



Improving teachers' understanding of reproductive health and sexuality education in special schools

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ABSTRACT

The inability to achieve complete independence in students with special needs has the potential to make this group vulnerable to problems, including reproductive health and sexuality problems. These problems are suspected to be due to the lack of understanding and perception of teachers in the concept and implementation of reproductive health and sexuality education in Special Schools (SLB). This study was conducted to see teachers' understanding of reproductive health and sexuality education for students with special needs. Using a quantitative approach with a one-group pretest-posttest design, this study involved 15 teachers from six SLBs in Bandung City who were selected using the purposive sampling method. The data obtained were analyzed using the Wilcoxon Signed-Rank Test. The results of the study showed a significant increase in the average score, indicating that the efforts made could improve teachers' understanding of reproductive health and sexuality education. Teachers felt more prepared to deal with the problems of students with special needs regarding reproductive health and sexuality after participating in competency refresher courses by participating in training or discussions. Training and discussions that are planned systematically, sustainably, and comprehensively can improve teacher competence and, more broadly, can improve the quality of reproductive health and sexuality education in SLB.

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ABSTRAK

Ketidakmampuan pencapaian kemandirian secara utuh pada peserta didik berkebutuhan khusus berpotensi membuat kelompok ini rentan terhadap masalah, termasuk masalah kesehatan reproduksi dan seksualitas. Permasalahan tersebut disinyalir karena adanya kekurangpahaman dan persepsi guru dalam tataran konsep dan implementasi pendidikan kesehatan reproduksi dan seksualitas di Sekolah Luar Biasa (SLB). Penelitian ini dilakukan untuk melihat pemahaman guru terhadap pendidikan kesehatan reproduksi dan seksualitas untuk peserta didik berkebutuhan khusus. Menggunakan pendekatan kuantitatif dengan one group pretest -posttest design, penelitian ini melibatkan 15 guru dari enam SLB di Kota Bandung yang dipilih dengan metode purposive sampling. Data yang diperoleh dianalisis dengan uji Wilcoxon Signed-Rank Test. Hasil penelitian menunjukkan peningkatan rata-rata skor secara signifikan yang menunjukkan bahwa upaya yang dilakukan dapat meningkatkan pemahaman guru terhadap pendidikan kesehatan reproduksi dan seksualitas. Guru merasa lebih siap untuk menghadapi permasalahan peserta didik berkebutuhan khusus mengenai kesehatan reproduksi dan seksualitas setelah mengikuti penyegaran kompetensi dengan mengikuti pelatihan atau diskusi. Pelatihan dan diskusi yang direncanakan dengan sistematis, berkelanjutan, dan komprehensif dapat meningkatkan kompetensi guru dan secara lebih luas dapat meningkatkan kualitas pendidikan kesehatan reproduksi dan seksualitas di SLB.

Kata Kunci: guru sekolah luar biasa; pemahaman guru; pendidikan kesehatan reproduksi dan seksualitas.

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INTRODUCTION

Education on reproductive health and sexuality is an important and necessary component of the learning process that aims to equip students with a solid understanding of the crucial role of maintaining good reproductive health, as well as recognizing and addressing related social and cultural issues. This type of education helps students to understand appropriate boundaries regarding reproduction and sexuality in their daily interactions and personal development. It also fosters a sense of responsibility and self-awareness. Teachers play a key role in delivering this knowledge as part of a comprehensive educational experience in schools (Plaza-del-Pino et al., 2021). Furthermore, research highlights that reproductive and sexual health education contributes significantly to raising students' awareness, knowledge, and concern about these issues (Chavula et al., 2022). However, despite its importance, implementing this education still faces several challenges in practice, particularly for teachers who often struggle with cultural taboos, a lack of resources, training, or institutional support in effectively addressing these sensitive topics.

Issues regarding the delivery of reproductive and sexual health education can be seen from teachers' competence in teaching reproductive and sexual health education to students (Prawira & Aprilia, 2024). In addition, the lack of specific training in this field is also one of the obstacles teachers face (Utami et al., 2024). Teachers often feel unprepared or lack confidence in teaching complex reproductive health education that requires specially adapted teaching methods (Nelson et al., 2020). Teachers feel anxious and lack sufficient knowledge to provide education on the prevention of sexual violence against children (Allen et al., 2020). Even research in Norway and Canada shows that teachers often feel less competent in distinguishing between healthy, problematic, and harmful sexual behavior, as well as a lack of support and cooperation between institutions in handling related cases (Almanssori, 2022; Draugedalen, 2023). In addition, there are significant differences in the implementation of reproductive health education in schools, depending on school policies, priorities, and supportive environments (Walker et al., 2020). Comprehensive sexuality education is still not integrated into school curricula, and child-friendly essential sexual and reproductive health service standards are not fully met (Handayani et al., 2019).

