In addition, the use of Malay language in talking about sexuality with the adolescents is seen as important by all the informants since the language that is widely used in the semi-rural area where the study was conducted, thus all students are expected to know the language. Similarly, in a study by Jaafar he stated that the use of the Malay language in the teaching-learning process results in a better understanding and acceptance of a certain topic. Despite there are some students who are unable to have a two-way communication with the teacher, they seem to understand instructions

given in which the use of concrete material such as visual sign is utilized by the adolescents to indicate whether they understood or otherwise the lesson taught.

In this study, the informants expressed that it is important for them to feel comfortable when talking about sexuality with the adolescents and that words of encouragement helps in the adolescents' acceptance towards themselves. Accordingly, when talking about sexuality, it is crucial for Special Education teachers to be comfortable about it for the students to feel the same way. When both parties feel comfortable to talk about sexuality, effective dialogues between the Special Education teachers and adolescents will occur. A study done in 2012 by Babonea and Munteanu stated that teacher-student relationship play an important role in the academic achievement and behaviour of students. This indicates that the presence of comfortable bonding between the Special Education teachers and the adolescents can result in learners' acceptance and understanding towards learning about sexuality education.

When it comes to learning about sexuality, an informant revealed that some adolescents with intellectual disability feel more comfortable asking their more knowledgeable peers about things they do not understand. Thus, the informants will guide the more knowledgeable peers in guiding their peers about concepts they do not understand. Teenage Pregnancy Unit, Department of Health reported that the peer education approach is an approach that values the perspectives and experiences of youths. When the adolescents get involved in helping their less-knowledgeable friends to understand a concept, an encouraging and supportive environment is created. This is in line with the peer education approach where this approach encourages young people to get involved in helping out their other peers in classes to instil positive and supportive environment.

Additionally, this study found that that mixing the gender of the adolescents in sexuality education related classes is not seen as a problem. They expressed that it is important to put the adolescents in a co-ed classroom environment when learning about sexuality because they need to obtain the same information as the opposite genders. However, an informant stated that when it comes to teaching about detailed facts and practical lessons regarding human sexuality, the adolescents will be separated according to their genders in order to be sensitive of the cultural demands. This finding is similar to a study done by Milton where he reported that teaching about sexuality in a co-ed environment enables the male and female students to learn from one another as well as respect each other. However, Lenderyou and Ray and Hilton argued that sexuality education is better taught in a non-co-ed environment to enable the students to learn about sexuality in a 'comfortable' atmosphere.

To add to the discussion, the adolescents' social interactions with the teachers and peers and self-motivation are important in order for learning about sexuality to be successful in this study. In addition, it is equally crucial to consider the adolescents' beliefs and understanding about human sexuality to ensure that they are on the right path in the knowledge aspect. Therefore, the social-behavioural interactions as well as intrapersonal skill of an individual have to be well developed in order for learning about human sexuality to be successful.

A prominent challenge in terms of teaching is the limited teaching materials for sexuality education. This is due to the lack of comprehensive sexuality education curriculum provided by the higher authorities specially for students in the Special Education program. Moreover, since sexuality education is still considered a taboo in the Asian society, this issue leads to several other challenges that affects the teaching-learning process at school. Due to the taboo, there is not much exposure from the family and school authority about human sexuality thus the adolescents tend to explore about it themselves. Moreover, adolescents with intellectual disability have problems in the social skills aspect as well as not knowing the right things to do in certain situations that require them to act accordingly. Consequently, they tend to display sexually risky behaviours and eventually make them the victim of the situation or in some cases the one performing the victimizing.

The informants shared several experiences where adolescents with intellectual disability portray sexually risky behaviours that may be harmful for themselves and the people around them. These behaviours include having strong tendency to be overly-affectionate, to use touch excessively, and to hug people they meet, even with strangers, displaying sexually provocative behaviours in classrooms, having the tendency to harass other students to gain teachers' attention, and lastly, a rare occurrence, an adolescent with intellectual disability that one of the informants taught who has been diagnosed with hypersexual disorder.

While these challenges occur, the informants described several school-based procedures that have been carried out later to minimize the sexually risky behaviours displayed by the adolescents. Firstly, the Special Education teachers highlighted the importance of informing the parents before proceeding to any other actions such as involving the higher authorities or the police. This is crucial because parents are supposedly the persons who know their children best and by getting information from the parents about their children's well-being at home, further actions can be taken after knowing the adolescents' history. Secondly, it is best to have a one-to-one talk with the students and get to know their backstory before scolding them for the behaviours they portrayed. The Special Education teachers need to remember that these adolescents can be naïve about their surroundings and they tend imitate the things that they see without rationalizing their actions. Thus, the action of having a talk with the adolescents as done by one of the informant is highlighted because it considers the individual's rights to explain themselves, their situation, and their understandings about human sexuality. Lastly, constant repetition of concepts and skills about sexuality education is essential in minimizing the sexually risky behaviours portrayed by the adolescents because they tend to have limited skills in remembering things due to the neurological condition.

