The International Association of Special Education	Ho Chi Minh City University of Education

"Building an Inclusive Culture Worldwide"

Proceedings of The

17th Biennial Conference of the International Association of Special Education

Ho Chi Minh City, Vietnam, July 10–14, 2022

Editors

Gulnoza Yakubova
Nga Hoang Thi
Huong Pham Thi
Elizabeth Dalton
Iris Drower
Hoa Nguyen Thanh
Matthew Lucas
Kalynn Pistorio

An Independent Publication of the International Association of Special Education ISBN: 978-0-9890212-4-1

Aims of the IASE

- To promote professional exchange among special educators all over the world.
- To develop special education as a discipline and profession.
- To encourage international cooperation and collaborative international research.
- To promote continuing education of its members by organizing conferences in different countries around the world.
- To foster international communication in special education through *The Journal of The International Association of Special Education.*

Conference held in collaboration with

Ho Chi Minh City University of Education

Table of Contents

Preface/i

Investigation: Symbolic Play and Expressive Language's Correlation of Children with Autism Spectrum Disorder. – Nguyen Thi Anh Thu, Hoang Thi Nho/ 1

Model Early Intervention for Children with Autism in Vietnam. – My Cao Thi Xuan, Nho Hoang Thi, Thanh Nguyen Chi/ 3

Impact of COVID-19 Pandemic on Non-Public Special Education Teachers and Psychological Support. – Le Thi Minh Ha/6

Examining Pre-Service Teachers' Self-Efficacy For Gender Equality Practice: A Comparison Of Elementary And Secondary School Teachers' Perceptions In Spain. – María C. Cardona-Moltó, Cristina Miralles-Cardona, Esther Chiner, Marcos Gómez-Puerta/8

The Model of Child Care and Education in Vietnam's Ethnic Minority Areas. – Chu Thi Hong Nhung, Hoang Thi Nho/11

Customized Employment Research and Application for School-to-Work. – Tim Riesen/14

Developing Role Playing Skills for Children with Autism Spectrum Disorder. – Nguyen Thi Tan/16

Preparing and Supporting Early Intervention Teachers of Children with Disabilities. – Robert A. Gable, Hoang Thi Nga Khoa Gddb/19

Using Fable to Set Proficiency Goals for Foundational Reading in India. – Radhika Misquitta/21

Promoting the Use of Evidence-Based Practices on Behalf of Students with Disabilities. – Robert A. Gable, Do Thi Thanh Thuy/23

Home-Based Intervention Model for Children with Developmental Disabilities. – Ngan Chu, Nhung Quach/25

Making Tactile Books to Develop Literacy for Children with Visual Impairments. – Trinh Thi Thu Thanh, Nguyen Thi Hang, Louise France/28

A Critical Analysis of Exclusionary Language in 16 Countries' National Laws and Policies. – Julie A. Sears, Lisa G. Driscoll, Jennifer A. Sughrue/37

The Interprofessional Process for Developing a Toolkit for Autism Spectrum Disorder for Rural Areas of South Africa. – Julie A. Sears, Tatiana Ransom, Brenda Louw/39

Socio-Emotional Skills of Children with Hearing Impairment in Kwara State, Nigeria. – Olabisi Adedigba, Bolanle Olabisi Olawuyi/40

The Initial Application of the Basics 3 Curriculum Framework in Vietnam: Practical Experiences. – Huynh Thi Hoang Oanh, Hoang Thi Nga, Hoang Truong Thuy An, Craig Goldsberry/43

Attitudes Towards People with Disabilities and Stress in Work: Special Education Teacher's Perspective. – Nguyen Thi Thanh Huyen/45

Supporting Adolescents with Autism Spectrum Disorders during COVID-19 Pandemic in Vietnam. – Thi-Thao Do, Thi-Cam-Huong Nguyen, Cong-Khanh Nguyen, Nu-Tam-An Nguyen, Thi-Bich-Ngoc Tran, Hoai-Thuong Nguyen/47

Education for Gifted Students with Learning Disabilities: Changing from Assessment Aspect. – Thi-Cam-Huong Nguyen/49

Residential College Experiences for Individuals with Intellectual Disabilities. – Mary Lindell, Jessica Daniels/51

Social Skills of Pupils with Intellectual Disability for Inclusive Culture. – Udeme Samuel Jacob, Esther O. Oyefeso, Oladunni C. Iyanda, Jace Pillay/53

Training Teachers in Universal Design of Learning. – Sujata Bhan, Apoorva Panshikar/55

Applying the CRA Instructional Sequence to Improve Basic Mathematics Knowledge and Skills for First-Grade and Second-Grade Students with Intellectual Disabilities. – *Tam Le Thi*//57

Training Teachers in India/UAE Online: UDL Basics and Applications. – Elizabeth Dalton, Susie Gronseth, Sujata Bhan, Betty Abraham/59

Early Childhood Inclusion for Children with Disabilities: Perspectives of School Administrators. – Huynh Thi Hoang Oanh, Hoang Truong Thuy An, Nguyen Thanh Hoa, Nguyen Thi Ngoc Nga/62

Knowledge and the Needs of Parents who Have Children with Autism Spectrum Disorder in Gesture Communication. – Phan Thieu Xuan Giang, Nguyen Thi Thu/65

PREFACE

Welcome to the proceedings of the 17th biennial conference of the International Association of Special Education (IASE). The theme of the conference is *"Building an Inclusive Culture Worldwide."* The IASE biennial conferences bring together special educators, families, and other interested professionals and individuals to share ideas and experiences, celebrate accomplishments, and create and renew friendships. This conference is an opportunity to learn about ways to empower individuals with disabilities and to promote sustainable development of inclusive practices.

We appreciate everyone who has been involved in making this conference successful including the presenters, organizers, and participants.

Editors

INVESTIGATION: SYMBOLIC PLAY AND EXPRESSIVE LANGUAGE'S CORRELATION OF CHILDREN WITH AUTISM SPECTRUM DISORDER

Nguyen Thi Anh Thu and Hoang Thi Nho

Conceptual Framework and Background

According to the United Nations (2008), "Autism is a form of a developmental disability that persists throughout life, usually appearing during the first three years of life. Autism is caused by neurological disorders that affect the functioning of the brain. Autism can occur in any individual regardless of gender, race, or socioeconomic status.(n.p.)" Expressive language impairments are very common and are considered a defining feature of children with autism spectrum disorder. One in four children with autism spectrum disorder never speak. Some children can only imitate animal calls, making meaningless sounds. The remaining children can develop language but often slower than average (Overview of Autism - Autism Research Center USA - Autism Research Institute). Some children never pass the parody stage. Others may begin to say some of the words and phrases they come up with (Prizant et al., 1997).

Children with autism often have difficulty in symbolic-play ability (Wetherby et al., 2004). They have difficulty associating an image of the real world with its pretend object or toy (Leslie, 1987). The symbolic play ability of children with autism lacks variety and complexity. Instead, it is repetitive and limited (Lee et al., 2016).

Therefore, many studies worldwide have conducted research that show a direct correlation between the symbolic-play ability with other developmental areas of children with autism, especially with expressive language. According to one study (Bigham et al., 2007) language delays predict the difficulties of children with autism in symbolic-play ability. Another study found a relationship between symbolic-play ability and expressive language capacity in autistic children. Thus, increases in symbolic play were associated with increases in expressive language skills (Chang et al., 2018). However, there have not been many studies on the correlation between symbolic-play ability and expressive language capacity of children with autism in Vietnam.

This Study

This study was conducted by using a questionnaire design for two months from December 2021 to February 2022. Participants included 122 teachers and parents who worked with children with disabilities in inclusive, integrated and specialized schools in Hanoi (*n = 47/122),* Hung Yen (*n = 15/122),* Hai Phong *(n = 14/122),* Buon Me Thuot *(n = 7/122),* Ho Chi Minh city *(n = 16/122),* Nha Trang *(n = 7/122),* Vinh Phuc *(n = 3/122),* Dak Lak *(n = 3/122),* Bac Ninh *(n = 1/22),* Binh Dinh *(n = 1/122),* Lam Dong *(n = 6/122)* and Binh Phuoc (*n = 1/122)*. There were nineteen questions in the survey for teachers and twelve questions in the survey for parents. Because of the COVID-19 epidemic, the authors created a survey using the survey management software Google Form and sent it to teachers via email and other social networks such as Facebook, Zalo, Viber.

Results

The findings indicate a close correlation between symbolic-play age and the total features of the expressive language of autistic children aged 5 – 6 years old: r = 0.418. This is the positive correlation. This result also shows an interaction between symbolic play and the field of expressive language. When children play games that develop the symbolic-play ability, their expressive language is strengthened and improved. At the same time, when children have good expressive language, their ability to participate in games that improve symbolic-play ability is

also better. There is a correlation between symbolic-play ability and characteristics of the expressive language age of autistic children but not high: r = 0.306. This is a positive correlation. The higher the age of development in expressive language, the better the child's symbolic-play ability. There are positive correlations between the symbolic-play ability and the ability to speak clearly; use words indicating names, actions, properties, and expressive words in daily life; use different types of sentences in communication; use words to express one's feelings, needs, thoughts, and experiences; and retell stories heard in a certain sequence of autistic children. The correlation is: r = 0.322; r = 0.323; r = 0.465; r = 0.356; r = 0.289 respectively. This result shows that the better the child's symbolic-play ability, the better the child's ability to speak clearly; use words indicating names, actions, properties, and expressive words in daily life; use different types of sentences in communication; use words to express one's feelings, needs, thoughts, and experiences; retell stories heard in a certain sequence. At the same time, the better the child's ability to speak clearly; use words indicating names, actions, properties, and expressive words in daily life; use different types of sentences in communication; use words to express one's feelings, needs, thoughts, and experiences; retell stories heard in a certain sequence, the better his ability to participate in games that develop his symbolic-play ability.

Recommendations

Educational institutions for children with autism should provide more training on play techniques and procedures, as well as increase the amount of time spent on play activities to help children acquire expressive language. It is necessary to include a variety of play resources, recommendations for play circumstances, and visual supporting play settings in the play corners to assist children with autism comprehend play situations and perform expressive language appropriately. Experiential activities and visits should be conducted more frequently to provide practical lessons to children with autism, so contributing to the development of symbolic-play capacity.

Suggestions for Future Research

Future research should be conducted to directly test the language level of children with autism. Measuring language samples of children with autism at various degrees of autism, for example, or investigating the relationship between the level of play and language of children with autism at other ages.

References

Bigham, S. A., & Bourchier-Sutton, A. (2007). The decontextualization of form and function in the development of pretense. *British Journal of Developmental Psychology*, *25*(3), 335-351.

Chang, Y. C., Shih, W., Landa, R., Kaiser, A., & Kasari, C. (2018). Symbolic play in school-aged minimally verbal children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *48*(5), 1436-1445.

Lee, Y. C., Chan, P. C., Lin, S. K., Chen, C. T., Huang, C. Y., & Chen, K. L. (2016). Correlation patterns between pretend play and playfulness in children with autism spectrum disorder, developmental delay, and typical development. *Research in Autism Spectrum Disorders*, *24*, 29-38.

Leslie, A. M. (1987). Pretense and representation: The origins of "theory of mind." *Psychological Review*, *94*(4), 412–426. https://doi.org/10.1037/0033-295X.94.4.412

Prizant, B. M., Schuler, A. L., Wetherby, A. M., & Rydell, P. (1997). Enhancing language and communication: Language approaches. In D. Cohen & F. Volkmar (Eds.), *Handbook of*

Autism and Pervasive Developmental Disorders (2nd ed., pp. 572– 605). New York: John Wiley

United Nations General Assembly. (2008). *Resolution adopted by the General Assembly on 18 December 2007: 62/139. World* Autism *Awareness Day* (UN Doc. A/RES/62/139). Retrieved from https://undocs.org/A/RES/62/139 Accessed 28 Sept 2018.

Wetherby, A. M., Woods, J., Allen, L., Cleary, J., Dickinson, H., & Lord, C. (2004). Early indicators of autism spectrum disorders in the second year of life. *Journal of Autism and Developmental Disorders*, *34*(5), 473-493.

Contact Information:

1. Nguyen Thi Anh Thu
Hanoi National University of Education
n.anhthu1799@gmail.com
136 Xuan Thuy, Cau Giay District, Ha Noi, Viet Nam

2. Hoang Thi Nho
Hanoi National University University of Education
htnho@vnu.edu.vn
G7 144 Xuan Thuy, Cau Giay District, Ha Noi, Viet Nam

About the authors:

Nguyen Thi Anh Thu – Doctoral student at the Faculty of Special Education, Hanoi National University of Education. She has participated in projects and works to support the education of children with disabilities.

Hoang Thi Nho – Ph.D., lecturer at University of Education, Hanoi National University. Participated in many projects, research, and works to support the education of early childhood children and children with disabilities. She is the author and co-author of books and textbooks in Early Childhood Education, Special Education.

MODEL EARLY INTERVENTION FOR CHILDREN WITH AUTISM IN VIETNAM

My Cao Thi Xuan, Nho Hoang Thi, and Thanh Nguyen Chi

Conceptual Framework and Background

The number of children diagnosed with autism spectrum disorder (ASD) has risen rapidly over the past decades. Currently, there are many different early intervention and support models in the world as well as in Vietnam. Globally, the current intervention models for children with disabilities mainly focus on: the center-based model, family-based model, and preschool-based model. Recent studies show that the most effective intervention for children with autism is based on a center-based model. However, with support from the center and community for parents of children with autism (Landa, 2018; Parsons et al., 2017), this method could prove to be even more effective. Parsons and colleagues (2017) expressed that when a parent-coaching intervention is provided, their parents have been guided in child-responsive engagement strategies and support combining parent-mediated and direct clinician-implemented intervention to maximize child developmental gains.

In Vietnam, similar models of intervention followed. According to research by Bui and Bui (2019) , the support model parents choose for children with disabilities typically includes: regular visits with special education teachers from special education and attendance to preschools in conjunction with early intervention centers. In addition, Cat et al. (2021) also launched a new model to support parents taking

care of children with autism during the epidemic utilizing online support and virtual trainning. The following questions guided this study: According to the assessment of parents and teachers, which model is the most widely used and prove to be the most effective? Are there any challenges during the process of early intervention for autistic children?

Research

This study was conducted using survey in the form of questionaire for the period of two months, from November 2021 to January 2022. This survey followed the self-administered approach in which the authors built a questionaire using the survey management software called Google Form and distributed it to teachers via email and other social networks such as Facebook, Zalo, Viber. Participants included 156 teachers who have experience working with children with disabilities in inclusive, integrated, and specialized schools in Hanoi, Ninh Thuan, Ho Chi Minh, Binh Duong, Da Nang, Hai Phong, Nha Trang, An Giang, Dong Nai, and 126 parents of children with autism. There were 10 questions for teachers on the following topics: types of intervention, frequency of intervention, goals of intervention, conditions of facilities where the intervention is located, and how to communicate with parents during the intervention process, favorable in the process of intervention for children with autism. There were 10 questions for parents on the following topics: type of intervention, assessment of progress after the intervention, frequency of communication with teachers during intervention for children, level of effectiveness of intervention implementation forms, the level of satisfaction with the early intervention model, and the characteristics of the facilities where the children receive the intervention.

Results

The results of the survey show that the most common form of intervention for children with disabilities is the center-based model. There are 68/156 votes from teachers and 49/126 votes from parents for the part-boarding at the center. However, many small-scale centers are formed, which do not meet the basic facilities and teachers' expertise requirements. Combination of semi-boarding and 1-1 intervention by the hour or inclusive education combined with home intervention are other selected intervention forms. In terms of the aspects affecting the effectiveness of early intervention models, two lowest rating factors are having support from interventional experts and therapists (58 comments accounting for 37.2%) and getting support from other community members (50 comments accounting for 32.1%). This proves that these aspects have not been properly taken into account in Vietnam.

Teachers and parents also gave ideas that can be used to improve the quality of early intervention. First, the number of individual intervention periods should be increased at school. Second, parents should reinforce and practice with their children according to the teacher's lesson in class. Third, parents and family members should extend the maximum support to their children during their time at home based on the special education center's educational plan. Another recommendation that requires an appropriate amount of attention is that intervention centers need to improve the quality of their facilities while taking how room conditions, physical activity affect sensory perception of children with autism into account.

Moreover, special education centers/schools should organize more training sessions for parents to share more specialized knowledge to them. There should be a much closer coordination between health facilities and education to support and combine the advantages of both of these forces in early intervention for children with autism. Specifically, there is a need to enhance the connection between the inclusive environment and specialized interventions.

Recommendations

There are some recommendations for the model of Intervention for Children with Autism in Vietnam. First, early intervention at the school/ center requires the coordination and participation of the child's parents in educational activities with the teacher/ interventionist. Second, the intervention center needs to have a connection with the affiliated schools to support and help each other prepare each step of the child's inclusive learning process. Next, it is important to have coordinating interdisciplinary forces to

better support both parents and children. Furthermore, there should be cooperation between professionals, parents and close coordination between forces (schools, intervention teachers, integration class teachers, families). Last but not least, the government should raise community awareness of care and education for children with disabilities, especially the awareness of health and education agency leaders.

Suggestions for Future Research

Further studies need to be conducted to learn about the factors affecting the effectiveness of early intervention modesl in Vietnam, which early intervention model effectively meets the needs of autistic children's families in Vietnam, effective multidisciplinary coordination mechanisms in early intervention models for children with autism in Vietnam today.