Reproductive and sexual health education in Special Schools, also known as Sekolah Luar Biasa (SLB), is essential because students with special needs are at higher risk of sexual violence and poor reproductive health. Like children with intellectual disabilities, they often behave incorrectly in order to maintain their reproductive health and interpret and respond to the behaviour of others. Students with special needs have the same right to receive reproductive health and sexuality education (Michielsen & Brockschmidt, 2021). To ensure comprehensive and adequate reproductive and sexuality education for people with disabilities, teachers must facilitate inclusive learning and discussion about reproductive health and sexuality (Roden et al., 2020). This education should not only focus on biological aspects but also include psychosocial aspects, healthy relationships, and reproductive rights (Schneider & Hirsch, 2020).

Students with special needs often do not receive adequate reproductive health education, which focuses only on the biological aspects of the human body without including other important aspects, such as the prevention of sexual violence or how to maintain reproductive health independently, even though sex education is essential for students, despite the stigma that still considers it taboo (Prawira & Aprilia, 2024; Wahyuni et al., 2023). This lack of understanding exacerbates the vulnerability of students with special needs to sexual exploitation and other reproductive health issues. Students with special needs face significant challenges in understanding basic concepts of reproduction and sexuality, making them more susceptible to sexual abuse (Galih & Azizah, 2022).

Although there is awareness of the importance of reproductive health education among teachers of students with special needs, a lack of confidence in delivering this material is one of the obstacles that

needs to be addressed. Limited teacher training is one of the main obstacles to reproductive and sexual health education for students with special needs (Prawira & Aprilia, 2024). However, training on reproductive health and sexuality education for students with special needs can serve as a platform to provide comprehensive knowledge about reproductive health and sexuality (O'Brien et al., 2021).

Other obstacles are related to the lack of supporting resources, such as adequate learning media, a poorly structured curriculum, and limited ability to deliver material inclusively and adaptively, thereby exacerbating the challenges of delivering reproductive health education in special needs schools (SLB) (Utami et al., 2024). Strengthening is needed so that teachers can improve their competence in delivering reproductive and sexuality education to students with special needs. Training or discussions are considered adequate for strengthening teachers' understanding and competencies in the context of reproductive and sexuality health education and teaching (Purnomo et al., 2021). Improving teachers' professional competencies for students with special needs, including pedagogical knowledge and motivation, significantly impacts the quality of teaching and the development of students with special needs (Kunter et al., 2013).

This study examines teachers' understanding of reproductive health and sexuality education for students with special needs. It hopes to describe teachers' competencies in teaching reproductive health and sexuality to students with special needs. In addition, several other efforts teachers can take for students with special needs will be described so that teachers' understanding of reproductive health and sexuality education for students with special needs can be further improved.

LITERATURE REVIEW

Basic Concepts of Reproductive and Sexual Health Education

The literature shows that students with special needs are often neglected in reproductive and sexuality education, either because of the assumption that they "do not need" this education or because parents and educators find it challenging to discuss these topics. Existing barriers related to teachers' mastery of the subject matter and pedagogical skills pose additional challenges to teaching reproductive and sexuality health education to students with special needs (Davies et al., 2022). However, students with special needs also have the same right to understand their bodies, the biological processes of reproduction, and the emotional and social aspects of sexuality (Petronela W. M. et al., 2021). In addition, reproductive health education helps prevent sexual violence, provides an understanding of consent, and equips students with special needs with the skills to maintain their privacy and safety (Yuliza et al., 2023).

Reproductive and sexual health education aims to provide a comprehensive understanding of the biological, psychological, and social aspects of human sexuality, thereby enabling individuals to take responsibility for their reproductive and sexual health (Kolifah et al., 2023; Permatasari & Suprayitno, 2021). Teachers teach reproductive health and sexuality education in schools from an early age to higher education (Furwasyih et al., 2022). Parents are equally important in teaching reproductive health and sexuality, even from an early age (Adeline & Tummanggor, 2023).