Conclusion

To conclude, this study has achieved its objectives of analysing the pedagogical considerations and challenges experienced by Special Education teachers in a semi-rural school in Sarawak. The investigation focused on cognitive and social-behavioural aspects of learning, to examine how sexuality education is presented to learners with intellectual disability. Findings illustrated the complex tasks and responsibilities of these teachers, teaching content which is culturally sensitive yet necessary, and the direct consequence of insufficient knowledge among the learners about the content would lead to risks of sexual abuse and unwanted pregnancies. The teachers addressed both cognitive and social-behavioural aspects in a manner which engaged the learners individually and in groups. Repetition and modelling are key in presenting content, and the teachers used their personal good judgment and awareness to detect and address learning moments and environments with these intellectually disabled learners. With limitations in the current curriculum and lack of resources to adequately supplement learning, the teachers were cautious and careful about their pedagogical strategies, because their success or failure to enable the adolescent learners to comprehend the contents of sexuality education would either shape or shake the adult years of these learners. [23](#) [24](#) [25](#) [26](#) [27](#) [28](#) [29](#) [30](#) [31](#) [32](#) [33](#) [34](#) [35](#) [32](#) [36](#) [37](#) [38](#) [39](#) [40](#) [41](#)

References

1. S. Hashmi, "Adolescence: An Age of Storm and Stress," *Review of Arts and Humanities*, vol. 2, no. 1, pp. 19-33, 2013.
2. C. T. Ang and L. W. Lee, "Pendidikan seksualiti dalam kalangan murid bermasalah pembelajaran di sekolah menengah: Cabaran dan kepentingan," *Jurnal Pendidikan Bitara UPSI*, pp. 6-6, 2013.
3. O. Rashikj and V. Trajkovski, "Sex education of persons with disabilities," *The Journal of Special Education and Rehabilitation*, pp. 135-138, 2009.
4. Mohd and K. R. Yunus, *Pendidikan seks untuk remaja berkeperluan khas (Terencat Akal): Satu analisis keperluan*, N. A. P. ., N. I. ., and P. M. P. di Malaysia: Pengalaman 50 Tahun Merdeka ., Eds. Kuala Lumpur: Utusan Publications, 2008.
5. K. Kumar, 2017, Retrieved from The Malay Mail Online.
6. O. Miwil and P. Y. Teoh, "Sex education is a must," Retrieved from New Straits Times, 2017.
7. M. Deschaine, "How development disabilities impact the sexual health of young adults," *Sexual Health Disparities Among Disenfranchised Youth*, pp. 10-14, 2011.
8. H. Singh, General debate on national experience in population matters: Adolescents and youth. The 45th Session of the Commission on Population and Development, New York, 2012, United Nations.
9. M. Mokhtar, M. Rosenthal, D. A. Hocking, J. S. Satar, and N. ., "Bridging the gap: Malaysian youths and the pedagogy of school-based sexual health education," in *ASEAN Conference on Environment- Behaviour Studies*. Elsevier, 2013, pp. 236-245.
10. J. Milton, "Primary school sex education programs: Views and experiences of teachers in four primary schools in Sydney," *Australia. Sex Education*, vol. 3, no. 3, pp. 241-256, 2003.
11. C. Haignere, J. Culhane, C. Balsley, and P. Legos, "Teachers' receptiveness and comfort teaching sexuality education and non-traditional teaching strategies," *Journal of School Health*, vol. 66, no. 4, pp. 140-144, 1996.
12. T. E. Smith, E. A. Polloway, J. R. Patton, and C. A. Dowdy, *Teaching students with special needs in inclusive settings*. Boston, MA: Pearson, 2006, 4th ed.
13. R. Siegler, "Children's thinking." Prentice-Hall, 1991, 2nd ed.
14. A. T. Javan, S. Framarzi, A. Abedi, and F. H. Nat-taj, "Effectiveness of rhythmic play on the attention and memory functioning in children with Mild Intellectual Disability (MID)," *International Letters of Social and Humanistic Sciences*, vol. 17, pp. 9-21, 2014.
15. L. Sweeney, *Human sexuality education for students with special needs*. Kansas City, KS: Marsh Media, 2007.
16. J. S. Louw, "A qualitative exploration of teacher and school staff experiences when teaching sexuality education programmes at special needs schools in South Africa," *Sexuality Research and Social Policy*, vol. 14, no. 4, pp. 425-433, 2016.
17. E. M. Howard-Barr, B. A. Rienzo, R. M. Pigg, and D. James, "Teacher beliefs, professional preparation, and practices regarding exceptional students and sexuality education," *Journal of School Health*, vol. 75, no. 3, pp. 99-104, 2005.
18. R. Magnani, K. Macintyre, A. M. Karim, L. Brown, P. Hutchinson, C. Kaufman, . . Dallimore, and A. ., "The impact of life skills education on adolescent sexual risk behaviors in," *Journal of Adolescent Health*, vol. 36, no. 4, pp. 289-304, 2005.
19. L. Lofgren-Mårtensson, "I want to do it right!" A pilot study of Swedish sex education and young people with intellectual disabilities," *Sexuality and Disability*, vol. 30, no. 2, pp. 209-225, 2012.
20. J. S. Louw, J. Kosciulek, and R. K. Chen, "Investigating educators' views of sexuality, HIV and AIDS