References

Bui.T. L & Bui.T.A.P, (2019). Model of individual supporting for children with disabilities in inclusive preschool. *Journal of Science, Hanoi National University of Education, 64* (9AB). Retrieved from http://stdb.hnue.edu.vn/portal/journals.php?volumeid=222

Cat, T. Q., Phuong, N. H., Ha, V. S., Huyen Thuong, ThS. H., Hoai Phuong, N. T., & Huong, N. M. (2022). Online training model for caregivers of children with autism to respond to the COVID – 19 pandemic. *Vietnam Psycho – Pedagogical Association. Public House of Hanoi National University*. 237-249. Retreived from https://hoitamlygiaoduc.org/mo-hinh-tap-huan-truc-tuyen-cho-nguoi-cham-soc-tre-tu-ky-nham-ung-pho-voi-dich-benh-covid-19/

Landa, R. J. (2018). Efficacy of early interventions for infants and young children with, and at risk for, autism spectrum disorders. *International Review of Psychiatry, 30* (1), 25–39. https://doi.org/10.1080/09540261.2018.1432574

Parsons, D., Cordier, R., Vaz, S., & Lee, H. C. (2017). Parent-mediated intervention training delivered remotely for children with autism spectrum disorder living outside of urban areas: Systematic review. *Journal of Medical Internet Research, 19* (8), 198. https://doi.org/10.2196/jmir.6651

Contact Information:

- Cao Thi Xuan My
HoChiMinh University of Education
myctx@hcmue.edu.vn
176 A4 Street, Ward 12, Tan Binh District, Ho Chi Minh City, Vietnam

- Hoang Thi Nho
University of Education, Hanoi National University
htnho@vnu.edu.vn
G7 144 Xuan Thuy, Cau Giay District, Ha Noi, Viet Nam

- Nguyen Chi Thanh
Moscow State Pedagogical University
chithanhnguyen318@gmail.com
Dormitory No. 2 of Moscow State Pedagogical University
119571, 88K2,Vernadsky Avenue, Moscow, Russia

About the Authors:

- Cao Thi Xuan My - Ph.D, lecturer at the Department of Special Education, Ho Chi Minh City University of Education. She participated in many project development programs, support, and scientific guidance in special education in Vietnam.

- Hoang Thi Nho - Ph.D, lecturer at the University of Education, Hanoi National University. She participated in many projects and worked to support children's education with disabilities. She is also the author and co-author of books and textbooks in special education.

- Nguyen Chi Thanh is seeking a a master's degree in Special Education at Moscow State Pedagogical University, Russia. He has been a member of the program called "The BASICS 3 Curriculum Framework Training" (Program for students with moderate to severe intellectual disability) - San Bernardino City Unified School District (California- USA)" since 2017 held in Ho Chi Minh City, Vietnam.

IMPACT OF COVID - 19 PANDEMIC ON NON - PUBLIC SPECIAL EDUCATION TEACHERS AND PSYCHOSOCIAL SUPPORT

Le Thi Minh Ha

Conceptual Framework and Background

In the 4th wave of the COVID-19 pandemic in Vietnam from the end of April 2021 to the present, Ho Chi Minh City and Binh Duong provinces were the two hot spots of the pandemic(Duong, 2020). In this study, we investigate the impact of the COVID-19 pandemic on the economic, social, and mental health of special education teachers and develop a mental health care strategy and provide emergency assistance for them(Le, H.T. et al; Bessel, 2019)

Non-public teachers are teachers who teach at private schools. These schools are established and operated by individuals or organizations and are self-invested. The school's main activities depend on direct contributions from learners or investors. However, a private school is also an educational institution that belongs to the general education system of the country, so activities like enrollment or education and training must all be based on regulations from the Ministry of Education and Training; diploma also has the same value as a public school(Thư Viện Pháp Luật, 2011).

Mental health Mental health is defined by the World Health Organization as a state of well-being in which an individual realizes his or her own abilities, is able to cope with the normal stresses of life, is able to work productively, and contribute to your community (World Health Organization, 2022)

Emergency psychosocial support is physical and psychological support for the aftermath of large-scale physical, psychological, or social crisis events. It is an informative approach to alleviating initial distress caused by traumatic events and promoting short- and long-term adaptive and coping functions. Psychosocial support is an intervention based on the understanding that people affected by a crisis are experiencing a range of initial physical, emotional, behavioral, mental reactions, and some of these reactions will interfere with their adaptive response to the problem they are experiencing. Support from informants, who are empathetic and caring, can promote recovery (Brymer et al., 2006).

Research

We surveyed 185 special education teachers online. This is a cross-sectional study, using convenience sampling with quantitative research methods. In which 87.6% were female and 12.4% were male, 40.5% of teachers lived in urban districts, 40.0% in suburban districts of Ho Chi Minh City, and 19.5% lived in Binh Duong province. There were 68.1% of teachers who taught at schools and centers for children with disabilities and 31.9% of teachers who taught a children’s group. Teachers were in the following age groups: Under 30 (64.3%), 31-40 (25.9), 41-50 (8.1%) and 50-55 (1.6%).

Results

The COVID-19 pandemic has affected the income of special education teachers by comparing ***monthly income before and during the pandemic***. Before the COVID-19 pandemic, 15.6% of teachers had an income of less than 5 million VND/month (about 22 USD), 63.24% under 10 million VND (about 44 USD), 14.05% under 15 million (about 66 USD), 5.96% under 20 million (about 88 USD), and 1.08% with income over 20 million VND. ***During the COVID-19 pandemic***, 69.73% had no income, 8.3% under 3 million VND/month (about 13 USD), 11.8% under 5 million VND, 9.19% under 10 million, and 1.08 under 15 million VND. Meanwhile, 11.9% of teachers had to pay monthly rent, 8.6% had to take care of food expenses for themselves and their families, 25.9% paid for rent and food at the same time, 11.0% of teachers took care of their own medical expenses, 8.6% teachers took care of food, rent, and medicine, 14.6% paid for their children's education, and 24.3% of teachers took care of food, rent and school fees for their children.

The COVID-19 pandemic has caused an extensive crisis, including psychological trauma for people, and special education teachers are not an exception. We surveyed the expression of psychological trauma in teachers, the results showed that COVID-19 not only caused 81.6% of teachers to lose their jobs, but 91.4% of teachers said that COVID-19 affected their psychological well-being. For example, 56.2% often worried, 10% of teachers were too stressed and 20.0% were afraid of contracting COVID-19, 5.9% were depressed and had difficulty controlling emotions, 4.3% did not take care of themselves and 2.7% engaged in self-destructive behavior.

The state of emergency due to the pandemic shows that teachers need support with social, physical, and mental health. Accordingly, 25.9% of teachers had a need for employment support; 43.8% psychological and spiritual support; 19.5% physical health support, and 10.8% other support (children's education, shelter). When asked: "If there are difficulties in life, how do you overcome them?" The results showed that 21.1% of teachers said they found a way to overcome, 48.6% asked friends and relatives for support, 7.6% saw a doctor; 3.8% saw a psychologist and 18.9% did not know what to do.

The above signs of psychological trauma require urgent support and intervention from psychologists and society. However, with the question "Where do you choose to get psychological support when needed?". The results showed that up to 41.6% of teachers did not know where they can get psychological support, 34.1% of teachers knew how to meet psychologists at the Psychological Counseling Center, 9.2% saw a doctor at the hospital, 6.5% knew about social centers/organizations and 8.6% of teachers went elsewhere. This shows that the mental health care network in Vietnam has not been fully communicated to the general public and special education teachers in particular.

Conclusions and Suggestions for Future Research

The study is a cross-section in the context of the early stage of the pandemic peak in Ho Chi Minh City and Binh Duong province, both of which are centers of the pandemic. Thus, the extent of the impact of the COVID-19 pandemic on special education teachers has not been fully explored. However, from this research data, we hope to bring awareness to Vietnamese education managers who need a development strategy to promote policies and support services, to meet the needs of the public in general, and special education teachers in particular during the COVID-19 emergency. Our findings may also support future research on the impact of the COVID-19 pandemic, as well as directions for mental health care professionals of Vietnam and other countries in taking care of mental health for teachers in particular and the public in general.

References

Bessel V. D. K., M.D (2019), *Sang chấn tâm lý*, Lê Phan Như Quỳnh dịch. NXB Thế giới, pp. 242-256

Brymer M., Jacobs A., Layne C, Pynoos R., Ruzek J., Steinberg A., Vernberg, E., Watson P., (2006). *Psychological First Aid Field (PFA) Field Operations Guide 2nd Edition*, (National Child Traumatic Stress Network and National Center for PTSD), pp. 5-10

Duong, K. A. (2020, April 15). *Viet Nam: COVID-19 và thách thức đối với ngành giáo dục*. The Friedrich-Ebert-Stiftung. Retrieved June 6, 2022, from https://vietnam.fes.de/post/viet-nam-covid-19-va-thach-thuc-doi-voi-nganh-giao-duc

Le, H. T., Lai, A. J. X., Sun, J., Hoang, M. T., Vu, L. G., Pham, H. Q., Nguyen, T. H., Tran, B. X., Larkin, C. A., Le, X. T. T., Nguyen, T. T., Pham, Q. T., Ta, N. T. K., Nguyen, Q. T., Ho, R. C. M., & Ho, C. S. H. (2020, October 29). *Anxiety and Depression Among People Under the Nationwide Partial Lockdown in Vietnam*. Frontiers. Retrieved June 2, 2022, from https://www.frontiersin.org/articles/10.3389/fpubh.2020.589359/full

Thông tư ban hành quy chế tổ chức và hoạt động của trường tiểu học, trường trung học cơ sở, trường trung học phổ thông và trường phổ thông có nhiều cấp học loại hình tư thục. (2011, March 28). Thư Viện Pháp Luật. Retrieved June 6, 2022, from https://thuvienphapluat.vn/van-ban/Giao-duc/Thong-tu-13-2011-TT-BGDDT-Quy-che-to-chuc-hoat-dong-truong-tieu-hoc-120868.asp

World Health Organization. (n.d.). *Mental health: Strengthening our response*. World Health Organization. Retrieved June 6, 2022, from https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response

Contact Information:
Assoc. Prof. Dr. Le Thi Minh Ha, Head of Psychology, Vice Dean of Faculty of Social Sciences and Humanities, Van Lang University, lethiminhha@yahoo.com

About the Author:
Le Thi Minh Ha is Assoc. Prof. Dr. in the Van Lang University of Ho Chi Minh City, Viet Nam. She holds a master's degree in Pedagogy and doctorate in Psychology. She has many years of Special Education teacher training and research on children with special educational needs

EXAMINING PRE-SERVICE TEACHERS' SELF-EFFICACY FOR GENDER EQUALITY PRACTICE: A COMPARISON OF ELEMENTARY AND SECONDARY SCHOOL TEACHERS' PERCEPTIONS IN SPAIN

María C. Cardona-Moltó, Cristina Miralles-Cardona, Esther Chiner, and Marcos Gómez-Puerta
University of Alicante, Alicante, Spain

For decades, gender equality (GE) has been a worldwide mission. Spain's efforts in promoting gender equality began in the 1980s. As a signatory country of the United Nations' (UN) *Convention on the Elimination of All Forms of Discrimination against Women* (CEDAW) (UN, 1979) and, recently, of the *2030 Agenda for Sustainable Development* (UN, 2015), the Goverment of Spain formally established a number of legislation policies. One of the most influential has been Organic Law 3/2007 on Effective Equality of Men and Women, which forces universities to train future professionals to become competent in gender issues by mainstreaming gender in course content and study programs (Art. 24, Point 2).

In the European context, Mazur (2009) compiled an overview of comparative research projects on gender equality and observed that gender mainstreaming (GM) implementation is clearly understudied. Most of this research has been conducted at national level and the few studies that compare a set of countries (Eveline & Bacchi, 2005) have come to agree that there is a great variability in GM conceptualization and practice. Moreover, there is a lack of instruments not only to measure the implementation but to monitor progress. Research conducted at various Spanish universities support these statements (*e.g*. Miralles-Cardona *et al*., 2020; Valdivieso, 2016) confirming that GM is poorly developed and monitored. Bearing this in mind, measuring self-efficacy for GM implementation is increasingly a necessity at all levels.

Self-efficacy has been measured using various instruments and scales (*e.g.* Tschannen-Moran & Woolfolf-Hoy, 2001), but consensus has not been reached about its composition and nature. There seems to be unanimity in that they have to be specific to the construct and multidimensional. Since no specific instrument for measuring GE competence has been found in the literature, this study seeks to address this gap by reporting on the initial testing of a scale designed to measure self-efficacy for gender equality practice. The study aimed (1) to confirm the construct validity of the scale and its factor invariance across degree and sex and, (2) to explore and compare student's level of GE competence at the end of their study programs.

Method

A survey was administered to three cohorts of undergraduate and graduate student teachers at the University of Alicante, Spain. Using a convenience sample that represented the three teacher majors in Early Childhood, Elementary and Secondary Education, 610 students were asked to rate their confidence in gender knowledge, skills and awareness using the Teacher Self-Efficacy for Gender Equality Practice (TEGEP) scale (Miralles-Cardona *et al*., 2022), a six-point Likert scale. Of the returned questionnaires, 1.5% contained missing or incomplete values and were eliminated. The final sample consisted of 601 participants from which 196 (33%) were early childhood, 202 (33%) elementary and 203 (34%) secondary school student teachers. The average age of participants (full sample) was 24.31 years old (*SD* = 5.66, range 20-54), 23.01, 22.49 and 27.40 for early childhood, elementary, and secondary education students, respectively. The majority were female (*n* = 433, 72%), Spanish (*n* = 582, 96.84%) and full-time students (*n* = 505, 84.02%). Hence, the sample distribution was biased in favor of females. Only a minority reported having taken an elective course on gender issues during their studies or said that they had previous knowledge on gender (*n* = 137, 22.80%). Several analyses were performed to achieve the goals : (1) single-group and multi-group confirmatory factor analyses (CFA) to verify factor stability and their invariance across subsamples; and (2) descriptive-comparative analyses to compare participants' self-efficacy in implementing a GE practice across degree and sex (ANOVA 3x2). Statistical analyses were run using SPSS-26 and AMOS-23 versions.

Results

Upon graduation, teachers reported unrealistic perceptions of their ability to teach using a gender perspective (*M* = 4.53, *SD* = 0.67). The level of self-efficacy was found moderate in the three teacher cohorts with no statistically significant differences across degrees in any of the three efficacy components, but gender attitudes were rated significantly higher by female than male students ($p < .01$). Interestingly, students were more confident in their ability to develop *gender attitudes and commitment* (*M* = 5.07, *SD* = 0.80) and in implementing a *gender*-sensitive *pedagogy* (*M* = 4.55, *SD* = 0.79) than in their *knowledge and awareness of gender* (*M* = 4.26, *SD* = 0.81).

Conclusion

Besides this, the study provides a reliable and valid instrument specifically helpful for guiding the education for the sustainable development of gender equality in instructional settings. Because there is no systemic approach to teaching sustainability nor valid and reliable instruments to assess gender competence for practicing a gender pedagogy, this tool will hopefully provide TE institutions a conceptual and practical framework on how gender equality can successfully be mainstreamed into curriculum. Infusing sustainable development of gender equality in curricula and assessing interventions as a habitual practice could be useful to monitor sustainability performance over time and assess contributions to SDG5.

Future Directions

The findings should be evaluated with the necessary caution (e.g., self-reported measure, limited number of participants and institutions which does not guarantee generality). Therefore, future studies with a broader and more diverse group of students from different institutions, degrees, and countries would be desirable. It is important to note that the study only provides information about the respondents' feelings of efficacy in general terms; that is, without taking into account modulating variables such as prior training in gender, motivation, or commitment to gender issues, so future studies should investigate how these variables can influence student teachers' perceptions of efficacy for a sustainable gender equality practice and empirically document the findings.

References

Eveline, J., & Bacchi, C. (2005). What are we mainstreaming when we mainstream gender? *International Feminist Journal of Politics, 7*(4), 496-512.

Mazur, A. G. (2009). Comparative gender and policy projects in Europe: Current trends in theory, method and research. *Comparative European Politics, 7*(1), 12-36.

Miralles-Cardona, C., Cardona-Moltó, M. C., & Chiner, E. (2020). La perspectiva de género en la formación inicial docente: estudio descriptivo de las percepciones del alumnado. *Educación XX1, 23*(2), 231-257. https://doi.org/10.5944/educXX1.23899

Miralles, C., Chiner, E., & Cardona-Moltó, M. C. (2022). Educating prospective teachers for a sustainable gender equality practice: Survey design and validation of a self-efficacy scale. *International Journal of Sustainability in Higher Education, 23*(2), 379-403. https://doi.org/10.1108/IJSHE-06-2020-0204

Spanish Government (2007, March 23). Ley Orgánica 3/2007, de 22 de marzo, para la Igualdad Efectiva de Hombres y Mujeres. *State Official Gazette/Boletin Oficial del Estado, 71,* 1-66.

Tschannen-Moran, M., & Woolfolk-Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17(7),* pp. 783-805. https://doi.org/10.1016/S0742-051X(01)00036-1.

United Nations, UN. (1979). *Convention on the Elimination of All Forms of Discrimination against Women* (CEDAW). UN. https://www.ohchr.org/EN/ProfessionalInterest/Pages/CEDAW.aspx

United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. https://sustainabledevelopment.un.org/post2015/transformingourworld

Valdivieso, S. (Coord.) (2016). Educación y género en la formación docente en un enfoque de equidad y democracia. In I. Carrillo-Flores (Coord.), *Democracia y educación en la formación docente* (pp. 117-140). University of Vic-Universidad Central de Cataluña.

About the Authors

María-Cristina Cardona-Moltó is a professor in the College of Education at the University of Alicante, Spain, and coordinator of the "Teaching4Diversity, Gender Equality and Inclusion" network. She holds a master's in Psychology and a PhD degree in Education. Currently, she is a visiting scholar in the Institute on Community Integration, UMN.

Cristina Miralles-Cardona is a school counselor and accredited mental health professional at the Northeast Metro 916 Intermediate School District, Lake Elmo, MN. She holds a PhD in Interdisciplinary Gender Studies and a Master's degree in Educational Psychology. Her research interests include quality social work education, mental health, and disability.

Esther Chiner is an associate professor of Educational Research and Assessment in the School of Education at the University of Alicante, Spain. She holds degrees in Psychology and Education and a PhD in Education. Her research interests are related to educational and digital inclusion of diverse students.