Reproductive and Sexual Health Education for Students with Special Needs

Schools have a responsibility to implement reproductive and sexual health education, especially for students with special needs. This knowledge can increase awareness in formal and informal schools (Kholis & Pranoto, 2022). Additionally, issues related to reproductive health and sexuality for students with special needs require collaborative efforts to ensure they are equipped to address challenges related to reproductive health and sexuality education, thereby improving their quality of life (Sunesni et al., 2023).

Students with special needs have the same rights and equality to access knowledge and skills to protect themselves and make informed decisions regarding their reproductive health and sexuality (Wu & Zeng, 2020).

Commitment to reproductive health and sexuality awareness for children with special needs is a shared responsibility (Nelson et al., 2020). Implementing this approach in schools poses a particular challenge because, in some cases, conversations or discussions about reproductive health and sexuality are still minimal (Davies et al., 2022). Policymakers and school administrators must strive to increase this awareness. Children with special needs require guidance from teachers to enhance their awareness of reproductive health and sexuality.

METHODS

This study used a quantitative approach with a one-group pretest-posttest design to examine the increased understanding of special needs school (SLB) teachers regarding reproductive health and sexuality education. The population of this study was all SLB teachers in the city of Bandung. The sample consisted of 15 SLB teachers selected purposively based on the criteria that they had taught reproductive health and sexuality in their respective schools and had never participated in training to strengthen their knowledge of these topics. Data were collected using a pretest and posttest to measure teachers' understanding of reproductive health and sexuality education. The test consisted of 20 multiple-choice questions assessing teachers' understanding of key topics, such as reproductive anatomy, puberty, prevention of sexual violence, and inclusive teaching methods. The instrument was developed based on relevant literature and reviewed by education experts before being used in this study to ensure that the questions asked aligned with the research objectives. The pretest and posttest data were analyzed using descriptive statistics to calculate the mean, standard deviation, and gain score (the difference between the pretest and posttest scores). To test the significance of the increase in teacher competence, a non-parametric statistical test was conducted using the Wilcoxon Signed-Rank Test with a significance level of 95% ($p < 0.05$).

RESULTS AND DISCUSSION

Based on the analysis of data collected through pretests and posttests, it can be seen that the posttest results show an improvement compared to the pretest results. Initially, SLB teachers, as research subjects, were given pretests, followed by treatment. SLB teachers were given training, materials, and discussions related to reproductive health and sexuality for students with special needs. The training, materials, and discussions were delivered using the In-On-In system, which consists of three main stages. The first stage was In-Service Training 1, which lasted for 10 hours of training and focused on theoretical learning. At this stage, SLB teachers received materials on reproductive health and sexuality education, including the anatomy and physiology of reproductive organs, puberty, gender-based violence, and the development of assessment instruments for reproductive health education.

The second stage is on-the-job Training, where teachers apply the knowledge they have learned at their respective schools during 16 hours of training. At this stage, SLB teachers teach reproductive health and sexuality education to students with special needs, adapting the teaching modules to the students' needs. Teachers also assess the application of the material in their respective classrooms. Facilitators assist teachers in providing feedback and ensuring effective implementation.

The final stage is In-Service Training 2, which lasts 6 hours. At this stage, teachers present the results of the on-the-job Training activities to the facilitators and fellow participants. This activity also includes reflection, evaluation, and discussion sessions to provide feedback and further development. Following

this session, each participant must submit a final report containing revisions and reflections on implementing reproductive health education at their respective schools.

The improvement in the pretest and posttest results can be seen in **Table 1** below.

Table 1. Pre-test and Post-test Results

No	School	Teacher's Name	Score <i>Pretest</i>	Score <i>Posttest</i>	Score Difference
1	SLB P. I.	IR	14	25	11
2		DS	17	21	4
3		EK	15	18	3
4	SLB A. Z.	RQ	15	23	8
5		FB	16	21	5
6		BN	15	20	5
7	SLB BC Y. W.	BF	17	20	3
8		FQ	8	16	8
9		ND	13	16	3
10	SLB BC N. A.	SM	12	16	4
11		LL	12	18	6
12		MW	13	18	5
13	SLB Mh.	SK	14	19	5
14	SLB S. P.	EP	11	18	7
15		SKJ	16	18	2
			208	287	17
			13,87	19,13	5,26

Source: research 2024

Table 1 above shows the pretest and posttest results of 15 teachers during the research and illustrates an increase in scores. The maximum score for the test was 25 points. Based on the pretest and posttest results, the average score of teachers increased from 13.87 points to 19.13 points with an average gain score of 5.26 points. For more details on the increase in scores on the posttest, see **Figure 1** below.