- education in working with students with disabilities in South African schools," *Journal of Applied Rehabilitation Counseling*, vol. 45, no. 2, pp. 9-17, 2014.
21. R. J. Waller, S. Kent, and M. E. Johnson, "Using teacher prompts and habit reversal to reduce finger-nail biting in a student with attention deficit hyper-activity disorder and a mild intellectual disability," *TEACHING Exceptional Children Plus*, no. 6, pp. 3-3, 2007.
 22. S. L. Johnson, *Therapist's guide to clinical intervention: The 1-2-3's of treatment planning*. Massachusetts, MA: Academic Press, 2017, 3 ed.
 23. F. K. Ahmad, "Use of assistive technology in inclusive education: making room for diverse learning needs," *Transcience*, vol. 6, no. 2, pp. 62-77, 2015.
 24. A. Bandura, *Social Foundations of Thought and Action: A Social Cognitive*. Englewood Cliffs, NJ: Prentice Hall, 1986.
 25. C. Bruder and B. S. Kroese, "The efficacy of interventions designed to prevent and protect people with intellectual disabilities from sexual abuse: A review of the literature," *Journal of Adult*, vol. 7, pp. 13-27, 2005.
 26. G. C. Gilbert, R. S. Sawyer, and E. B. McNeill, *Health education: Creating strategies for school and community health*. Boston, MA: Jones & Bartlett, 2011.
 27. T. Hasselbring and L. Goin, "Integrated media and technology," in *Strategies for teaching learners with special needs*, E. A. P. . and J. R. P. ., Eds. Macmillan, 1993, pp. 145-162.
 28. A. H. andez, "Making content instruction accessible for English language learners," in *English Learners: Reaching the Highest Level of English Literacy*, G. C. G. ., Ed. International Reading Association, 2003, English learners: Reaching the highest level of English literacy.
 29. G. Hilton, "Sex Education - the issues when working with boys," *Sex Education*, vol. 1, pp. 31-41, 2001.
 30. S. Jaafar, *Penggunaan bahasa ibunda secara inklusif dalam pendidikan dengan rujukan kepada Bahasa Melayu*. Seminar Sambutan Hari Bahasa Ibunda Antarabangsa, Kelantan, 2015.
 31. D. N. Kellogg, "Clinical report-the evaluation of sexual behaviors in children," *Journal of The American Academy Of Pediatrics*, pp. 200-1692, 2009.
 32. A. Kioko, "Why schools should teach young learners in home language. Retrieved from British Council: <https://www.britishcouncil.org/voices-magazine/why-schools-should-teach-young-learners-home-language>," 2015.
 33. E. K. Love, "Utilizing technology to teach sexuality," Retrieved from Teaching, 2013.
 34. G. Lenderyou and C. Ray, "Why is sex education work with boys important? London: Sex Education Forum." 1997.
 35. J. Milton, "Primary school sex education programs: Views and experiences of teachers in four primary schools in Sydney," *Australia. Sex Education*, vol. 3, no. 3, pp. 241-256, 2003.
 36. A. Paivio, M. Walsh, and T. Bons, "Concreteness effects on memory: When and why," *Journal of Experimental Psychology: Learning, Memory, and Cognition*, vol. 20, pp. 1196-1204, 1994.
 37. D. Schaafsma, G. Kok, J. M. Stoffelen, and L. M. Curfs, "Identifying effective methods for teaching sex education to individuals with intellectual disabilities: A systematic review," *Journal of Sex Research*, pp. 1-21, 2014.
 38. A. Swango-Wilson, "Meaningful sex education programs for individuals with intellectual/developmental disabilities," *Sex Disability*, vol. 29, pp. 113-118, 2011.
 39. A. Vize and L. Stonecypher, "Intellectual disabilities in the classroom. Retrieved from Bright Hub Education: <http://www.brighthubeducation.com/special-ed-inclusion-strategies/9893-teaching-students-with-intellectual-disabilities/>," 2015.
 40. "Teenage Pregnancy Unit, Department of Health. (2002, June). Involving young people in Peer Education: A guide to establishing sex and relationships peer education projects. Retrieved from ,," 2002.
 41. "UNICEF. (2017). *Kanak-kanak kurang upaya di Malaysia: Kajian mengenai pengetahuan, sikap dan amalan*. Retrieved from UNICEF Malaysia: <https://www.unicef.org/malaysia/Unicef-BM.pdf>," 2017.