Marcos Gómez-Puerta is an associate professor of Instruction and School Organisation at the University of Alicante (Spain). He has a degree in Psychopedagogy and a PhD in Educational Research. His research interests are mainly related to the educational, digital, labour and social inclusion of people with disabilities.

THE MODEL OF CHILD CARE AND EDUCATION IN VIETNAM'S ETHNIC MINORITY AREAS

Chu Thi Hong Nhung and Hoang Thi Nho

Currently, in Vietnam, many models exist to support parents in nurturing and developing children, implemented by organizations such as UNICEF (Engle et al., 2000), Save the Children (Watanabe et al., 2005), World Vision (Abbott et al., 2019), National Early Education (Boyd et al., 2017), etc. These models partly help parents gain more knowledge and practical skills to better care for and educate their children.

The model of children under three years old playing in the community is one of the innovative models of Vietnam Plan International to implement the national childcare and development program. This model has been implemented since 2011 in eight provinces: Ha Giang, Thai Nguyen, Phu Tho, Bac Giang, Quang Tri, Quang Ngai, Kon Tum, and Gia Lai. By June 2016, Vietnam Plan International had established 162 groups of children with the participation of 3,604 parents/caregivers and 3,764 children in 162 villages in the 8 provinces mentioned above. Children's playgroups are considered important support for children and parents in disadvantaged areas. Children aged 0-3 years old in disadvantaged areas have limited access to early childhood education, or do not have the opportunity to participate in playgrounds that encourage the children's development (Le-Quang, 2014).

In Vietnam, two primary models exist for supporting parents in taking care of their children's comprehensive development: (1) Models of supporting parents in taking care of their children's development at home (Ruiz-Casares et al., 2009) and (2) Models of supporting parents in childcare and children's development in the community (Tran et al., 2022). The aim of this study was to understand the quality of early childhood education and care in the mountainous regions of Vietnam.

Research

This study was conducted through surveys, observation, interviews, and group discussions. At first, the research team collected reports and documents from the Kindergarten Department - Department of Education and Training of Lao Cai, Gia Lai, and other mountainous provinces. Secondly, individual interviews and group discussions with relevant participants were conducted. Those participants included: Preschool teachers in groups of licensed and unlicensed children; and parents whose children are studying in authorized and unlicensed groups and whose children who are not being sent to preschool. During the survey, the research team observed a number of groups of children with mental challenges about the environment, facilities, etc. These observations also t provided important data e r to make an objective and comprehensive assessment of quality care and education for children.

Results and Discussion

Parents in mountainous and ethnic areas want to send their children to preschool educational institutions (mainly in public preschools) if they are workers in forestry enterprises or factories (in Chu Se district). If they work in agriculture, they want to send their children where they receive lunch allowance for preschool children (Ta Phoi, Lao Cai). The number of children at home in 2019 - 2020 in Lao Cai city was high (4513 children), accounting for 68.18% of Chu Se district, and in Gia Lai province 11,518 children, accounting for 88.7%.

The awareness of many parents about childcare and education is still incomplete. Besides, parents with children who have not yet attended school are worried that their children are young and cannot come to school too early. As a result, independent groups of preschoolers have partially met the needs of some parents. These facilities usually accept children from 12 months, and some accept children from 8 months. Independent groups of preschoolers have contributed to the education sector to solve the current shortage of care and education for children under 36 months of age.

Most educational groups for children with mental health problems focus on caring and nurturing activities. However, the survey showed that children's hygienic conditions, nutrition, and health examination were not guaranteed. Through discussions with teachers, caregivers, and observation of independent groups of children, it shows that education activities stay at the level of childcare but have not really followed the Program.

Most of the groups' activities have children of different ages. However, teachers do not have much experience organizing educational activities in the mixed class, so activities for children are usually only suitable for one age group. On the other hand, teachers said, they work in an insecure state and do not determine long-term attachment.

The physical facilities of educational groups for children with mental health problems are still poor and challenging. The conditions only remain at the level of meeting the childcare and hardly guarantee the quality of care and education. Most of the facilities of ethnic minority children's groups are leased back from the household's houses or fully utilized, then renovated into preschool classes, so it is not suitable and also challenging to renovate.

Among the personal items for children in the grade group, the quantity meets the requirements. However, in some classes, the usage is not really meeting the hygiene requirements. Thus, the reality shows that for the above facilities, the essential elements to ensure are kitchen, fence and clean water, factors of the area of the room, playground, and toys.

In general, the care and education of children in mountainous areas are still limited because most families are still facing many difficulties. Many families do not have money to send their children to educational institutions. Because mothers lack knowledge in childcare and education, the quality of care and education for children under 36 months is still low. Therefore, it can be seen that the private group of children or family groups in the mountainous

provinces has not met the needs of young parents today. Some older children are still cared for by their parents at home and lack other care methods.

Recommendations

Promoting the model of community-based child education is a suitable form for mountainous provinces and ethnic minority areas. In addition, the government should raise public awareness about the family's responsibility in protecting the health and happiness of couples when deciding to have children, take care of, nurture and educate children from 0 to 3 years old. Simultaneously, the model of mobilizing objects to participate in club activities to access knowledge, skills and early education methods, ensures equality of conditions for children to go to preschool. The nutrition club model can be divided into two main groups. Group 1 consisted of mothers of non-malnourished children and group 2 included mothers of malnourished children. Group 1 organizes activities 2 days/month and group 2 has 12 days/month. The goal of the nutrition club model is to communicate to mothers on each topic such as breastfeeding, good foods to supplement nutrition for children and share experiences and difficulties in taking care of their children. To implement these models successfully, it is necessary to promote communication work to help parents raise awareness of the need for childcare and education to help children develop comprehensively, thereby actively participating.

Future Research

The study relies heavily on reports from the Education Department supplemented by interviews with pre-school teachers and parents. Future research should focus on ideas about appropriate models primarily from the opinions of residents and teachers. In addition, it is necessary to add more case studies of good and effective implementation models from community initiatives and consider which factors directly affect the effectiveness of these models.

References

Abbott, P., D'Ambruoso, L., & Duc, D. M. (2019). *Vietnam case study: Drivers of policy change towards providing integrated early childhood development*. Training and Research Support Centre (TARSC). https://www.tarsc.org/publications/documents/FCH-Vietnam%20case%20study2019.pdf.

Boyd, W., & Dang Phuong, T. (2017). Early childhood education in Vietnam: History and evaluation of its policies. In *Early Childhood Education Policies in Asia Pacific* (pp. 263-283). Springer, Singapore.

Engle, P. L., Bentley, M., & Pelto, G. (2000). The role of care in nutrition programmes: current research and a research agenda. *Proceedings of the Nutrition Society*, *59*(1), 25-35.

Le-Quang, K. (2014). *Evaluating the application of a behaviour change model in a community development project in a rural ethnic minority community in Vietnam: a case study of Plan International's Early Childhood Care And Development Project in Lam Vy Commune, Dinh Hoa District, Thai Nguyen Province* (Master's thesis).

Ruiz-Casares, M., & Heymann, J. (2009). Children home alone unsupervised: Modeling parental decisions and associated factors in Botswana, Mexico, and Vietnam. *Child abuse & neglect*, *33*(5), 312-323.

Tran, T. T., Hoang, T. D., Hoang, M. V., Tran, N. T., Nguyen, N. G., Hoang, P. M., & Vo, T. V. (2022). Community-based interventions to prevent dental caries among Kindergarten children in Vietnam: A 12-month study of field trial. *The Journal of Contemporary Dental Practice*, *23*(2), 135-142.

Watanabe, K., Flores, R., Fujiwara, J., & Tran, L. T. H. (2005). Early childhood development interventions and cognitive development of young children in rural Vietnam. *The Journal of nutrition*, *135*(8), 1918-1925.

Contact Information:
Chu Thị Hồng Nhung
University of Education, Hanoi National University
chunhung@vnu.edu.vn
G7 144 Xuan Thuy, Cau Giay District, Ha Noi, Viet Nam

Hoang Thi Nho
Hanoi National University of Education
htnho@vnu.edu.vn
G7 144 Xuan Thuy, Cau Giay District, Ha Noi, Viet Nam

About Authors:
Chu Thi Hong Nhung, PhD, lecturer at Hanoi National University of Education. She is the author and co-author of books and textbooks in the field of Early Childhood Education.

Hoang Thi Nho – PhD, lecturer at Hanoi National University of Education. She is the author and co-author of books and textbooks in the field of Early Childhood Education, Special Education.

CUSTOMIZED EMPLOYMENT RESEARCH AND APPLICATION FOR SCHOOL-TO-WORK

Tim Riesen, PhD
Institute for Disability Research, Policy & Practice, Utah State University

For over four decades, researchers have examined ways in which secondary schools can improve employment outcomes for transition-aged students with disabilities. Despite these efforts, many students with disabilities, especially those with the most significant disabilities (MSD), remain chronically underemployed or unemployed. Outcome data in the U.S over the years illustrate the gravity of this problem. Specifically, the U.S Department of Labor (2020), reported the unemployment rate for youth with disabilities between 16-19 years-old is 21.7% compared to 12.4% of peers without disabilities. This gap increases with age with only 11.4% of young adults with disabilities between 20-24 years old unemployed compared to 6.6% of their peers without disabilities. When outcome data are drilled down by disability, individuals with the most significant disabilities (MSD) are even less likely to be employed. In fact, only 21.1% of individuals receiving day supports from state intellectual and developmental disability agencies are employed in competitive integrated employment (Windsor et al., 2021).

These data are troubling because research consistently establishes strategies that can be used to improve competitive integrated employment outcomes. In terms of transition, providing work-based learning experiences and developing paid employment for students with disabilities prior to exiting school is one of the largest predictors of post-school success (Carter et al., 2012). Unfortunately, low expectations, stereotypes, and lack of knowledge about validated employment strategies often limit the applied work-based learning experiences of students with MSD (Riesen & Oertel, 2019). Secondary transition programs should therefore utilize strategies that help students with MSD identify their strengths, needs,

and interests related to employment and engage students in work-based learning experiences that align with student interests. Customized employment (CE) is one strategy that can be used during the secondary transition for students with MSD. The manuscript will provide a review of research on CE and application for secondary transition programs.

What is Customized Employment?

Customized employment emerged in 2001to mitigate the disparity in opportunities and outcomes that exist for individuals with the most significant disabilities. CE is a sequential, cumulative process where information gathered during each phase drives the activities in subsequent phases. The first phase of the process is *discovery.* Discovery is psychosocial rehabilitation process used to determine an individual's strengths, interests, skills, and support needs to obtain and maintain customized employment. The discovery process includes interviews, observations, documentation review, and interactions with the student in home, neighborhood, and employment settings. Discovery information is used to develop the second phase: customized job development. Customized job development uses an informational interview framework to learn more about employers, working conditions, and other potential employers who engage in similar work. Based on this information, jobs are negotiated based on an employment proposal that accounts for the job seekers unique skills and interest and the job developer creates a job site analysis and plan.

Research on Customized Employment

Over the past three years, the have been several studies (Inge et al. 2018; Riesen et al. 2019; 2021a; 2021b) that attempt to systematically operationalize the interventions, descriptions of the customized employment process. The discovery and customized job development fidelity scales currently undergoing the validation process may have utility to use in secondary transition programs. These scales establish objective measures that secondary education transition programs can use to ensure the process of customized employment discovery and customized job development practices to fidelity.

Application for School-to work

CE has been used to support transition age youth with disabilities to explore employment opportunities. For example, Condon and Callahan (2008) developed the Individualized Career Planning Model transition-aged youth with disabilities between ages of 14 and 21. The salient features of the model included: (a) CE opportunities, (b) entrepreneurial options or self-employment opportunities, and (c) linkages with adult agencies. The model was designed to align and be implemented within the existing school system structure. Secondary educators can use the fidelity scales to measure adherence to CE practices that lead to learning about a student's strengths, interests, and needs as they relate to employment and lead to the student engaging in meaningful work-based learning activities. Moreover, the CE process can help build meaningful connections with employers and key community members who can support the student after transition from school to adult living

References

Carter, E. W., Austin, D., & Trainor, A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of Disability Policy Studies*, 23, 50-63.

Condon, E., & Callahan, M. (2008). Individualized career planning for students with significant support needs utilizing the discovery and vocational profile process, cross-agency collaborative funding and social security work incentives. *Journal of Vocational Rehabilitation, 28,* 85-96.

Inge, K. J.,Graham, C. W., Brooks-Lane, N., Wehman, P. & Griffin, C. (2018). Defining customized employment as an evidenced-based practices: The results of a focus group study. *Journal of Vocational Rehabilitation,* 48, 155-166 DOI:10.3233/JVR-180928

Riesen, T., Hall, S., Keeton, B., & Jones, K. (2019). Customized employment discovery fidelity: Developing consensus among experts. Journal of Vocational Rehabilitation, 50(1), 23–37. https://doi.org/10.3233/JVR-180985

Riesen, T., Hall, S., Keeton, B., & Snyder, A. (2021a). Internal consistency of the customized employment discovery fidelity scale: A preliminary study. *Rehabilitation Counseling bulletin*.

Riesen, T., Hall, S., Keeton B., & Snyder, A. (2021b). Building Consensus Among Experts Regarding Customized Job Development Fidelity Descriptors: A Delphi Study. *Journal of Rehabilitation*. 87(3), 22-30.

Riesen, T. & Oertle, K. (2019). Developing employment training opportunities for transition-age youth with intellectual and developmental disabilities: A preliminary survey of employer perspectives. *Journal of Rehabilitation*, 85 (2), 27-36.

Winsor, J., Timmons, J., Butterworth, J., Migliore, A., Domin, D., Zalewska, A., & Shepard, J. (2021). StateData: The national report on employment services and outcomes through 2018. Boston, MA: University of Massachusetts Boston, Institute for Community Inclusion.

United States Department of Labor, Bureau of Labor Statistics. (2020). *Employment status of the civilian noninstitutional population by disability status and selected characteristics, 2019 annual averages* [Economic News Release]. https://www.bls.gov/news.release/disabl.t01.htm

Contact Information

Tim Riesen, PhD
Utah State University, Institute for Disability Research, Policy & Practice
USU Salt Lake
920 West Levoy Drive
Taylorsville, Utah 84123
tim.riesen@usu.edu

About the Author:

Dr. Riesen is the Division Director of Research and Training at the Institute for Disability Research, Policy & Practice at Utah State University. He has a research assistant professor appointment in the Department of Special Education and Rehabilitation. Dr. Riesen specializes in supported and customized employment, transition, and adult services.

DEVELOPING ROLE PLAYING SKILLS FOR CHILDREN WITH AUTISM SPECTRUM DISORDER

Nguyen Thi Tan

Conceptual Framework and Background

According to Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (2013) and International Classification of Diseases 11th (2018), children with autism spectrum disorder (ASD) have social communication deficits and are limited and stereotyped in behavior, interests, and activities. These defects lead to deficits in role-playing skills (RPS) of children with ASD. RPS in children with ASD develops at a simple level and with low frequency (Thorp et al., 1995). The degree of performance of role-playing actions in children

with autism spectrum disorders is simple (Kasari et al., 2006). In addition, the independence of children with ASD when role-playing is lower than that of their peers of the same age group and children with other developmental disorders (Barton et al., 2010), and several children with ASD lack creativity when participating in RPG (Low et al., 2009). However, the goal of assessing and teaching RPS for children with ASD can be achieved with appropriate support measures and strategies (Barton et al., 2008). Improving RPS will help children with ASD expand their social knowledge, interaction, and communication, and also form appropriate behaviors and habits of participating in games (Toth et al., 2006). Therefore, the development of RPS for children with ASD is a priority goal in the process of intervention and support for children in inclusive preschool.

In the world, the history of research on RPS for children with ASD is diverse, among which are some studies by Sherratt, (2002), Boudreau et al. (2010), Lydon et al. (2011), and Jorgenson (2017). Especially in 2012, Barton (2012) compiled a table to classify the level of RPS used to evaluate and develop RPS for children with ASD. In Vietnam, research on teaching children with ASD about playing skills in general and RPS in particular, is still insufficient. Therefore, the research and development of RPS for children with ASD in inclusive preschools in Vietnam have become even more urgent.

Research

We conducted four specific studies which served the basis for the conference presentation, which are as follows:

Observation and questionnaire survey methods were used to investigate and evaluate the current state of RPS in 30 children with mild ASD aged 5 to 6 years. We observed, photographed, and videotaped the activities of teachers teaching young children RPG and used a questionnaire based on the author Barton's (2012) rating scale to assess children's RPS.

Survey method used questionnaires and interviews to study and evaluate the current situation of developing RPS for children with ASD aged 5-6 years. We used questionnaires to survey 50 teachers of children with ASD in Ho Chi Minh City to determine the level of implementation and effectiveness of developing RPS for children with ASD in inclusive schools. In addition, we interviewed the principal and a few teachers to determine what caused the situation.

Through theoretical research, we aimed to investigate and propose some measures for developing RPG for children with ASD aged 5-6 years. We used theory analysis, synthesis, classification, and systematization methods to develop a theoretical foundation and propose measures to develop RPS for children with ASD aged 5-6 years.

Case study method and pedagogical experiment were used to conduct an experimental study on three groups of solutions to develop RPS for children with ASD aged 5-6 years. We tested the feasibility of the proposed measures on two children with mild ASD who were 5-6 years old. Then, after evaluating the children's initial support skills and intervention plans, they chose measures to develop RPS that were appropriate for each child's characteristics, experimented with the impact, and evaluated the results after the experiment.

Results

The RPS evaluation status of 5-6-year-old children with ASD reveals that the majority of children have an average level of RPS (43.3 percent). The current state of RPS development in children with ASD aged 5-6 years: The majority of teachers (80%) at the facilities surveyed are well aware of the role of RPG and the importance of RPS for the comprehensive development of children with ASD aged 5-6 years. Currently, schools (74%) are interested in

developing RPS for children with ASD, but it has not yet achieved high efficiency (the percentage of children with ASD with poor RPS is 26.7%).