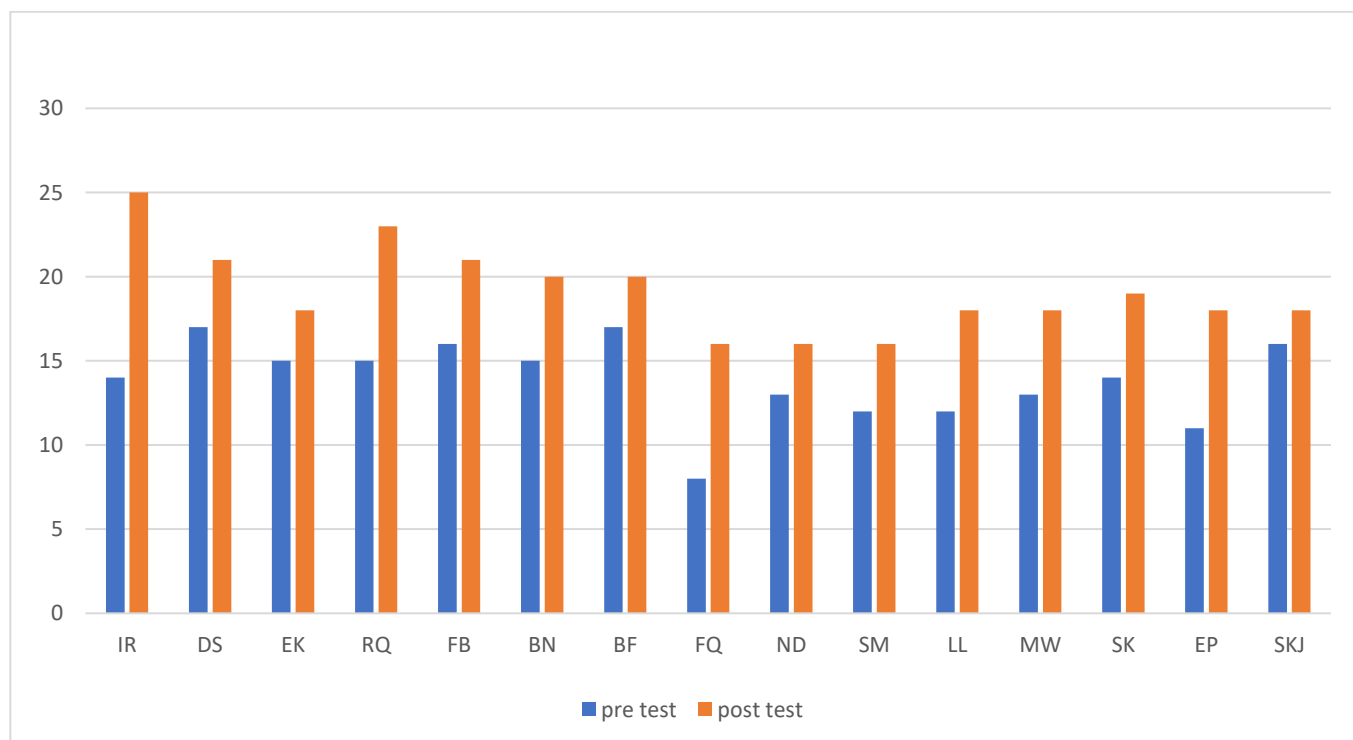


Figure 1. Percentage of pretest and post-test results
 Source: Research 2024

Figure 1 above compares the pretest and posttest scores obtained from the research results. The Y-axis represents the scores with a maximum score of 25 points, while the X-axis represents the initials of the SLB teachers as the research subjects. Each SLB teacher has two bars, one for the pretest and one for the posttest scores. Based on **Figure 1** above, the scores obtained on the posttest increased, and one research subject even obtained the maximum score of 25 points. These scores indicate that all special needs teachers who were the subjects of this study understand reproductive health and sexuality education for students with special needs. A statistical test was conducted to determine the significance of this increase. The results of the normality test can be seen in **Table 2** below.