These studies proposed several measures to organize the development of RPS for children with ASD aged 5 to 6 years old, who were divided into three groups: Group of measures to prepare for the development of RPS for children with ASD aged 5-6 years old (provide and expand awareness of RPG; create excitement and demand for RPG; equip premise skills for RPS; create RPS groups; build an environment for RPS; design RPS activities; plan RPS interventions); Group of measures to teach RPS to children with ASD aged 5-6 years (modeling; RPS expansion measures; reminders; reinforcement system); Group of measures aimed at improving the RPS of children aged 5 to 6 (Integrating into other educational activities and daily activities; assessing the RPS of 5-6-year-old children with ASD).

Case 1 experimental results: Children's RPS increased from an average (25.7 points/48 points) to a good (34.7 points/48 points). The level of creativity and interest in role-playing in children increased from moderate to good.

Case 2 experimental results: Children's RPS improved from a low level (reaching 17.2/48 points) to an average level (27.3 points/48 points). Children's creativity and interest in RPGs improved from poor to moderate.

Recommendations and Suggestions for Future Research

One of the most significant limitations of children with ASD is challenges with RPS. This challenge has an immediate impact on the quality of play and learning activities for children. The development of RPS for children with ASD learning to adapt in Vietnam necessitates more attention and implementation at the same time, in which the proposed research measures are both feasible and urgent.

RPS research and development for children with ASD should be expanded in the future. This study should be continued and implemented in inclusive preschools in Vietnam, contributing to the development of RPS in particular and playing skills in general for children with ASD.

References

Barton, E. E., & Pavilanis, R. (2012). Teaching pretend play to young children with autism. *Young Exceptional Children*, *15*(1), 5–17. https://doi.org/10.1177/1096250611424106

Barton, E. E., & Wolery, M. (2010). Training teachers to promote pretend play in young Children with disabilities. *Exceptional Children, 77*(1), 85–106. https://doi.org/10.1177/001440291007700104

Kasari, C., Freeman, S., & Paparella, T. (2005). Joint attention and symbolic play in young children with autism: A randomized controlled intervention study. *Journal of Child Psychology and Psychiatry*, *47*(6), 611–620. https://doi.org/10.1111/j.1469-7610.2005.01567.x

Low, J., Goddard, E., & Melser, J. (2009). Generativity and imagination in autism spectrum disorder: Evidence from individual differences in children's impossible entity drawings. *British Journal of Developmental Psychology*, *27*(2), 425–444. https://doi.org/10.1348/026151008x334728

Thorp, D. M., Stahmer, A. C., & Schreibman, L. (1995). Effects of sociodramatic play training on children with autism. *Journal of Autism and Developmental Disorders, 25*(3), 265–282. https://doi.org/10.1007/bf02179288

About the Author:

Nguyen Thi Tan, Master of Special Education, is a current lecturer in the faculty of special education at the National College of Education in Ho Chi Minh City and a senior trainer of

"Early intervention for children with ASD" program, certificated by OWL Center (England).
The Faculty of Special Education, The National College of Education, HCMC
Add: 182 Nguyen Chi Thanh street, Dist. 10, HCMC, Vietnam.
Email: Tannguyenthi@ncehcm.edu.vn

PREPARING AND SUPPORTING EARLY INTERVENTION TEACHERS OF CHILDREN WITH DISABILITIES

Robert A. Gable[1] and Hoang Thi Nga Khoa Gddb[2]

[1]Old Dominion University, Norfolk VA USA
[2]Ho Chi Minh City University, Ho Chi Minh City Vietnam

Today, a growing number of children with disabilities spend all or most of their day receiving instruction alongside their non-disabled classmates (Gable & Hester, 2020). Current placement practices are consistent with UNESCO's assertion that students with disabilities deserve the same quality education as their non-disabled counterparts. These inclusive practices pertain to young children as well. There is a consensus among experts that young children at-risk or who have been identified as disabled will benefit from early, intense intervention (e.g., Gable & Hester, 2020). That said, the need exists for more highly skilled early childhood interventionists, prepared to address the diverse needs of young children and to provide technical support to others working with this special population.

Use of evidence-based practices. A substantial amount of attention now is on the use of evidence-based practices —practices for which there is strong empirical research across multiple studies (Cook & Odom, 2013). To support the use of EBPs, it is important to create a 'host environment' that is conducive to their ongoing implementation. There must be administrative commitment to recognizing and rewarding teacher use of EBPs (Cook et al., 2008). There also needs to be collegial support for the use of EBPs at a high level of fidelity. There now is recognition that early interventionists should possess a select number of 'high-leverage' skills that have the broadest applicability (opportunities to respond; precise praise statements; precorrection; scaffolding, etc.). Emphasis should be on depth rather than breath of skill development (e.g., Gable, 2019).

Research and experience have shown that lack of adherence to an original plan of intervention can lead to failed instruction and lost instructional time. Unfortunately, time is unforgiving; lost instructional time rarely can be recouped (G. Sugai, personnel communication, April 17, 2018). Accordingly, early interventionists should not only be taught discrete skills to a high level of mastery, but also the use of self-monitoring strategies to evaluate (a) the extent to which they engage in a newly acquired skill and (b) the fidelity of its implementation. Furthermore, early interventionists should be taught to collect data on the impact of a given intervention. Absent data on both fidelity and effectiveness, it is impossible to distinguish between a flawed intervention plan and a potentially sound plan that is being poorly implemented. Last, these data may increase the probability that teachers will not abandon prematurely a potentially effective intervention when the impact of an intervention is not immediately apparent.

Intensity of an intervention. Early intervention teachers should be aware of the multi-dimensional nature of their intervention efforts. A doctor will prescribe a medication according to its frequency (two times a day), duration (two weeks), and strength (50 mgs), as well as possible side effects (drowsiness) (Codding & Lane, 2015). The same logic applies

when recommending an intervention to a teacher or parent/caregiver. In the final analysis, three overlapping variables come into play: (a) is the intervention being conducted according to the original plan, (b) is the intervention having a positive effect, and (c) in what form does it work best (Codding & Lane, 2015).

Another factor early interventionists must consider is the "contextual fit" of an intervention (Detrich, 1999). The question is whether a particular intervention fits the teaching philosophy and skillset of the teachers' involved standards or expectations that might affect the quality of implementation and, in turn, student outcomes. Implementation of new strategies may require teachers to make substantial changes in their daily routines, so 'buy-in' becomes an important factor. In addition, the extent to which a teacher feels capable of implementing a given strategy and their confidence that, with a reasonable amount of time and effort, it will have a positive impact on student performance are important factors as well. In the beginning, special education teachers often fail to make timely data-based adjustments in their instruction, they may need to be taught, directly and systematically, this problem-solving skill.

Impact of COVID-19. It is important to acknowledge the profound effect that Covid-19 has had of the teaching/learning process, especially young children with disabilities. In some cases, early intervention teachers are making use of *e*-coaching to support the efforts of parents or other care givers who may be cast in the role of behavior change agent (e.g., Donley et al., 2020). However, this technology may not always be available; face-to-face consultation may be the only option. So-called soft skills, such as demonstrating enthusiasm, showing empathy regarding a challenging situation, promoting culturally sensitive interventions, and strong interpersonal skills are essential to achieving positive child outcomes. Once a plan is in place, a low level of implementation fidelity may indicate the need to reexamine the specific skills of the person attempting to implement the strategy, modeling repeatedly each step of an intervention sequence, and providing corrective feedback during subsequent intervention efforts.

Conclusion

As we have discussed, early intervention teachers must possess a range of skills with which to directly instruct young children with disabilities or interact with potential change agents. Because of the COVID-19, both low tech face-to-face and *e*-coaching technologies are in current practice. Coaching in 'real time' that includes (a) immediate, (b) positive, and (c) precise feedback facilitates treatment implementation with fidelity. Even so, any form of coaching is a labor-intensive process. Accordingly, the frequency and duration of coaching sessions may need to be determined according to the skillset of the teacher or caregiver relative to the complexity of the child's learning/behavior problem.

References

Codding, C., & Lane, K. (2015). A spotlight on treatment intensity: An important and often overlooked component of intervention inquiry. *Journal of Behavioral Education, 24*, 1–10.

Cook, B., & Odom, S. (2013). Evidence-based practices and implementation science in special education. *Exceptional Children, 79*, 135-144.

Cook, B., Tankersley, M., Cook, C., & Landrum, T. (2008). Evidence-based practices in special education: Some practical considerations. *Intervention in the School and Clinic, 44*, 69–75.

Detrich, R. (1999). Increasing treatment fidelity by matching interventions to contextual variables within the educational setting. *School Psychology Review, 28*, 608-620.

Donley, J., Detrich, R., States, J., & Keyworth, J. (2020). *Remote learning: An overview*. Oakland, CA: Wing Institute.

Gable, R.A. (2019). *In search of a science of teacher preparation*. Manuscript submitted for publication. Old Dominion University.

Gable, R.A., & Hester, P.P. (2020), *Early intervention for young children with autism spectrum disorders (ASD*). Unpublished manuscript. Old Dominion University.

Kretlow, A.G., & Bartholomew, C.C. (2010). Using coaching to improve the fidelity of implementation of evidence-based practices: A review of studies. *Teacher Education and Special Education, 33,* 279-299.

About the Authors:

Robert A. Gable received his PhD from Peabody College of Vanderbilt University. He has been a special education teacher and principal. Before Old Dominion University, he was on faculty at Vanderbilt University and University of Pittsburgh. He is widely published; his interests include responsible inclusion, intervention support, and teacher preparation.

Hoang Thi Nga Khoa Gddb is the lecturer of Special Education Department, Ho Chi Minh City University of Education. She also has served as the dean since 2014. Her research interest focuses on improving the early intervention services for children with developmental disabilities, evidence-based teaching and promoting the inclusive education for children with disabilities in VietNam.

USING FABLE TO SET PROFICIENCY GOALS FOR FOUNDATIONAL READING IN INDIA

Radhika Misquitta
The Gateway School of Mumbai

The recent National Education Policy (NEP; MHRD, 2020) of India accords the highest priority to achieving proficiency in foundational literacy for all students by grade 3. In keeping with this goal, the Prime Minister of India has announced an oral reading fluency (ORF) goal of 30 to 35 correct words in a minute with comprehension for students completing grade 3 (Ministry of Education, 2020). We could find no data to support this ORF goal. Current ORF benchmarking studies in India are being conducted using the Early Grade Reading Assessment (EGRA) tool and have established a grade 2 benchmark of 30 cwpm for English (Banerjee & Sen, 2020; RTI International, 2018). Given the emphasis on oral reading fluency as an indicator of overall reading proficiency, it is important to ensure that targets set are data driven.

The purpose of this paper is to present preliminary beginning (BOY) and end of year (EOY) benchmark goals for grade 3 reading fluency in India. We present data from three schools, from different Indian education boards, that assessed students using FABLe. We also compare data to international benchmarks and target goals set by the Indian government.

Methods

Participants. Participants were students from three schools in India. Data were collected for 387 students at BOY and 380 students at EOY. Data were collected in 2020 and 2021. EOY data for one school was collected using face-to-face assessments in 2020. All other assessments were conducted virtually due to the pandemic.

Tools. Students were assessed using the Fluency and Benchmarking for Literacy in Education (FABLe) tool, the first digital CBM application developed for India (Misquitta & Ghosh, 2021). FABLe tests are currently available for grades 3 and 4. In FABLe, students are presented with hard copies of a reading passage, or a passage is shared on screen if conducting the assessment virtually. Teachers access a digital copy of the same on their mobile device or tablet. As the student reads, the teacher marks errors by selecting words that were read incorrectly. A built-in one-minute timer indicates when the assessment is complete. The teacher also marks qualitative indicators about the reading quality. The app then generates automated reports indicating words read correctly per minute (cwpm), number of errors, accuracy percentage, as well as a detailed error analysis. All teachers who conducted the assessment were trained in FABLe and could implement the test with fidelity.

Results

We examined FABLe percentile scores to establish a benchmark for the beginning of the year and end of the year in grade 3. We selected the 25th percentile as a benchmark. Additionally, we looked at the 10th percentile as an indicator of students in need of intensive reading instruction. The 25th percentile for BOY was set at 51 cwpm and at EOY was 71 cwpm. The 10th percentile at BOY was 36 cwpm and 51 cwpm at EOY.

We also examined how FABLe benchmarks compared to international benchmarks. Specifically, we compared the FABLe benchmarks to percentile scores outlined in Hasbrouck and Tindal (2017). The BOY 25th percentile for grade 3 for both FABLe and international were similar, with international percentile at 59 cwpm and FABLe at 51 cwpm. The EOY 25th percentiles differed, with the international percentile at 91 cwpm and FABLe at 71 cwpm.

Finally, we compared FABLe percentiles to targets set by the Indian government. The Prime Minister has set a target of 30 to 35 cwpm at EOY for Grade 3, while FABLe 25th percentile at EOY is 71 cwpm.

Discussion

India has set a target goal of 30 to 35 cwpm with comprehension for grade 3 students. Our preliminary data indicates that this target significantly underestimates the number of students who are yet to achieve proficiency. For example, students scoring 30 cwpm fall well below the 10th percentile on FABLe. Typically, students falling below the 25th percentile are considered in need of additional support (Fletcher et al., 2005; Fuchs & Fuchs, 2005) while others recommend that only those scoring closer to the 50th percentile should be considered as on track (Hasbrouck & Tindal, 2006). This study highlights the need to establish more data-based targets and presents FABLe as a research-based tool that can be used to gather these data.

References

Banerjee, S. & Sen, S. (2020, October). Fluency and its role in foundational literacy. *Central Square Foundation.* https://centralsquarefoundation.org/articles/fluency-and-its-role-in-foundational-literacy.html

Fletcher, J. M., Francis, D. J., Morris, R. D., & Lyon, G. R. (2005). Evidence-based assessment of learning disabilities in children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 34*(3), 506–522. https://doi.org/10.1207/s15374424jccp3403_7

Fuchs, D., & Fuchs, L. S. (2005). Responsiveness-to-intervention: A blueprint for practitioners, policymakers, and parents. *Teaching Exceptional Children, 38*(1), 57–61. https://doi.org/10.1177/004005990503800112

Hasbrouck, J., & Tindal, G. A. (2006). Oral reading fluency norms: A valuable assessment tool for reading teachers. *The Reading Teacher, 59*(7), 636–644. https://doi.org/10.1598/rt.59.7.3

Hasbrouck, J., & Tindal, G. (2017). *An update to compiled ORF norms* (Technical Report No. 1702). Eugene, OR, Behavioral Research and Teaching, University of Oregon.

Ministry of Human Resource Development Government of India. (2020). National Education Policy 2020. https://www.mhrd.gov.in/sites/upload_files/mhrd/files/NEP_Final_English.pdf

Ministry of Education. (2020, September 11). *PM addresses 'School Education in 21st Century' Conclave under New Education Policy- 2020* [Press release]. https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1653312

Misquitta, R., & Ghosh, A. (2021). FABLe: A mobile application to assess and build foundational literacy skills for all children, including children with disabilities in India. *International Journal of Disability, Development and Education,* 1–13. https://doi.org/10.1080/1034912X.2021.1901861

RTI International. (2018). Analysis of Early Grade Reading Assessment in India: Initial data collection and assessment report (Vol. 91, Issue 011).

About the Author:

Radhika Misquitta is the Co-Principal of the Gateway School of Mumbai and its founding member. She has a PhD in Special Education from the University of Texas at Austin. Her interests are in teacher education, in developing systemic supports for supporting children with disabilities, and in ways the technology can be harnessed to optimise learning. Mumbai, India 400088 for more information you can email radhikamisquitta@gmail.com or rmisquitta@gatewayschoolmumbai.org

PROMOTING THE USE OF EVIDENCE-BASED PRACTICES ON BEHALF OF STUDENTS WITH DISABILITIES

Robert A. Gable[1] and Do Thi Thanh Thuy[2]
[1]Constance F. and Colgate W. Darden Professor
Old Dominion University
Norfolk VA USA
[2]Lecturer in Special Education
Hanoi National University of Education

Today, we are witnessing dramatic changes in public education, a number of which are attributable to the enactment of PL 94-142 (Education for All Handicapped Children Act of 1975). This landmark US legislation contained several provisions that have redefined the American educational landscape for students with disabilities. PL 94-142 stipulated that children with disabilities had the right to a "free and appropriate public education" in the "least restrictive environment". Furthermore, it afforded students with disabilities access to instruction designed to address their needs by means of an "Individual Educational Plan" (IEP) (Gable & Hendrickson, 2004). With the 1997 Individuals with Disabilities Education Act (IDEA), there was a fundamental shift in that no longer were students with disabilities simply assured access to a public education, but schools now were accountable for providing them a quality education (Gable & Hendrickson, 2004).

The impact of accountability. The demand for accountability put tremendous pressure on schools and on classroom teachers. At the same time, it prompted preservice

special education teacher preparation programs to focus on 'evidence-based practices', practices that have multiple empirical studies to support their effectiveness (e.g., Cook & Odom, 2013). Notwithstanding increased preservice emphasis on evidence-based practices, beginning special education teachers often struggle to engage correctly and consistently in the proper use of evidence-based practices. Indeed, many beginning teachers invest the bulk of their time trying to survive and less time attempting to apply intervention practices of which they have only limited knowledge (Gable, 2019). As Scheeler (2008) points out, there is little generalization of university-based, didactic instruction to the workplace. What often is missing is the support beginning (and experienced) teachers need to not only engage in evidence-based practices, but also do so with high fidelity. Fidelity refers to the relationship between an intervention plan and the way it is implemented. Low fidelity occurs when a teacher fails to properly carry out the plan of instruction. The net result is lost opportunities for students to learn. And Kenworth (2017) asserts that the missing link in teacher preparation is coaching. Keyworth argues that teachers are more likely to engage in proven-effective strategies if they are shown how to do them, given the repeated opportunity to practice them, and receive constructive feedback. Interestingly, other authorities posit that the missing link is implementation (Detrich, States, & Keyworth, 2017). We believe there is truth in both assertions and that together they represent a major challenge to better serving students with disabilities. What is needed is quality professional development, based on the needs of the teachers, coupled with ongoing coaching that offers teachers of students with disabilities support that is essential to successful teaching and learning.

Coaching to support classroom teachers. There is a growing body of empirical research to support the use of coaching to enhance the quality of classroom instruction (e.g., Rock 2019). Coaching can take various forms. For example, an experienced classroom teacher might observe a colleague teach one or more lessons, then meet with that teacher to seek their self-reflection on instruction and provide feedback and suggestions regarding future instruction. Another option that is increasingly common in the United States is known as *e*-coaching. It usually entails the use of a wide-angle cam (and tripod) connected to a classroom computer and a Bluetooth head set that allows an outside expert or a building-level colleague to observe and give 'real-time' suggestions that are precise and positive and usually centered on the three-term contingency of antecedent-pupil response-consequences (Rock, 2019). Unlike a more traditional approach in which time elapses between an observation and the time set aside for feedback and discussion, *e*-coaching allows a trained observer to offer ongoing feedback to facilitate the mastery of effective teaching strategies and, at the same time, correct flawed classroom practices (Rock, 2019).

The selection of a proven-effective strategy is a necessary but not sufficient step toward improving student outcomes; implementation must correspond directly with the original plan of instruction; that is, reflect fidelity of implementation (e.g., Detrich, States, & Keyworth, 2017). That plan must account for the relationship between student(s) capability and teacher expectations; the greater the agreement between these two variables, the more likely it is there will be positive student outcomes. Furthermore, initial teacher/pupil success will establish 'positive behavior momentum' whereby both players will be more willing to engage in another round of instruction. There is no optimum coaching standard. The length and number of observations, the number of coaching sessions, and the focus of the conversation regarding a teachers' instruction must be data-informed, meaning decisions should be based on measurable changes (or lack of changes) in student performance. A major benefit to providing coaching in a teachers' classroom is that both the setting and the students become "discriminative-stimuli," cues for the teacher to continue to engage in the newly acquired teaching behavior (e.g., Rock, 2019).

Conclusion

The strategic use of coaching is one way to bridge the gap between research and practice. Combined with a quality program of job-embedded, longitudinal professional development, coaching holds promise for better supporting a diverse group of children and adolescents with various disabilities. Yet unknown are ways to successfully 'scale-up' coaching to serve a large number of teachers or the ideal approach to supporting students with disabilities in a range of educational settings. However, as the use of coaching becomes more widespread, it is reasonable to assume that more innovative approaches will be developed to better serve general and special education teachers and their students.

References

Cook, B., & Odom, S. (2013). Evidence-based practices and implementation science in special education. *Exceptional Children, 79,* 135-144.

Detrich, R., States, J., & Keyworth, R. (2017). *Treatment is a problem-solving process*. Oakland, CA: Wing Institute.

Gable, R.A. (2019). *In search of a science of teacher preparation*. Unpublished manuscript. Old Dominion University.

Gable, R. A, & Hendrickson, J.M. (2004). Teaching all the students: A mandate for educators. In J.S. Choate (ed.) *Successful Inclusive Teaching: Proven Ways to Detect and Correct Special needs.* (4th ed), Boston, MS: Pearson.

Keyworth, R. (2017). *Dimensions of treatment integrity.* Oakland, CA: Wing Institute.

Rock, M. (2019). *The Coaching Continuum for Educators.* Alexandria, VA: ASCD.

Scheeler, M.C. (2008). Generalizing Effective TeachingSskills: The Missing Link in Teacher preparation. *Journal of Behavioral Education, 17,* 145-159.

About the Authors:

Robert A. Gable received his PhD from Peabody College of Vanderbilt University. He has been a special education teacher and principal. Before Old Dominion University, he was on faculty at Vanderbilt University and University of Pittsburgh. He is widely published and is interested in responsible inclusion, intervention supports, and teacher preparation.

Do Thi Thanh Thuy is a University Lecturer and Head of the Department of Practice in Special Education at Hanoi National University of Education (HNUE). She holds doctoral degrees in psychology and special education from HNUE. Her interests include responsible inclusion; evidence-based practices; and special education professional development for teachers.

HOME-BASED INTERVENTION MODEL FOR CHILDREN WITH DEVELOPMENTAL DISABILITIES

Ngan Chu and Nhung Quach

Background

Dong Nai and Binh Phuoc located in the southeast region of Vietnam are two provinces heavily sprayed with Agent Orange. According to the Ministry of Health's Disability Information System, there are 25,181 people with disabilities in Dong Nai and 12,716 people with disabilities in Binh Phuoc (Vietnam Ministry of Health, 2022), of which about 8% are children with disabilities. Despite great efforts from Central and Local governments, and international and national agencies to mobilize resources to support people

with disabilities in general and children with disabilities in particular, many difficulties and challenges still remain, including (1) challenges people with disabilities experience in remote areas, (2) extremely limited access to social services, (3) commune workers' lack of professional knowledge and skills to support people with disabilities in addition to an enormous workload to handle; and (4) shortage of special educators/ teachers (Sustainable Health Development Center, 2021). Currently, care for people with disabilities in general and children with disabilities in particular is mainly dependent on their families. Interventions and support by families can bring children with disabilities a balance between physical and mental care. While this is an effective support method with affordable cost for people with disabilities, statistics on demands of people with disabilities who need care, including the rate of receiving adequate care is still limited (Centre for Social Initiatives Promotion, 2021). Furthermore, awareness of people with disabilities' abilities and their families' capacity to care, support and intervene is still very limited, and time spent to care for members with disabilities is also very constrained because of the family's economic conditions. These are critical reasons that lead to a situation in which parents do everything instead of delegating capacity-appropriate responsibilities to people with disabilities and taking away opportunities for them to learn and develop their abilities. Facilities providing services for people with disabilities are rare and most families cannot afford the fees. Current services available in communities primarily come from projects. These difficulties occur due to a lack of social support which also relates to a lack of professional support and stigma-related lack of social interaction (Shin & Nguyen, 2016).

Model introduction

Home-based intervention is an initiative derived from the tremendous needs of children with disabilities in these provinces, the model is based on significant results from intervention programs implemented by parents (Koily et al., 2021; Taylor et al., 2018) as well as improving parent quality of life. This model was developed and deployed with a series of capacity-building activities for parents and caregivers so that they would be capable of intervening for their children. Parents and caregivers of children with developmental disorders were trained and coached by experienced special education experts. An expert was assigned to work with them throughout the process of capacity building from exploring children's capacities and needs to assessment, development, and implementation of intervention plans and then progress evaluation. Concurrently, this expert provides timely guidance and modifications to parents in order to ensure the effectiveness of the intervention. Each child and his/her parents can receive direct assistance from the expert in 8 to 10 months to ensure parents achieve the necessary knowledge and skills to provide home-based intervention.

Method

This is a mixed-methods study carried out with parents and caregivers of children with developmental disabilities and special education experts. We undertook pre- and post-intervention semi-structured surveys with 612 parents and caregivers, tracked children's progress throughout the intervention process, and conducted program evaluation and social validity interviews.

Results

Parental involvement in the intervention for children with disabilities has been shown to increase and improve parental performance and satisfaction. The post-intervention survey conducted in home-based special education intervention showed that all parents/caregivers in Dong Nai and 83% of parents in Binh Phuoc recognized children's' positive improvement

after 6 months of intervention. All surveyed parents confirmed that their children's improvements created significant changes in their families, especially stress release, pressure reduction, and increased happiness. These were key factors in improving their quality of life. Besides, they were more motivated in supporting their children. Based on progress evaluation reports by special education experts, all children with intellectual and developmental disabilities reached new milestones in all intervention areas within 3 to 5 months of intervention. This is a critical piece of evidence for a model of special education intervention which can be applied anywhere, especially in limited-resource areas.

Recommendations

In the last two years, under complicated circumstances caused by the COVID-19 pandemic, home-based intervention by parents and caregivers has shown its effectiveness and brought great meaning to both children with disabilities and their families. It is crucial to consider replicating this model and make special education intervention accessible for all children with disabilities, especially when it is a feasible, resource-light, lasting intervention that greatly improves the quality of life for children with developmental disabilities and their families in low and middle-income countries.

Limitations and Future Directions

The evaluation of the model had a number of limitations which future studies might address. As a project-based study, we have not had an opportunity to conduct a longer-term, follow-up of families to determine if the changes and progress reported have been maintained. This would require additional evaluation resources. The impact of the intervention on the families has not been fully assessed in this evaluation although parental reports noted benefits related stress-relief and improved family cohesion. Future studies might attempt to measure families' changes over time.

References

Centre for Social Initiatives Promotion (2021). Bidding documents for the Project to support the improvement of the quality of life of people with disabilities in areas heavily sprayed with Agent Orange in Tay Ninh, Dong Nai, Binh Phuoc. https://csip.vn/detail/request-for-application-1205.html

Koly KN, Martin-Herz SP, Islam MS, Sharmin N, Blencowe H, Naheed A. (2021). Parent mediated intervention programmes for children and adolescents with neurodevelopmental disorders in South Asia: A systematic review. *PLoS ONE 16(3): e0247432.* https://doi.org/10.1371/journal.pone.0247432

Shin, Y.Jin, and Son, Nguyen D. (2016). The effects of a home-based intervention conducted by college students for young children with developmental delays in Vietnam. *International Journal of Developmental Disabilities*. https://doi.org/10.1080/20473869.2016.1144316.

Sustainable Health Development Center (2021). Annual report of "Disabilities Integration of Services and Therapies Network for Capacity and Treatment (DISTINCT)" project funded by USAID in Tay Ninh, Binh Phuoc and Dong Nai [Unpublished manuscript].

Taylor, Tina; Smith, Timothy B.; Korth, Byran B.; and Mandleco, Barbara. (2018). Effects of Parent-Implemented Interventions on Outcomes for Children with Developmental Disabilities: A Meta-Analysis. *Faculty Publications*. 3195. https://scholarsarchive.byu.edu/facpub/3195

Vietnam Ministry of Health (2022). Disability Information System.

Contact Information
Ngan Chu
Sustainable Health Development Center - VietHealth
Address: No. 8 - D2B, Lane 26, Van Phuc, Ba Dinh, Ha Noi, Vietnam
Cell phone: 84.934001081
Email: nganchu.viethealth@gmail.com

About the Authors:
Ngan, Chu Thi Kim is DCOP of "Comprehensive Rehabilitation for children with disabilities in Tay Ninh and Binh Phuoc". She has been focusing her work on people with disabilities and project management activities since 2004. Her various experiences have made her professional in project management and heartily devoted in providing best services for disadvantaged people.

Nhung, Quach Hong is a Specialist of "Disabilities Integration of Services and Therapies Network for Capacity and Treatment" project funded by USAID. With Social Work and Special Education background, she is prepared to be efficient in fast-paced multitasking environments with high-quality standards, and in charge of special education curricula, materials, and technical procedures.

MAKING TACTILE BOOKS TO DEVELOP LITERACY FOR CHILDREN WITH VISUAL IMPAIRMENTS

Trinh Thi Thu Thanh, Nguyen Thi Hang, and Louise France

Background

According to the National Survey on People with Disabilities carried out by the General Statistics Office of Vietnam in conjunction with UNICEF from 2016 to 2017 (reported in 2018), only 34.01% of children with disabilities aged 2 to 5 in Vietnam have access to any books, comics, and toys. From our experience and observations, children with VI in Vietnam under the age of five, who need to access books by touch, have much less than these figures suggest, close to zero percent.

Tactile books are emerging across the world, both in research and practice: such books have been adapted or designed to meet children with VI's need to access books through touch. In 2017, we started a project to make tactile books for preschool children with VI in Hanoi to help try and fill the huge gap in provision of suitable books for these children. We named our project "Tactile Books Made for Sharing".

Content

A progressive range of tactile books. As Blok and Lanners (2009) point out, "Tactile books match the child's level of knowledge and understanding so they allow him to consolidate, broaden and integrate his experiences" (p. 31). In this project, tactile books aim to match the child's level of development of symbolic understanding by providing four levels as follows:

Level A: Object Books: Real everyday objects linked together by a theme or a very simple story.

Level B: Object Books with one or two first tactile pictures that can be compared with reality, illustrating simple stories about familiar experiences.

Level C: Stories with a number of tactile pictures that further develop the child's symbolic understanding using a range of concepts but still based on familiar experiences.

Level D: Stories which may be outside the child's direct experience, with some more imaginary themes and some abstract pictures.

The child's journey into literacy starts before Level A with real life experiences and real objects that have particular meaning for a certain child. "Experience books" refer to books by which the parent or preschool teacher shares an experience with a child. During that experience, the adult and child collect objects with meaning and memory and bring them back to home or school to make a book together. The book is unique as it has been made with and for that child only.

Level A Object Books introduce objects that do not belong to the child personally but are common objects in Vietnam. Attaching an object to a page makes it more difficult to recognize as it loses its most meaningful feature, for example a sock or hat can no longer be put on. Therefore, there is a progressive range within Level A: initial books have objects attached by Velcro so that they can be removed and fully explored by the child. Later books have more real objects sewn or stuck onto the page, so the child has to learn to recognize them increasingly by the shape and texture. This will prepare them for recognizing a tactile picture at the next stage.

Level B Object Books introduce one or two first tactile pictures that enable the child to compare reality with a tactile representation for the first time. The real object represented in a first tactile picture needs to be either included on other pages of the book, provided in a bag to accompany the book or found readily in any typical home. At level B the child will encounter pictures representing parts of the human body for the first time, particularly the face. The adult is guided to provide the child with supplementary play experiences, such as making a face from play dough together.

Level C books will have more tactile pictures, still representing familiar experiences, but the real objects will not always be at hand. The child will have to rely on memory and understanding to make connections, such as a trip to the market and pictures of vegetables. Dolls have been included in some early Level C books to help children learn to recognize different ways a person can be represented. Other books represent people in 2D form and the role of an adult is to support the child verbally and by touch to make the connection. As the child progresses through level C, different concepts in symbolic understanding can be developed through the choice of different books.

At level D, the stories are not all based on familiar experiences for Vietnamese children. The stories become a means for developing children's understanding of the wider world or objects in their environment that are not possible to explore by touch, such as a cockroach or mosquito. Some pictures attempt to illustrate concepts that are very difficult to depict in tactile form, such as water. Other stories will be entirely imaginative, e.g. about pirates or monsters. All the stories will potentially lead to a more complex imaginative play. Having a progressive range of books means that the children will have books suitable for their current level of development with the clear expectation that they will continue to make progress and move on to the next level.

It is also important that when making tactile books, attention is paid to encouraging children to read through beautiful tactile images and attractive words. A progressive range of books focuses efforts on teaching the Braille characters, especially how to read them. We hope that by providing a source of enjoyable and imaginative stories brought to life by tactile pictures children will be inspired to learn to read Braille and parents and teachers will be inspired to teach them.

Level of tactile books and literacy. In 2017, we devised our own checklist of tactile book skills with 78 items in the following areas that correspond to the four levels of our tactile books (levels A, B, C, and D): tactile skills; fine-motor skills; concept development; development of symbolic understanding; listening/attention and expressive skills and book

and story skills (see Appendix: Tactile Book Skills). Based on these items, teachers and parents can decide which level of tactile book is currently most appropriate for their child's developmental level of emergent literacy, make an educational plan or check their child's progress when reading tactile books.

As we have observed parents and teachers sharing our books with children, we have realized the need to offer more guidance on how to make the optimal use of tactile books. We have been holding storytelling sessions in an early intervention class and a parent support group to model best practice. We are also developing written guidelines for teachers and parents to follow when reading tactile books with a child, for example: Teachers or parents should sit on the left; the child sits on the right as all our main pictures are on the right-hand page. If a child wants to explore or read the Braille on the left-hand page, it is also easy for him/her to pull the book toward himself/herself. Adults should remember to keep their hands *under* the child's hands, if guiding is necessary, so the child is free to remove their hands at any time. Adults need to name the object or objects and give the child enough time to touch objects and pictures to recognize them. Adults should explain in simple words what the tactile picture is and discuss how to compare it with their child's experience. The tactile book must be in line with the child's level of development. It is very important to remember to always read a tactile book with a child, not let him/her read alone.

Conclusion

Our books are now being loaned to parents of children with VI to read at home and to teachers in early intervention classes. The informal feedback we have received indicates that the children really enjoy them. We want to gather more systematic feedback from the parents and teachers on the impact of the books on the child's emergent literacy. We also plan to involve selected children in giving feedback on how we can improve the design of the pictures.

Our plans for the future development of the project "Tactile Books Made for Sharing" include making more books and setting up our own library. We also plan to host more story-telling sessions in our own library, more pre-school classes as well as public and private libraries. Furthermore, we want to join in with initiatives run by Vietnamese authors and publishers to nurture the culture of parents, reading regularly to all children, with and without disabilities.

When our guidelines about how to share the books are written and ready to share, we plan to hold workshops to train parents and teachers in how to best share the books. We would also like to carry out home visits and classroom visits to give one-to-one feedback and recommendations on how teachers and parents can improve their sharing of the books. We intend to write guidelines about how to make the books and principles of good tactile picture design in Vietnamese. We hope we can share our guidelines and experience with anyone in other provinces who would like to develop tactile books for children with VI.

Research about tactile books for children with VI in Vietnam is emergent. We hope that our checklist of tactile book skills (see Appendix) could be used as a basis for further research on the impact of using tactile books on children's emergent literacy development. "Tactile Books Made for Sharing" is based on our reading of research and previous guidelines from around the world. It has focused on the enjoyment of reading as well as sharing books with family members and peers through our full range of books for children with VI in Hanoi and beyond throughout Vietnam for them to develop a lifelong love of stories and reading.