Table 2. Normality Test

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre Test	.145	15	.200*	.937	15	.348
Post Test	.203	15	.098	.913	15	.150

Source: research 2024

Decision criteria

If p-value = 0.05, then reject. H_0

If the p-value is 0.05, then accept H_0

Conclusion

Since the p-value = 0.001 0.05, accept H_0 , meaning the data is abnormal.

Next, the Wilcoxon test was performed because the number of data points was less than 30 and the data was not normally distributed. The results of the Wilcoxon test are shown in **Table 3**.

Table 3. Wilcoxon Test Results

Related-Samples Wilcoxon Signed Rank Test Summary	
Total N	15
Test Statistic	120.000
Standard Error	17.550
Standardized Test Statistic	3.419
Asymptotic Sig.(2-sided test)	.001

Source: research 2024

Kriteria keputusan

Jika $p \text{ value} \leq 0,05$ maka Tolak H_0

Jika $p \text{ value} > 0,05$ maka Terima H_0

The conclusion from the test is that the $p\text{-value} = 0.001 < 0.05$, so H_0 is rejected, meaning there is a significant difference between the pretest and posttest. Thus, it can be stated that the increase in scores in this study is significant at a 95% confidence level ($p < 0.05$). This indicates that the training, materials, and discussions provided to special education teachers effectively improve their understanding of reproductive health and sexuality education for students with special needs..

Discussion

Based on the results of the study, it can be seen that SLB teachers experienced an increase in scores after being given treatment through discussions, materials, and training. The average increase in scores was 5.26 points. This shows the effectiveness of the efforts made to improve SLB teachers' understanding of reproductive health and sexuality education for students with special needs. Before receiving treatment, SLB teachers showed limitations in teaching complex material such as reproductive health and sexuality education for students with special needs. SLB teachers face challenges regarding readiness and infrastructure support (Kholis & Pranoto, 2020). Several teachers said that one of the obstacles they faced was a lack of confidence and limited knowledge in adapting teaching methods to the needs of students with special needs, especially when discussing topics that are considered taboo. This finding is consistent with other studies indicating that teachers often feel pedagogically unprepared to teach sensitive topics without specialized training (Nelson et al., 2020). Special education teachers require mentoring, training, discussions, and adequate materials to significantly enhance their confidence and abilities and to adapt teaching materials and methods to the characteristics of students with special needs (Prawira & Aprilia, 2024).

Teachers with low pretest scores improved significantly after receiving materials, discussions, and training. This indicates that the treatment provided helped teachers who had initial limitations in understanding the topic of reproductive health and sexuality of students with special needs. This supports the theory that practice-based training and continuous guidance enable teachers to continuously improve their teaching methods following the developments they experience in the field (Kunter et al., 2013). Research has shown that practice-based teacher training and direct guidance, such as the In-On-In model used in this study, are more effective in improving teachers' understanding than theory-based training alone. Field practice and continuous guidance enable teachers to effectively apply the knowledge they have acquired while receiving feedback to improve their teaching methods (Nelson et al., 2020). This is particularly important in the context of reproductive health and sexuality education for students with special needs in SLBs, where teachers face complex challenges in delivering material that is appropriate for students with special

needs. In the In-On-In model, SLB teachers are offered a unique approach that combines theory, field practice, and ongoing guidance. SLB teachers can be encouraged to apply the knowledge gained directly in the field while receiving ongoing guidance. This integrated approach allows teachers to practice the theory they have learned with adequate support, improving their teaching skills and strategies more effectively (Purnomo et al., 2021).

SLB teachers require assistance to improve their knowledge and skills in providing reproductive and sexuality education to students with special needs, as this is related to the prevention of sexual abuse and violence against children with special needs (Ummah et al., 2023). The material's highly sensitive and taboo nature poses a particular challenge for teachers. In addition, the diverse conditions of students with special needs must be taken into consideration to ensure that information about reproductive and sexuality education for students with special needs is adequately conveyed and accurately, and understood by students with special needs (Paramesthi & Rahardjo, 2021). Reproductive health and sexuality education for students with special needs is the responsibility of all parties. Teachers play a central role in its delivery at school, making the material crucial for understanding. Based on the research findings, there are several key considerations for special education teachers to ensure that reproductive health and sexuality education for students with special needs is effectively achieved. SLB teachers need to understand the basics of reproductive health and sexuality accurately. Additionally, teachers must master adaptive and inclusive methods of delivering the material, as well as communication skills and psychological approaches to create a sense of safety for students receiving reproductive health and sexuality education for students with special needs. With appropriate guidance and materials, this can be achieved, thereby enhancing the competencies of SLB teachers as well.