References

Abba, G. (2009). Reading together: When do we start. In P. Claudet & P. Richard (Eds.). *The Typhlo and Tactus Guide to children's books with tactile illustrations* (pp. 23-30). Les Doigts Qui Revent.

Anh, Hoai. (2015). *Trai Tim Cua Me*. Kim Dong Publishing House.

Blok, A. & Lanners, J. (2009). First Tactile Books. In P. Claudet & P. Richard (Eds.), *The Typhlo and Tactus Guide to children's books with tactile illustrations* (p. 31-38). Les Doigts qui Revent.

Claudet, P. & Richards, P. (2009). *The Typhlo and Tactus Guide to children's books with tactile illustrations.* Les Doigts qui Revent.

General Statistics Office (2018*). Findings of Vietnam's National Survey on People with Disabilities 2016 -2017.* Statistical Publishing House.

Marek, B. (2009). Filling the gap: From tactile picture books to tactile graphics. In P. Claudet & P. Richard (Eds.). *The Typhlo and Tactus Guide to children's books with tactile illustrations* (pp. 89-104). Les Doigts qui Revent.

Hladíková, H. (2014). Children's book illustrations: Visual language of picture books. *CRIS Bulletin of the Centre for Research and Interdisciplinary Study*, *1*, 19-31.

McLinden, M. (2012). Mediating haptic exploratory strategies in children who have visual impairment and intellectual disabilities. *Journal of Intellectual Disability Research*, *56*(2), 129-139.

UNFPA (2011). *People with disabilities in Vietnam: Key findings from the 2009*. Viet Nam Population and Housing Census.

Authors:

Trinh Thi Thu Thanh and Nguyen Thi Hang are both researchers about education for people with visual impairments and multiple disabilities.

Louise France used to be a teacher for children with visual impairment in the UK. Now she works as a volunteer at The Vietnam National Institute of Education Sciences. Thanh, Hang, and Louise are conducting the project "Tactile books, made for sharing" which has made tactile books and lent them to children. The project also coordinates Hanoi Library to organize storytelling sessions for children and parents.

Appendix. Tactile Book Skills

Level	**Pre-Level A** **Real object play**	**Level A** **Object Books: Real everyday objects linked together by a theme or a very simple story.**	**Level B** **Object Books with one or two first tactile pictures that can be compared with reality, illustrating simple stories about familiar experiences.**	**Level C** **Stories with a number of tactile pictures that further develop the child's symbolic understanding using a range of concepts but still based on familiar experiences.**	**Level D** **Stories which may be outside the child's direct experience, with some more imaginary themes and some abstract pictures.**
Features of books at this level	(Parent/teacher may make 'experience book' that is unique for their child but not part of scope of this project)	Object books: real objects attached to a page e.g., book of bathroom objects	First tactile picture books: First simple tactile pictures e.g., face, item of clothing.	Tactile pictures of familiar experiences such as food, pets, daily routines.	More detailed pictures. Some events in the story may be outside the child's personal experience. Some pictures of unfamiliar objects/animals e.g., gecko, monkey. Representations of things difficult to represent in tactile form such as water.
Tactile Fine-motor	● Recognises everyday objects ● Finds hidden	● Uses finger pads to feel and explore details of objects/ textures ● Shows finger isolation ● Cooperates with	● Explores different detail – uses fingertips to feel parts of smaller toys eg wheels on	● Traces/feels textures and braille with light touch ● Uses finger pad to trace the outline of a whole	● Takes opportunity to learn correct finger position to track braille: ○ Finger pads of

	objects (with favourite object) ● Explores everyday objects with a variety of different actions using hands/finger in order to gain different types of information such as texture, temperature, weight , size ● Holds one object on each hand ● Relates two objects together in play ● Shows interest in 2 or more textures	prompts from adults to find the braille and feels briefly ● Turns single page with help ● Able to find special features of objects ● Attempts to search for dropped objects ● Can use both hands to do two different actions during the same activity	toy car ● Identifies rough/smooth, hard/soft textures ● Able to match two textures ● Locates braille on the page and explores ● Can turn pages of book one by one without physical prompt. ● Identifies 2 object with the same texture (soft, rough…) ● Can match by material and texture ● Explores/ touches Braille in informal ways.	shape or object. ● Matches and sorts a variety of textures ● Uses at least 2 index fingers (finger pads) to trace lines (horizontal, zigzag…) with prompts ● Places finger pads on braille words or line and attempts to move from left to right ● Names shapes by tracing raised outline of shapes ● Feels and compares 2 objects or parts of an object on the page to find the requested object (size, shape, texture…)	index fingers ○ Uses other fingers to support index fingers or has them ready ○ Light touch ○ Straight fingers ● Can track from left to right along Braille line ● Can track left to right along braille line and find the next line ● Begins to recognise some features of the braille text, e.g. long line/short line, particular letters e.g first letter of their name ● Locates Braille labels in familiar environment ● Tracks 3-5 Braille lines of different length
Concept Development Development of symbolic	● Demonstrates understanding of what objects are used for by making attempt to use objects on self, such	● Shows understanding of link between objects and familiar routines ● Does some pretend actions to an adult, e.g., gives drink from an	● Can identify at least 3 shapes ● Can find / name particular textures in a picture that represents different	● Uses shape to help identify objects in tactile pictures (knows which common objects are round or square etc) ● Can name particular	● Uses shape, texture, relative size and other features together to identify objects in tactile picture quicker than they did in level C

understanding	as comb on hair. ● Recognises body parts during movement activities ● Can name a few familiar objects, toys, or food	empty cup? ● Identifies body parts, actions ● Recognises and names familiar objects by touch in a tactile book	familiar things in child's everyday experience eg nose, eyes, hair, ears ● Uses one object to represent another in pretend play eg uses a lid as a cup, puts brick on a plate as if it is food	textures in a picture that represent different familiar things in child's everyday experience in more difficult pictures e.g., motorbike, animals. Understands concepts 'under', 'on top', 'behind' ● During pretend play can carry out 2 or more symbolic actions that follow each other in the same activity e.g. getting ready to go to bed	● Understands that top of page = high (sky) and bottom of page = low (ground) ● In pretend play can involve other children or adults in complex sequence of actions ● In pretend play can recreate situations outside the home such as the doctors, shopping,
Listening/ Attention & Expression.	● Becomes absorbed in an activity and can ignore what is going on around them to concentrate ● Enjoys and takes turns in social games ● Enjoys sharing toy or object with adult / attention can be directed to an	● Enjoys sharing object books with adults: attention can be directed to objects on page by adult using hand under hand prompts. ● Enjoys rhyme book, joins in some words while rhyme is sang or read.	● Able to sit at small table and engage in adult activity for 5 minutes or more ● Enjoys sharing book with an adult and makes comments about it ● While listening attentively to story, feels relevant parts of a simple tactile picture.	● While listening attentively to the story, use 2 hands to feel relevant parts of a more complex tactile picture. ● Describes pictures and relates to events in own experience.	● Child feels picture and discusses with teacher or parent describes, makes comments in relation to own experience, answers *and asks* 3 – 5 questions ● While listening to story attempts to track braille lines from left to right.

	object by adult using: a) voice b) touch. (Joint attention)				
Book and story skills	● Recognises familiar rhymes and games eg, showing excitement, smiling, stilling ● Joins in rhymes with actions and Vocalizations ● Explores book but uses like a toy	● Explores the pages of tactile books with help (hand under hand) ● Shows interest and sometimes explores pages of object book independently ● Opens and closes a book	● Locates braille on the page and is becoming aware that this tells the story ● Shows understanding of main parts of book: front cover, spine etc by holding book in correct position for reading ● Explores the page of tactile books without help	● Enjoys familiar stories read to them eg has one or more favorite stories and characters ● Notices a deliberate mistake in story telling or a rhyme ● Turns pages to search for favorite picture ● Joins in telling of parts of familiar story (may or may not be feeling braille)	● Feels braille word or sentence and 'reads' by memory. ● Enjoys a variety of stories read to them and has some favorite stories and characters ● Can retell the story in own words

A CRITICAL ANALYSIS OF EXCLUSIONARY LANGUAGE IN 16 COUNTRIES' NATIONAL LAWS AND POLICIES

Julie A. Sears[1], Lisa G. Driscoll[2], and Jennifer A. Sughrue[3]
[1] Educational Foundations and Special Education, East Tennessee State University, Johnson City, TN, USA
[2] Educational Leadership and Policy Studies, The University of Tennessee, Knoxville, TN, USA
[3] Educational Leadership, Florida Gulf Coast University, Fort Myers, FL, USA

Article 24 of the United Nations Convention on the Rights for People with Disabilities (UNCRPD) (2006), along with the United Nations General Comment (2016), provide the most comprehensive international standards for inclusive education (Byrne, 2019). As signatories of the UNCRPD, the 184 countries' governments (United Nations, 2022) have expectations to implement article 24 Education into national-level laws and policies (Waldschmidt et al., 2017). Despite many countries' governmental efforts to shift legislation from segregated and integrated legislation to more meaningful and quality inclusive education, no country holds exemplary inclusive practices (Byrne, 2019). In fact, there are times when laws and policies create exclusions for students with disabilities which can often be hidden "behind a thick masking veneer of equity, inclusion and improvement discourses" (Slee, 2014, p. 11). All of this leaves many students with disabilities without legal support to access the most appropriate education to reach their highest potential.

Problem and Purpose

Inclusive education is a never-ending process to evaluate the exclusions which come with the inclusion (Ainscow et al., 2013). One way to bring understanding to such exclusions is to examine the inconsistencies and overtly problematic policies (Hardy & Woodcock 2015). Therefore, this study utilized a critical policy analysis of 16 selected countries' education laws and policies to examine, if and how, implicit and explicit law and policy language and practices may exclude students with disabilities. The outcomes of this study are particularly useful for future inclusive education researchers, disability advocates, and policymakers. However, the results are limited to these 16 selected countries.

Research Framework

The study's framework was developed by critically analyzing past policy studies conducted between 2010 through 2020 to construct a framework of possible explicit and implicit exclusionary indicators. As this study's laws and policies were examined, other indicators of exclusion emerged both implicitly and explicitly. Later, the countries' number of exclusionary indicators were used to rate the education laws and policies to be inclusive (no exclusionary indicators), needs improvements (one or two exclusionary indicators), or needs major improvement (three or more exclusionary indicators).

Findings

The outcomes of this study signify the current status of 16 countries' inclusive education policies which indicates that most countries' laws and policies have exclusionary language and practices. The explicit exclusionary indicators found were integration versus inclusive education, segregated learning environments, rigid and inflexible curriculum, negative labeling, denied access to general schools, lack of physical access to general schools, lack of support for assessments, use of school fees, and a lack of student rights. The number of explicit exclusionary indicators indicate that seven countries' laws and policies need major improvements, three countries' laws and policies need improvement, one country needs no improvements, and three countries could not be assessed due to a lack of inclusive laws and policies. Implicit exclusionary indicators found included a lack of individualized supports, medical model/deficit-based assumptions, lack of teacher training, lack of accountability, lack of student rights, lack of access to the general education setting, segregated learning environments, and lack of support for assessments. Based on the number of implicit exclusionary indicators found, seven countries' laws and policies need major improvements, six countries need improvements, and three countries' laws and policies could not be assessed due to missing laws and policies.

Implications

The implication of this study provides information as to the exclusionary language and practices that occur within 16 countries' laws and policies. Policymakers, disability advocates, and future researchers can

apply these found exclusionary indicators to help improve the inclusiveness of students with disabilities in future education laws and policies. Additionally, this study provides a framework that future researchers can use to assess other countries' laws and policies.

Conclusion

As Ainscow et al., (2013) indicated, exclusions are linked to inclusion with a never-ending process to actively recognize the exclusions which may exist. While many of these 16 signatory countries' governments have implemented supportive laws and policies for inclusive education, exclusionary language and practices continue to exist which may create exclusions for children with disabilities. However, these countries' policymakers and disability advocates can work together by being cognizant to help remove the existing exclusionary indicators when developing future inclusive laws and policies.

References

Ainscow, M., Dyson, A., & Weiner, S. (2013). *From exclusion to inclusion: Ways of responding in schools to students with special education needs.* CfBT Education Trust. http://www.cfbt.com

Byrne, B. (2019). How inclusive is the right to inclusive education? As assessment of the UN convention on the rights of persons with disabilities' concluding observations. *International Journal of Inclusive Education*, 1-18.

Hardy, I. & Woodcock, S. (2015). Inclusive education policies: Discourses of difference, diversity and deficit. *International Journal of Inclusive Education, 19*(2), 141-164. https://doi.org/10.1080/13603116.2014.908965

Slee, R. (2014). Discourses of inclusion and exclusion: Drawing wider margins. *Power and Education, 6*(1), 7-17. https://doi.org/10.2304/power.2014.6.1.7

United Nations. (2006). *Convention on rights of persons with disabilities-article 24.* https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html

United Nations. (2022). *Conventions on rights of persons with disabilities*. https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html

Waldschmidt, A., Strum, A., Karacic, A., & Dins, T. (2017). Chapter 11: Implementing the UN CRPD in European Countries. In R. Halvorsen, B. Hvinden, J. Bitckenbach, D. Ferri, and A.M.G. Rodriguez (Eds). *The Changing Disability Policy System: Active Citizenship and Disability in Europe* (pp.177-188).

Authors' Biographies

Julie A. Sears, PhD, is employed by the Vanderbilt Consortium Leadership Education in Neurodevelopmental Disabilities (LEND) at East Tennessee State University, Johnson City, Tennessee, USA. Her research interests include K-12 education law and international education law and policy.

Lisa G. Driscoll, PhD, is an associate professor in the Educational Leadership & Policy Studies Department and an affiliated faculty with the Postsecondary Educational Research Center at The University of Tennessee, Knoxville. Her research interests span K-20 education policy with a specialization in education finance and legal issues.

Jennifer A. Sughrue, PhD, is a professor of educational leadership and the coordinator of the EdD in Education program at Florida Gulf Coast University. Her research interests span K-20 education law and policy, with an emphasis on law- and policy-to-practice.

THE INTERPROFESSIONAL PROCESS FOR DEVELOPING A TOOLKIT FOR AUTISM SPECTRUM DISORDER FOR RURAL AREAS OF SOUTH AFRICA

Julie A. Sears[1], Tatiana Ransom[1], and Brenda Louw[1]
[1] East Tennessee State University, Johnson City, TN, USA

Interventions for people with disabilities are often developed in high-income countries and often do not translate to countries with fewer resources (Franz et al., 2018). South Africa is one country that has a dearth of autism interventions with services ranging from best practices to minimal services, and a disparity of care exists. Many services continue to be scant which creates waiting lists lasting up to 18-months long for a diagnosis (Franz et al., 2018). Those who are fortunate to acquire intervention services may receive one 30-minute session every four to six weeks (Franz & Dawson, 2019).

To add to the dilemma of accessibility to services, there is limited information available for practitioners, academics, and parents (Frantz et al., 2017). In addition, pseudoscience propagates many unethical and unscientific practices regarding the management of ASD (Knopf, 2014). Therefore, there is a need to support caregivers and their children with ASD by providing information concerning characteristics and best practices to support this critical time when the brain is growing more rapidly (Franz & Dawson, 2019).

Aim of the Project

Schlebusch et al. (2020) encouraged practitioners to creatively think about providing services, no matter how small. This project's goal was for an interprofessional group of trainees, who are interested in neurodevelopmental disabilities, to develop a toolkit that could be used as a starting point to inform caregivers of the ASD characteristics, how to stimulate and respond to behaviors, and how to provide basic supports that can be done in the home for children with ASD. While the toolkit does not address the macro challenges of the early intervention system for South Africa, it can be used as a resource for providers and caretakers.

Project Findings

The interprofessional group reported important lessons from developing this toolkit. First, they learned how to work with other professionals, faculty mentors, and community partners to develop a product useful to the community served. Second, trainees learned how to research and apply the cultural context to their work when serving others. Lastly, the trainees were able to take best practices from their professions to create easy-to-understand information for caregivers in South Africa.

Implications for Practices

Interprofessional collaborations have been found to be beneficial on many levels (Green et al., 2015). The interprofessional benefits of this project include opportunities to reach a broader audience, gain wisdom from others, access new resources, develop new skills, and a cross-fertilization between disciplines (Green et al., 2015). Through this process, trainees reported feeling better prepared to work with other professions to develop useful community-based solutions.

Conclusion

Interprofessional collaborations occur when two or more professions work together to solve a complex need of the community (Green et al., 2015). This team of interprofessional trainees worked together with South African community partners and developed a toolkit for caregivers of young children with autism. The outcomes of this project not only provided an informative toolkit for South African caregivers, but the interprofessional group members learned important collaboration skills to meet the cultural and contextual needs of the community.

References

Franz, L., Adewumi, K., Chambers, N., Violjoen, M., Baumgartner, J. N., & de Vries, P. J. (2018). Providing early detection and early intervention for autism spectrum disorder in South Africa: Stakeholder perspectives from the Western Cape province. *Journal of Child & Adolescent Mental Health, 30* (3), 149-165.

Franz, L., Chambers, N., Von Isenburg, M., & de Vries, P. J., (2017). Autism spectrum disorder in South Africa: A comprehensive scoping review. *Autism Research, 10*(5), 723-749. https: //doi.org/10.1002/aur.1766.

Franz, L., & Dawson, G. (2019). Implementing early intervention for autism spectrum disorder: A global perspective. *Pediatric Med, 2*(44), 1-3. https://doi.org/10.21037/pm.2019.07.09

Green, B. N., & Johnson., C. D. (2015). Interprofessional collaboration in research, education, and clinical practice: Working together for a better future. *Journal of Chiropractic Education, 29*(1), 1-10. doi:10.7899/JCE-14-36

Knopf, L. (2014). Issues concerning pseudoscience and treatment fads for people with autism. *Reaching Milestones*. https://reachingmilestones.com/issues-concerning-pseudoscience-treatment-fads-people-autism/

Schlebusch, L., Chambers, N. J., Dawson-Squibb, J-J., Harty, M., Franz, L., & de Vries, P. J. (2020). Challenges and opportunities of implementing early interventions for autism spectrum disorders in resource-limited settings: A South African example. In M. Hodes, S. Shur-Fen Gau, & P. J. de Vries (Eds.), *Starting at the Beginning: Laying the Foundation for Lifelong Mental Health* (pp. 99-132). Elsevier.