The competencies possessed by SLB teachers serve as preparation for dealing directly with students with special needs in schools. Teachers feel better prepared to deal with issues related to reproductive health and sexuality among students with special needs after participating in competency refresher courses through training or discussions. Refresher courses are necessary to ensure teachers are always prepared for various possibilities (Lubis et al., 2024). This refresher training is not only in the form of providing material, discussions, and training, but also relates to teachers' understanding of the media that will be used for reproductive health and sexuality education for students with special needs. In the In-On-In session that was attended, SLB teachers identified the most appropriate learning media to be used in their respective classrooms. Using interactive learning media, learning videos, and digital pop-ups is not impossible (Januarti et al., 2023; Mansur et al., 2023; Padmadiani et al., 2021).

Systematically planned, continuous, and comprehensive training and professional discussions have a significant impact on improving teachers' competence, particularly in the area of reproductive and sexual health education. This enhancement, in turn, improves the overall quality and effectiveness of reproductive and sexual health education in special needs schools. Teachers are responsible for delivering accurate, age-appropriate, and sensitive sex education across all levels of education, from early childhood to higher education (Furwasyih et al., 2022). Given the importance of this subject, regular refreshment and updating of competencies are crucial. One effective method is the In-On-In training approach, which combines in-service instruction, field application, and follow-up mentoring. This model strengthens teachers' theoretical understanding and builds their practical teaching skills. As a result, it helps ensure that reproductive health and sexuality education for students with special needs is delivered in a more informed, confident, and impactful manner.

CONCLUSION

The provision of materials, structured discussions, and training using the In-On-In model has proven to be highly effective in enhancing the competence of Sekolah Luar Biasa (SLB) teachers in delivering

reproductive health and sexuality education to students with special needs. The significant increase in average scores from the pretest to the posttest indicates that a training approach combining theoretical understanding, practical application in the field, and ongoing mentoring or supervision can significantly improve both the knowledge and pedagogical abilities of SLB teachers. This improvement is especially relevant in teaching sensitive subjects such as reproductive health and sexuality. These findings are consistent with previous research, which shows that hands-on training and continuous professional support positively impact teaching performance, particularly in the special education setting. Teachers who participated in the program reported increased confidence and competence in delivering complex material related to reproductive health. They also gained more flexibility and creativity in adapting teaching strategies to fit the unique needs of their students. Additionally, they explored and utilized various learning media to enhance the effectiveness and accessibility of reproductive and sexual health education for students with special needs.

This study has several limitations that must be acknowledged and considered when interpreting the findings. First, the sample size was small, involving only 15 SLB teachers. While the results provide valuable insights, the limited number of participants may not fully represent the broader population of SLB teachers across different regions or educational settings. As a result, the generalizability of the findings to a broader context may be limited. Second, this study primarily relied on quantitative measurements through pre- and post-tests to assess improvements in teacher competence. While this method effectively captures changes in knowledge levels, it does not provide a deeper understanding of qualitative aspects, such as the personal experiences of teachers during the training, the emotional or psychological responses they had, or the practical challenges they encountered in implementing the new material in their classrooms. Third, the study focused only on short-term gains in understanding and did not include a follow-up evaluation to determine whether the improvements in teacher competence were sustained over time. Without long-term tracking, it is unclear whether the knowledge and skills acquired during training continue to influence teaching practices in the following months or years. Despite these limitations, the In-On-In training model used in this study proved to be more effective than traditional training methods, as it allowed teachers to apply theoretical knowledge directly in authentic classroom contexts while receiving ongoing support and feedback. Future research is recommended to examine the long-term impacts of this model, explore its adaptability across diverse educational settings, and investigate the benefits of combining the In-On-In approach with complementary methods such as coaching, mentoring, or peer learning to enhance further teaching effectiveness and the sustainability of professional development programs for special education teachers.

AUTHOR'S NOTE

The author declares that there are no conflicts of interest related to the publication of this article and emphasizes that the data and content are free from plagiarism.

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REFERENCES

- Adeline, C., & Tumanggor, R. O. (2023). Persepsi orang tua terhadap pemberian pendidikan seks pada anak berkebutuhan khusus di usia dini. *Jurnal Muara Medika dan Psikologi Klinis*, 3(2), 101-107.
- Allen, K., Livingston, J., & Nickerson, A. (2020). Child sexual abuse prevention education: A qualitative study of teachers' experiences implementing the second step child protection unit. *American Journal of Sexuality Education*, 15(1), 218 - 245.

- Almanssori, S. (2022). Sexual violence prevention is missing in teacher education: Perspectives of teacher candidates on prevention education. *Sex Education*, 23(1), 662 - 676.
- Chavula, M. P., Zulu, J. M., & Hurtig, A. K. (2022). Factors influencing the integration of comprehensive sexuality education into educational systems in low-and middle-income countries: A systematic review. *Reproductive health*, 19(1), 1-25.
- Davies, A. W., Balter, A. S., van Rhijn, T., Spracklin, J., Maich, K., & Soud, R. (2022). Sexuality education for children and youth with autism spectrum disorder in Canada. *Intervention in School and Clinic*, 58(2), 129-134.
- Draugedalen, K. (2023). Supporting teachers in safeguarding against harmful sexual behaviour: service providers' perspectives on transformative practices. *London Review of Education*, 21(4), 1-13.
- Furwasyih, D., Sunesni, S. & Edyyul, I. A. (2022). Pengaruh pemberian edukasi tentang pendidikan seksual pada anak berkebutuhan khusus dengan tingkat pengetahuan guru Sekolah Luar Biasa (SLB). *Jurnal Kesehatan Mercusuar*, 5(2), 33-40.
- Galih, D., & Azizah, N. (2022). Reproductive and sexual health education in students with intellectual disabilities: A systematic review. *Jurnal Ilmu Pendidikan*, 28(1), 14-20.
- Handayani, E. S., Yamtinah, S., & Kristiyanto, A. (2019). Analisis kebutuhan guru Sekolah Luar Biasa (SLB) terhadap program pendidikan seksual bagi siswa tunarungu. *Prosiding Seminar Nasional Kesehatan Masyarakat Universitas Muhammadiyah Surakarta 2019*, 1(1), 1-10.
- Januarti, L., Suryaningsih, M., & Aini, Q. (2023). Pop-up digital for disability tunagrahita pencegahan pelecehan seksual pada anak tuna grahita di SLB Samudra Lavender. *Jurnal Pengabdian kepada Masyarakat Wahana Usada*, 5(2), 135-149.
- Kholis, M., & Pranoto, Y. K. S. (2022). Literatur review: Efektivitas penerapan pendidikan seksual di sekolah formal untuk anak usia dini. *Prosiding Seminar Nasional Pascasarjana*, 5(1), 635-640.
- Kolifah, K., Faizah, N. L., & Aliza, A. D. (2023). Pendidikan kesehatan reproduksi dan seksualitas pada remaja SMPLB hambatan intelektual untuk mencegah terjadinya kekerasan seksual di Kabupaten Jombang. *Journal of Health Innovation and Community Service*, 2(2), 59-64.
- Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology*, 105(3), 805-820.
- Lubis, K., Purba, H., & Syukri, M. (2024). Pembelajaran ibadah Shalat bagi Anak Berkebutuhan Khusus (ABK) tuna grahita di SLB E Negeri Pembina Medan Sumatera Utara. *Ansiru PAI: Pengembangan Profesi Guru Pendidikan Agama Islam*, 8(1), 25-36.
- Mansur, A. R., Sari, I. M., Deswita, D., Neherta, M., Fajria, L., Farlina, M., ... & Yuni, A. R. (2023). Meningkatkan kesadaran remaja tunagrahita tentang pencegahan kekerasan seksual melalui media video. *Jurnal Sipissangngi: Jurnal Pengabdian kepada Masyarakat*, 3(2), 117-123.
- Michielsen, K., & Brockschmidt, L. (2021). Barriers to sexuality education for children and young people with disabilities in the WHO European region: A scoping review. *Sex Education*, 21(6), 674-692.
- Nelson, B., Odberg Pettersson, K., & Emmelin, M. (2020). Experiences of teaching sexual and reproductive health to students with intellectual disabilities. *Sex Education*, 20(4), 398-412.