Authors' Biographies

Julie A. Sears, PhD, is employed by the Vanderbilt Consortium Leadership Education in Neurodevelopmental Disabilities (LEND) at East Tennessee State University, Johnson City, Tennessee, USA. Her research interests include K-12 education law and international education law and policy.

Brenda Louw, D.Phil.SLP, is a Professor in Speech-Language Pathology in the Department of Audiology and Speech-Language Pathology at East Tennessee State University. Her research includes cleft lip and palate and early intervention, pediatric HIV/AIDS, NOWS and culturally responsive care. She has published and presented on these topics nationally and internationally.

Tatiana A. Ransom is a bachelor's level special education major at East Tennessee State University, Johnson City, Tennessee, USA. She has a twin with autism, apraxia, and an intellectual disability. Her research interests include family members of people with disabilities.

Author Note

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number T73MC30767, Vanderbilt Consortium LEND. This information or content and conclusions are those of the authors and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

SOCIO-EMOTIONAL SKILLS OF CHILDREN WITH HEARING IMPAIRMENT IN KWARA STATE, NIGERIA

Olabisi Adedigba[1] and Bolanle Olabisi Olawuyi[2]
University of Ilorin, Ilorin, Nigeria

Conceptual Framework and Background

The development of social-emotional skills lays the foundation for other developmental tasks in children. It is a gradual, integrated process in which children learn to recognize, experience, express, and control their emotions as well as create meaningful interpersonal relationships. In essence, good socio-emotional competence is fundamental to every child's happy and successful life regardless of abilities or disabilities. Lack of social-emotional development in children increases their likelihood of developing behavioral issues such as delinquency, inattentiveness, peer rejection, bullying, violence, and others. Children can receive assistance that is appropriate for their age and developmental stage if the issues are identified early on (Zins et al., 2007; Harris, 2014).

Literature shows that reports on the socio-emotional skills of children with hearing impairment are inconsistent. Some researchers claim that the level at which children with hearing impairment develop socio-

emotional skills varies from individual to individual, but that majority of people with hearing impairment have social, psychological, and physical challenges (Manfred, 2007; Harris, 2014; Estrada-Carmona et al., 2019). Others say (Hoffman, 2015; Hintermair et al., 2017) that children with hearing impairment are more likely to have developmental delays and problems than their peers with normal hearing, while some claim that children with hearing impairment are frequently able to socially and emotionally interact with children without hearing impairment on an equal term (Rama & Rajaguru, 2016).

According to Holstrum et al., (2009), a lack of knowledge on the level of socio-emotional development of children with hearing impairment can make it difficult to provide them with the needed, well-targeted, and successful interventions. Thus, there is a need to examine the level of socio-emotional skills of children with hearing impairment in order to provide them with the necessary assistance. In particular, there is a dearth of literature on the social-emotional-emotional skills of children with hearing impairment in Kwara State. As a result, the study examined the socio-emotional skills of children with hearing impairment in Kwara State. Seven skills that are at the heart of socio-emotional development (empathy, self-concept, self-awareness, responsibility, communication, cooperation, and friendship skills) were put into two groups: managing emotions and interpersonal relationships. Two questions guided the study:

1. What is the level of emotion management skills observed among children with hearing impairment in Kwara State?
2. What is the level of interpersonal relationship skills observed among children with hearing impairment in Kwara State?

Research Methodology

A descriptive survey design was adopted in this research. A purposive sampling technique was used to sample 400 children with hearing impairment from 7 special and 13 regular schools in Kwara State. The participants ranged in age from 6 to 12 years old. A self-developed instrument by the researchers, "Children's Social-Emotional Skills Rating Scale" (CSSRS), provided the opportunity to evaluate children's social-emotional skills in the areas of emotion managing skills (empathy, self-concept, and self-awareness) and interpersonal relationship skills (responsibility, communication, cooperation and friendship). The instrument's content validity was checked and its test of reliability yielded an index of 0.80 using the test-retest method and Cronbach's alpha. The observation of the participants lasted 12 weeks. Data was analyzed using descriptive statistics of mean and standard deviation.

Results and Discussions

Table 1: Mean scores and standard deviations of the level of emotion management skills among children with hearing impairment in Kwara State

Emotion Management Skills	**Mean**	**SD**
Empathy Skills	2.46	0.79
Self-Concept Skills	2.10	0.99
Self-Awareness	2.44	1.00
Grand Mean	2.30	0.93

Table 1 reveals that the grand mean (2.30) of the three kinds of emotional management skills assessed was less than the standard reference mean score (2.50). This is an indication that the level of observed socio-emotional skills of children with hearing impairment in Kwara State was low, as shown in the weighted mean scores for empathy skills (2.46 < 2.50), self-concept skills (2.10 < 2.50), and self-awareness skills (2.44). This finding was in line with previous studies by Goodvin (2005) and Hadjikakou and Nikolaraizi (2008), who found that the majority of children with hearing impairment have low self-esteem.

Table 2: Mean scores and standard deviations of the level of interpersonal relationship skills among children with hearing impairment in Kwara State

Interpersonal Relationship Skills	**Mean**	**SD**
Responsibility Skills	2.03	1.06
Communication Skills	2.23	0.74
Cooperation Skills	2.15	0.71
Friendship Skills	2.51	1.02
Grand Mean	2.23	0.88

Table 2 reveals that the grand mean of the interpersonal relationship skills (2.23) was less than the standard reference mean score (2.50). This indicates that the level of observed social-emotional skills of children with hearing impairment in Kwara State was low as revealed in weighted mean scores for responsibility skills (2.03<2.50), communication skills (2.23<2.50), co-operation (2.15 < 2.50) and friendship skills (2.51 > 2.50). The finding was in agreement with Hadjikakou and Nikolaraizi (2008) who found that children with hearing impairment have poor communication skills and Ezema (2013) who found that students with hearing impairment exhibited low responsibility. However, the finding contradicted Rama and Rajaguru's (2016) finding, which revealed that the majority of children with hearing impairment have excellent communication skills. The differences between this study's results and those of Rama and Rajaguru could be due to differences in the study location or to other external factors.

Conclusion and Recommendations

Children with hearing impairment have poor social-emotional skills, according to the study. All seven categories of socio-emotional skills that were assessed in the children with hearing impairment had low levels of skill development. Therefore, in order to support children with hearing impairment in the classroom, teachers should consciously educate, model, and reinforce the use of socio-emotional skills. Likewise, administrators must recognize that children with hearing impairment require various resources, particularly visual and tactile, in order to attain the same objectives as their hearing peers. Parents should also help their children with hearing impairment learn good social-emotional skills, no matter what kind of disability they have.

Future Research Directions

Future research efforts should extend to explore how other characteristics such as family background, gender, and age variations can determine the socio-emotional skills of children with hearing impairment in Nigeria. It may be of interest for future research to examine the correlation between socio-emotional abilities and learning outcomes among children with hearing impairment. This research could also prompt other researchers to make a conscious effort to provide interventions that will assist children with hearing impairment in developing socio-emotional skills in the same way that their peers do in the Nigerian context**.**

References

Estrada-Carmona, S., Xequé-García, J. A., López-Chan,Y. Z., Pérez-Aranda, G.I., Gómez- Rodrigez. S.R. (2019). Qualitative study of the socio-emotional skills performance in hearing impairment children and normal hearing children. *British Journal of Psychology Research*,7(2), 47-60.

Ezema, E.O. (2013). Effect of total communication on academic achievement of pupils with hearing impairment in Enugu State. A PhD thesis in the Department of Educational Foundations (Special Education) University of Nigeria, Nsukka +124

Hadjikakou, K. & Nikolaraizi, M. (2008). The communication experiences of adult deaf people within their family during childhood in Cyprus. *Deafness and Education International,* 10(2), 60–79.

Harris, L.G (2014). Social-emotional development in children with hearing impairment. (Theses and Dissertations--communication sciences and disorders. 4. Retrieved on 04/06/2021 from https://uknowledge.uky.edu/commdisorders_etds/4.

Hoffman, M. F., Quittner, A. L., & Cejas, I. (2015). Comparisons of social competence in young children with and without hearing impairment: a dynamic systems framework. *Journal of Deaf Studies and Deaf Education,* 20(2), 115–124. https://doi.org/10.1093/deafed/enu040.

Holstrum, W.J., Biernath, M. D., McKay, S.D., Ross, D.S. (2009). Mild and unilateral hearing impairment implications for early intervention. *Infants & young children*, 22 (3), 177–187. https://doi.org/10.1097/01.IYC.0000357455. 38816.b8.

Manfred, H (2007). Prevalence of social-emotional problems in deaf and hard of hearing children in Germany. *American Annals of the Deaf,* 152(3), 320-330.

Rama, K. P., Rajaguru, S. (2016). Efffect of life skills training among students with hearing impairment. IJARIIE 2 (6) www.ijariie.com

Biography Information
Olabisi Adedigba is a childhood teacher educator at the University of Ilorin and a Child Rights Advocate. She holds B. Ed and M.Ed in Guidance Counseling, M. Ed and Ph.D. in Early Childhood Education. She has a cross-disciplinary research interest with a primary focus on the holistic development of a child.

Bolanle Olabisi Olawuyi is a Professor of Educational Psychology and Special Educator. presently has her tenure at the University of Ilorin, Nigeria. She holds B.Ed and M.Ed in Special Education and Ph.D. in Educational Psychology. Her research interests are in Educational Psychology, Critical thinking, Special education, Disability, and Child Psychology.

THE INITIAL APPLICATION OF THE BASICS 3 CURRICULUM FRAMEWORK IN VIETNAM: PRACTICAL EXPERIENCES

Huynh Thi Hoang Oanh, Hoang Thi Nga, Hoang Truong Thuy An, and Craig Goldsberry

Conceptual Framework and Background

A functional curriculum is designed to teach functional life skills that are necessary for students to live and work independently in the community. It is also referred to as a life-skills curriculum that includes multiple components such as functional academics, vocational education, community accessibility, daily living skills, financial skills, independent living skills, transportation skills, social skills, and self-determination (Patton et al., 1997; Bouck, 2014). The empirical studies also suggested that a functional curriculum could develop and initiate the independent living ability and social inclusion for students with disabilities (Bouck & Satsangi, 2014).

The Basics^3 Curriculum Framework is a functional educational curriculum framework developed to meet the needs and abilities of students with moderate to severe disabilities. It is designed for learners of all ages, ranging from infants to adults. It focuses on functional domains of Academics, Domestic, Community, Vocational and Recreation & Leisure that aim to help students develop their independence and access to the community when they mature. In addition, the goals in each domain are related to the standards of the Common Core State Standards (CCSS) of the California State Department of Education that could lead to improved outcomes of successful education and employment for students with disabilities and providing work-based learning experiences proven by both practice and research (Robertson, 2015). Furthermore, the Basics^3 Curriculum Framework also provides assessment tools called the Benchmarks and the Diamond Learning Model (DLM) which could help educators, parents, and professionals obtain the necessary information and monitor students' progress. These effective tools could be used during the assessment process to help teachers identify specific intervention goals for children according to the Basics^3 Curriculum Framework.

Research

This study will present the initial steps of applying the Basics^3 Curriculum Framework in an early intervention program for children with intellectual disabilities at preschool. The findings of this project could provide background information for the application of the Basics^3 Curriculum Framework for other groups of children with disabilities in different educational levels.

The classroom action research method was used to develop the application process of the Basics^3 Curriculum Framework for a group of preschool-aged children in the practical center of the Ho Chi Minh City University of Education and in two other inclusion resource centers in Ho Chi Minh City. The results were analyzed from in-depth interviews with 13 teachers participating in this study.

Results

The study's process of applying the Basics^3 Curriculum Framework contains six main tasks. These include revising the Vietnamese translation of the Basics^3 book, adapting goals and objectives to Vietnamese culture, simplifying scoring steps based on the Diamond Model, and administrating the Benchmarks for assessment.

Regarding the revising of the Vietnamese translation: several words and phrases were identified and not translated clearly into Vietnamese and Basics^3 Vietnamese version needs to be edited by psychologists and philologists/linguists.

Regarding adaptations to Vietnamese culture: There are certain difficulties in the application of the Basics^3 in Vietnam because of differences in the culture and educational contexts between Western and Asian

regions. For example, item F.A1.9.3 "… students will trace the following lines using different materials – sand, shaving cream". Preschool teachers in Vietnam suggested using alternative materials for shaving cream because they are mostly female. The item FA 2.13 "students will match and sort coins" should be omitted because coins are no longer an official currency in Vietnam. Teachers also suggested removing items FA 2.24 of Physics and FA2.25 of Astronomy because these subjects are not taught in the national curriculum at the preschool level. Hence, it would be difficult to teach these subjects to preschool-aged children with disabilities. In the area of domestic skills, participants also mentioned that items related to cooking a dish, setting the table, using appropriate utensils when eating (D 2.4, D2.7, D2.9, D2.18); presenting appropriate behaviors at restaurants, responding to the earthquake in the community (C2.1, C2.10) should be alternated as skills because they are rarely used in Vietnam due to culture differences. Furthermore, they also suggested that the item "using buses" in Vocational Area (V1.6) should be changed from level 1 to level 2 because of the differences in specific regulations on using public buses in Vietnam for children.

Concerning simplifying the scoring process based on the Diamond model: to ensure consistency in recording the amount and level of promptings in the Diamond Model, participants recommended several changes that could support teachers in easily memorizing and implementing this model. Accordingly, level 3 is adjusted to 2 prompts given to students, level 2 is corresponsive to 3 prompts, and level 1 is to 4 or more supports. This is revised as following:

- Level 5 (Independent): the students can complete the task individually, without prompts from teachers within different settings.
- Level 4 (Rehearsal): the student is able to consistently complete the task independently with 1 prompt in at least two different settings.
- Level 3 (Application): the student is able to complete the task with 2 prompts (verbal, gestural, or modeling).
- Level 2 (Emerging): the student is able to complete the task with 3 prompts (verbal, gestural, or modeling).
- Level 1 (redirection): The student requires direct teacher intervention to complete the task due to refusal behaviors or needs more than 4 prompts due to lack of prerequisite skills. Prompting serves the purpose of behavioral intervention.
- Level 0 (Dependent): The student requires full assistance to complete the task. This is due either to inability or lack of prerequisite skills.

Concerning the use of the Benchmarks for assessment: 85% of teachers participating in the study expressed that the Benchmarks is a useful assessment tool and more than 90% of responders rated this tool at "satisfied level" in the study survey. They reported that results of the Benchmarks app made their work of writing assessment reports and designing individual education plans (IEP) for students more convenient. However, teachers need support in the translation of the content of items in the Benchmarks app from English to Vietnamese to save time when entering data.

Recommendations

The Basics³ Curriculum Framework is an essential program for special education in Vietnam. The application of this framework provided various lessons for the development of special education programs for children with disabilities in Vietnam. In particular, this framework has a clear, detailed, and hierarchical structure. Moreover, this also includes an assessment approach – The 5 Diamond levels – ordered in different levels of promptings that effectively supports special teachers in the process of assessment and identification of intervention goals for their students. Furthermore, the domains of the Basics³ Curriculum Framework are interconnected and integrated into various teaching activities and topics. In summary, the research findings suggest that this framework should be revised and there is a need to develop one assessment app in Vietnamese in order to successfully apply this curriculum in Vietnam.

Suggestions for Future Research

It is necessary to expand this research content from level 2 to level 6 of The Basics³ Curriculum Framework in future. Additionally, the development of assessment software and an online system of students' data loggings could also be the research topics that need to be investigated more.

References

Bouck, E. C., & Satsangi, R. (2014). Evidence-base of a functional curriculum for secondary students with mild intellectual disability: A historical perspective. *Education and Training in Autism and Developmental*

Disabilities, *49*(3), 478-486.
Patton, J. R., Cronin, E., & Jairrels, V. (1997). Curricular implications of transition: Life skills as an integral part of transition education. *Remedial and Special Education*, 18, 294-306.
Robertson, P. (2015). *Basics for Administrators training.* San Bernardino.

Contact Information:
Huynh Thi Hoang Oanh, Hoang Thi Nga, Hoang Truong Thuy An
Ho Chi Minh City University of Education
240 An Duong Vuong Street, Ward 4, District 3,
Ho Chi Minh City, Vietnam
oanhhth@hcmue.edu.vn; ngahtt@hcmue.edu.vn; anhth@hcmue.edu.vn

About the Authors:
The authors are lecturers at Ho Chi Minh City University of Education. They hold PhD and masters' degrees in Special Education and Psychology. They have the same shared interest and experiences in the field of special education, especially working with children with disabilities in early intervention programs and inclusive settings.

Craig D. Goldsberry
San Bernardino City Unified School District, WORC Program @ San Bernardino Valley College Campus
777 N. F Street, San Bernardino, CA 92410 USA
Craig.goldsberry@sbcusd.k12.ca.us

About the author:
Craig Goldsberry is the teacher/coordinator of the WORC (Working On Real Careers) Program based on the campus of San Bernardino Valley College. He has been the IASE Volunteer in Vietnam since 2015. He holds a B.A. in Psychology and a M.S. in Special Education.

ATTITUDES TOWARDS PEOPLE WITH DISABILITIES AND STRESS IN WORK: SPECIAL EDUCATION TEACHER'S PERSPECTIVE

Nguyen Thi Thanh Huyen

Conceptual Framework and Background

Special education is a topic in education that needs attention from stakeholders. Some problems are considered a national concern. A variety of of issues in special education focus on research and practice. However, the teacher is a significant schooling factor influencing the achievement of students (Sass et al., 2010). Improving programs and giving good working conditions can reduce the high rate of teachers leaving their job (Gersten et al., 2001).