- O'Brien, H., Hendriks, J., & Burns, S. (2021). Teacher training organisations and their preparation of the pre-service teacher to deliver comprehensive sexuality education in the school setting: A systematic literature review. *Sex Education*, 21(3), 284-303.
- Padmadiani, A., Jauhari, M. N., & Badiah, L. I. (2021). Pengaruh media pembelajaran interaktif untuk pendidikan seks usia dini bagi siswa tunagrahita. *Special and Inclusive Education Journal (Special)*, 2(2), 110-118.
- Paramesthi, M. H. P., & Rahardjo, T. (2021). Kompetensi komunikasi guru SLB mengenai pendidikan seks usia dini pada anak berkebutuhan khusus tunarungu. *Interaksi Online*, 9(3), 136-150.
- Permatasari, D., & Suprayitno, E. (2021). Pendidikan kesehatan reproduksi pada remaja. *Jurnal Empathy Pengabdian kepada Masyarakat*, 2(1), 8-12.
- Petronela W. M., M., Soebiyanto, A. W., & Limijadi, E. K. S. (2021). Analisis pelaksanaan pemenuhan hak atas informasi dan hak kesehatan reproduksi perempuan penyandang disabilitas di Kota Semarang. *Jurnal USM Law Review*, 4(2), 547-564.
- Plaza-del-Pino, F. J., Soliani, I., Fernández-Sola, C., Molina-García, J. J., Ventura-Miranda, M. I., Pomares-Callejón, M. Á., ... & Ruiz-Fernández, M. D. (2021). Primary school teachers' perspective of sexual education in Spain: A qualitative study. *Healthcare*, 9(3), 1-12.
- Prawira, A., & Aprilia, I. D. (2024). Sexual and reproductive health education: A case study at Pembina Pekanbaru Special School. *Journal of ICSAR*, 8(2), 230-236.
- Purnomo, E. A., Surachman, T., & Susanto, A. (2021). Effectiveness of service training based on education and training model On-In-On-In for dual skills program. *Journal of Vocational Education and Training*, 73(2), 178-193.
- Roden, R.C., Schmidt, E. K., & Holland-Hall, C. (2020). Sexual health education for adolescents and young adults with intellectual and developmental disabilities: recommendations for accessible sexual and reproductive health information. *The Lancet Child and Adolescent Health*, 4(9), 699-708.
- Schneider, M., & Hirsch, J. (2020). Comprehensive sexuality education as a primary prevention strategy for sexual violence perpetration. *Trauma, Violence, and Abuse*, 21(1), 439-455.
- Sunesni, S., Furwasyih, D., Edyyul, I. A., Padma, J., Hayati, I. I., Maisiska, L., ... & Analika, V. P. (2023). Pelatihan tentang kesehatan reproduksi remaja disabilitas intelektual pada guru SLB Kota Padang. *Jurnal Kreativitas Pengabdian kepada Masyarakat (PKM)*, 6(10), 4203-4217.
- Ummah, S. M., Akmalia, D. N., Maura, A. S., Avianika, K. A., & Hamidah, S. (2023). Pendidikan seks bagi anak tunagrahita di SLB Purnama Asih. *Jurnal Bintang Pendidikan Indonesia*, 1(2), 169-176.
- Utami, D. R. R. B., Nurwati, I., & Lestari, A. (2024). School-based sexual and reproductive health education among adolescents in developing countries. *International Journal of Public Health Science*, 13(1), 141-149.
- Wahyuni, H. I., Faradita, M. N., & Syarifurrahman, I. (2023). Paradigma guru sekolah dasar tentang edukasi seksual sejak dini sebagai implementasi sekolah ramah anak. *Anterior Jurnal*, 22(2), 88-93.
- Walker, R., Drakeley, S., Welch, R., Leahy, D., & Boyle, J. (2021). Teachers' perspectives of sexual and reproductive health education in primary and secondary schools: a systematic review of qualitative studies. *Sex Education*, 21(6), 627-644.

- Wu, J., & Zeng, S. (2020). Sexuality education for children and youth with disabilities in Mainland China: Systematic review of thirty years. *Children and Youth Services Review*, 116(1), 1-6.
- Yuliza, W. T., Yanti, M., & Handiny, F. (2023). Implementasi kebijakan pendidikan kesehatan pada anak berkebutuhan khusus di SLB YPPLB Padang. *JIK Jurnal Ilmu Kesehatan*, 7(2), 372-380.