The teacher's attitude is a critical factor in teaching progress that may affect the achievement of a student. Focusing on teacher issues, with the number of special needs of students in a class and teachers in special education programs, the leaders of schools need to be more sensitive and pay full attention to teachers to solve further problems such as stress, workload, and pressure (Samaden, 2021). Gething and Wheeler (1992) propose the Interaction with Disabled Persons (IDP) scale. Twenty items to tap dimensions underlying negative attitudes towards people with disabilities that aimed to measure attitudes and encourage sensible attitudes towards people with disabilities. This measurement helps universities enhance the training programs to give teachers positive attitudes toward students with disabilities, especially in universities running special and general education programs under a dual system in Vietnam. Gersten et al., (2001) research on working in special education shows factors affecting the commitment and intention to stay in the field of inclusive educators. Gersten et al., further states the problem in job design that "*a poorly designed job can affect teachers in negative ways, leading to withdrawal from involvement in the job and eventual decisions to leave the position or the field*" (p.551). Working in inclusive education with different needs of students, the educators get a high degree of pressure that causes a decrease in job engagement. Thus, job design is a negative factor leading to stress in the work of inclusive teachers (Gersten et al., 2001).

The investigation was guided by one research question :1)*What is the impact of attitudes towards people with disabilities and problems in job design of special education teachers on their pressure in a work environment*? This research aims to examine the Interaction with Disabled Persons Scale (IDP) to measure attitudes towards people with disabilities by Gething and Wheeler (1992) and investigate the impact of IDP variables and problems in job design on teachers' pressure.

Research

The research adopted the IDP scale to measure attitudes towards people with disabilities from the study of Gething and Wheeler (1992). Problems in Job Design and Pressure in work were adopted from Gersten et al. (2001). The questionnaire was sent via an online link. The study used random sampling. This research employed exploratory factor analysis (EFA) and Cronbach's alpha to examine constructs and used linear regression to test the relationships between independent variables and dependent variables. The link opened in three days that collected 108 respondents who work at education centers and schools that support children with disabilities throughout Vietnam. Of 108 respondents, 27% of respondents have less than five years and the rest, 73%, have more than five years of experience in special education. 10% of respondents are male and the rest is female.

Results and Discussions

The EFA employed the KMO and Bartlett's test of sphericity, principal components with Varimax rotation. KMO value is based on the threshold of Kaiser (1974) and Tabachnick and Fidell (2007). The KMO value of this research data was 0.737, which fell into a good range that indicated the sample size satisfactory for factor analysis. Based on the factor loading, seven items, including IDP8, DP10, IDP11, IDP13, IDP14, IDP15, and IDP19, were eliminated. There are four loaded factors, in which one factor of Problem in Job Design and three factors of Attitudes towards People with Disabilities, comprising (1) ***Discomfort in Social Interaction***, (2) ***Vulnerability,*** and (3) ***Coping***. This study employed Cronbach's alpha for reliability tests. The results of Cronbach's alpha are acceptable, 0.882 for Pressure in Work, 0.842 for Discomfort in Social Interaction, 0.684 for Vulnerability, 0.751 for Problem in Job Design, except Coping with Cronbach's alpha value at 0.530.

Linear regression is employed to test four hypotheses. Hypotheses H_1, H_2, and H_3 propose positive impacts of Discomfort in social interaction, Vulnerability, and Coping with Stress in the work of special education teachers, respectively. And H_4 proposes a negative impact of Problems in job design on Stress in the work of special education teachers. The results show that the independent variables explain 24,2% of the variance of pressure in the work of teachers (R-square = 0.242). With a 95% confidence interval, this study confirms the effect of Discomfort in Social Interaction and Problem in Job Design on Pressure in Work of special education teachers (sig. of H_1: .000, H_4: .043). The results do not confirm the impact of Vulnerability and Coping on Pressure in Work (sig. of H_2: .346, H_3: 0.302).

The acceptance of H_1 confirms a positive effect of the discomfort of inclusive teachers in social interaction on their stress in work. Discomfort in social interaction reveals their degree of discomfort when communicating with people with disabilities. They are overwhelmed and less concerned when meeting a person with a disability directly. Thus, the higher level of discomfort in social interaction triggers a higher pressure in the work of inclusive educators. This finding recommends that inclusive educators need to have confidence in their competence to meet the demand of diverse student needs. Furthermore, the finding recommends universities need redesigned special education programs to improve teachers' attitudes. The acceptance of H_4 verifies a negative effect of the problems in job design on their stress in work with students owning disabilities. Problems in job design such as poor job design cause failure to achieve valued goals and work-related stress for individuals (Gersten et al., 2001). The impact of poor job design on stress in the work of special education teachers, in turn, results in lowered self-efficacy as well as lowered engagement in work. They can leave the job because the working conditions do not fit the designed job. To solve this problem, the universities need to give students career orientations in a special education environment. The schools need to design or redesign the job based on working conditions to satisfy inclusive teachers' psychology.

Conclusion

Teachers in special education have to cope with the different and special needs of students; thus, they get a lot of pressure and workload. This study reveals the impact of attitude toward people with disabilities, discomfort in social interaction, and job design problems of teachers on the pressures in working of teachers. These results contribute to academic and practical aspects. These results confirm a conceptual framework of the impact of attitude and job design on pressure. In practice, the results have policy implications for educational

institutions in teacher training to integrate skills and attitudes into the curriculum and for special education teachers in designing the job and preparing for their careers.

References

Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. K. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children, 67*(4), 549-567.

Gething, L., & Wheeler, B. (1992). The interaction with disabled persons scale: A New Australian instrument to measure attitudes towards people with disabilities. *Australian Journal of Psychology, 44*(2), 75-82.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39*(1), 31-36.

Samaden, I. S. B. (2021). Time element in the construct of special education teacher workload in Malaysia. *Turkish Journal of Computer and Mathematics Education, 12*(11), 5141-5145.

Sass, T., Hannaway, J., Xu, Z., Figlio, D., & Feng, L. (2010). *Value added of teachers in highpoverty schools and lower-poverty schools (Working Paper 52)*. National Center for Analysis of Longitudinal Data in Education Research. Washington, DC.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics*. Boston, MA: Pearson Education. Inc.

Contact information:
Nguyen Thi Thanh Huyen
Doctor in Special Education
VNU University of Education, Faculty of Educational Sciences,
VNU University of Education, 144 Xuan Thuy street, Cau Giay, Hanoi - 100000, Vietnam

SUPPORTING ADOLESCENTS WITH AUTISM SPECTRUM DISORDERS DURING COVID-19 PANDEMIC IN VIETNAM

Thi-Thao Do, Thi-Cam-Huong Nguyen, Cong-Khanh Nguyen, Nu-Tam-An Nguyen, Thi-Bich-Ngoc Tran, and Hoai-Thuong Nguyen

Introduction

Children with autism spectrum disorder (ASD) are particularly affected by the COVID-19 pandemic (Bellomo et al., 2020). Especially during the lockdown period, staying at home slowed down the development of social skills and reduced independence and self-confidence of children with ASD (Chaturvedi, 2020). Many children with ASD have difficulty adapting to changes in their environment (Christensen et al., 2018). Thus, when they have to stay at home for a long time due to the Covid-19 lockdown, they may not understand what is happening, why they are not allowed to go to school, why their routines are disrupted, and they have many difficulties adapting to changes in their environment. Children with ASD are often more fearful, frustrated, and anxious, which manifests in behaviors such as sleep disturbances, loss of appetite or increased repetitive behaviors, increased agitation or irritability, or decreased self-care abilities (Hume et al., 2020). Furthermore, many children with ASD use electronic devices (such as televisions, tablets, and smartphones) longer and more often. Then, it is very difficult for them to stop using electronic devices and switch to another activity (Istituto Superiore di Sanità, 2020). The purpose of this study is to understand the difficulties that teenagers with ASD face in unusual contexts such as social distancing during the Covid pandemic, thereby proposing measures to support children to adapt in the pandemic and the social distancing.

Research methods

In this study, we conducted a 3-level Likert Scale questionnaire on the awareness of teenagers with ASD about their own difficulties during the Covid-29 pandemic block-down. The questionnaire contents include (1) difficulties in health, psychological and sensory (with the reliability is 0.92 by Cronbach's Alpha) and (2) behavioral and habit difficulties that the children encountered during the period of lockdown due to Covid-19 (with the reliability is 0.91 by Cronbach's Alpha)

This questionnaire is then designed in the Google Form, sent to teachers of students with ASD, then teachers send it to the parents and the parents explain for their children to answer. Both parents and children signed an electronic informed consent.

There were 69 teenagers with an ASD diagnosis between the ages of 12 and 14 who participated in

answering the questionnaire from November 2021 and March 2022 during the stressful time of the Covid-19 pandemic in Viet Nam. Children's autism spectrum disorder was medically confirmed from mild to high functional level. The final raw data were downloaded from Google Forms into a MS Excel for analysis using SPSS software.

Results

The survey results show that over 90% of adolescents with ASD currently face difficulties in all three areas of health, psychology, and senses during the COVID-19 lockdown. The three most difficult problems that they face are: The most difficulty is in the field of physical health (with 76.1% of children having many difficulties), followed by "Not being able to satisfy sensory needs" (with 75.5% on very difficult level), and "Thinking about negative, insecure things" (74.8% very difficult).

More than 90% of adolescents with ASD have difficulties in behavior and habits during the COVID lockdown period. The three most difficult problems are: Difficulty adapting to new schedules and learning tasks at home (85.6% very difficult), followed by "Appears to many new problem behaviors" (83.1% very difficult), and finally the phenomenon of problem behaviors reappears (75.3%). Age factors and high functional level have a clear influence on the difficulties of adolescents with ASD: The older the student with ASD, the more obvious the difficulties are ($p<0.05$*); and the higher the function level they have, the more obvious the difficulties are ($p>0.05$*).

Recommendations

First, to help adolescents with ASD adapt to new schedules and learning tasks at home, it is necessary to explain adolescents with ASD to understand the changes in the surrounding environment due to the COVID_19 pandemic, especially, during the lockdown period by using short social stories and illustrated videos. Second, to prevent the appearance of many new problem behaviors, support should be given to maintaining existing habits and skills such as self-service, hygiene, dressing, and other social skills by involving them in routine and structured activities at home which are carried out by parents. Third in the new context of being at home with parents for a long time, it is important to build new skills for adolescents with ASD to cope with environmental changes by using social stories about needed skills during the pandemic. Adolescents with ASD should learn the following new skills: Limit going out of the house unless necessary; Keep a safe distance; Wash your hands often with soap; Wear a mask when going out. The use of rewards and reinforcement is important in the formation and maintenance of new behaviors and habits. Thus, this method should be continuously edafter the Covid-19 lockdown period.

Finally, maintaining physical exercises and sensory conditioning is necessary. Parents should learn the characteristics of their child's sensory needs to design appropriate activities such as vestibular activity, and somatosensory. Visual sensory disturbances sometimes directly affect daily activities of children with ASD. Some suggestions for the arrangement of the environment for adolescents with ASD include: (1) Arrange a neat environment, should choose simple curtains, and gentle colors; (2) Provide sufficient input for the child's vestibular needs through games, e.g., airplane games, car games in the playground, roller coasters, swings, rocking in the rocking chair, listening to music through headphones, deep breathing, lifting heavy objects, watching favorite video clips, and exercising (Ameis et al., 2020).

Conclusion

During the COVID-19 pandemic, adolescents with ASD in Vietnam faced many difficulties in terms of physical health, psychological, sensory, behavioral, and habit. These results coincide with the research results of many other authors such as Christensen et al. (2018), Chaturvedi (2020), and Hume et al. (2020). This study also shows that the older the child, and the higher the functional level they have, the greater the impact of the COVID-19 pandemic is on the child. Therefore, during the COVID-19 pandemic, especially during the lockdown period, families and teachers must help children with ASD to relieve stress and anxiety and be proactive in activities while adapting to new situations. The effects of students' age and level of ASD symptom severity on their behaviors to adapt to changing situations during a public health crisis, such as COVID-19 pandemic, need to be examined more closely in the future.

References

Ameis, S. H., Lai, M.-C., Mulsant, B. H., & Szatmari, P. (2020). Coping, fostering resilience, and driving care innovation for autistic people and their families during the COVID-19 pandemic and beyond. *Molecular Autism*, *11*(1), 1–9. https://doi-org/10.1186/s13229-020-00365-y

Bellomo, T. R., Prasad, S., Munzer, T., & Laventhal, N. (2020). The impact of the COVID-19 pandemic on children with autism spectrum disorders. *Journal of Pediatric Rehabilitation Medicine, 13*(3), 349-354. https://doi-org./10.3233/prm-200740

Chaturvedi, S. K. (2020). COVID-19, coronavirus and mental health rehabilitation at times of crisis. *Journal of Psychosocial Rehabilitation and Mental Health, 7*(1), 1-2. *https://doi.org/10.1007/s40737-020-00162-z*.

Christensen, D. L., Van Naarden Braun, K., Baio, J., Bilder, D., Charles, J., Constantino, J. N., Daniels, J., Durkin, M. S., Fitzgerald, R. T., Kurzius-Spencer, M., Li-Ching Lee, Pettygrove, S., Robinson, C., Schulz, E., Wells, C., Wingate, M. S., Zahorodny, W., & Yeargin-Allsopp, M. (2018). Prevalence and characteristics of autism spectrum disorder among children aged 8 tears – autism and developmental disabilities monitoring network, 11 Sites, United States, 2012. *MMWR Surveillance Summaries*, *65*(13), 1–23. https://doi-org/10.15585/mmwr.ss6513a1

Hume, K., Waters, V., Sam, A., Steinbrenner, J., Perkins, Y., Dees, B., Tomaszewski, B., Rentschler, L., Szendrey, S., McIntyre, N., White, M., Nowell, S., & Odom, S. (2020). *Supporting individuals with autism through uncertain times*. Chapel Hill, NC, USA: University of North Carolina.

Istituto Superiore di Sanità (ISS). (2020, August). *Indicazioni ad interim per un appropriato sostegno delle persone nello spettro autistico nell'attuale scenario emergenziale SARS-CoV-2 Rapporti ISS COVID-19.*

Contact Information:

Thi-Thao Do
Faculty of Special Education, Hanoi National University of Education
136 Xuan Thuy, Cau Giay, Hanoi, Vietnam
thaodt@hnue.edu.vn

About the Author:

Thi-Thao Do is Vice-dean of the Faculty of Special Education, Hanoi National Univerisity of Education. She holds a Ph.D. in Pedagogy and Education. She is an expert in education for children with autism spectrum disorders and children with intellectual disabilities in early intervention and inclusive education using evidence-based research methods.

EDUCATION FOR GIFTED STUDENTS WITH LEARNING DISABILITIES: CHANGING FROM ASSESSMENT ASPECT

Thi-Cam-Huong Nguyen

Background

Not all, but many students with learning disabilities have a particular ability at the level of giftedness or genius (Maddocks, 2018). Gifted students with learning disabilities (GLD) are twice exceptional students. Giftedness and disability both interact with each other. That is the reciprocal masking or compensational effect that giftedness and learning disabilities have on each other. About 2 to 9% of students with twice-exceptional needs (including students with GLD) are often not identified due to this masking effect (Yssel et al., 2020). This shows that identifying students with GLD is not easy. At the same time, the education of students with GLD faces many challenges because most teachers think that giftedness and disability are two different states, separate, and cannot influence each other (Heward, 2012).

Method

We conducted a survey to ask 11 teachers who are teaching students with GLD in 2020 to understand the reality of recognizing and educating students with GLD, thereby making suggestions to solve problems. These teachers were selected by the non-probability sampling method with convenience sampling. They are teachers of GLD students who accessed a hospital and educational institution in Hanoi (Vietnam) during the

year 2020. Due to the Covid-19 pandemic in this duration, the number of students with GLD who visited doctors has decreased, thus the number of teachers also decreased.

Results

The results show that 9 out of 11 teachers ($p<0.05$*) confirmed the deficiency of students with GLD. All 11 teachers ($p<0.01$**) prioritized support to help students with GLD overcome weaknesses and difficulties but did not have a plan to develop students' strengths. Nine out of 11 teachers ($p<0.05$*) were reducing the number of exercises, and 10 out of 11 teachers ($p<0.01$**) were minimizing the requirements of activities to make them easier for students with GLD. Nine out of 11 teachers ($p<0.05$*) did not have suitable teaching materials for students with GLD and lacked understanding of specific support methods for students with GLD. Most teachers did not adequately and sufficiently understand the nature of GLD. Teachers prioritized improving academic difficulties over impacting students' positive internal strengths.

Changing from the Assessment Aspect

It is said that due to the masking effect, in many cases, the IQ of students with LD is dragged down, and due to the high standards of giftedness, the twice exceptional needs of students with GLD is easily overlooked. In the model of identifying students with LD based on cognitive ability, by changing the assessment criteria for giftedness for students with LD, it is possible to easily identify their giftedness, thereby easily identifying students with GLD, and not overlook their twice exceptional needs. On the other hand, by knowing cognitive strengths and weaknesses of students with GLD, this is also helpful for identifying suitable support and intervention methods to the ability of students with GLD, opening up the possibility of improving intervention effectiveness.

Some ways to change assessment. Assessment of students with GLD includes giftedness assessment and learning disability assessment (Maddocks, 2018). The traditional way of assessing giftedness is through contests, considering academic achievement and intelligence quotient (IQ). However, students with GLD will often fail exams and have poor academic performance due to learning disabilities. Meanwhile, composite intelligence scores can be dragged down, leading to underestimation results in the assessment of students with GLD (Nielsen, 2002). According to Lovett and Lewandowski (2006), total scores from IQ assessments may not be a valid representation of the cognitive abilities of students with GLD with diverse strengths and weaknesses. Because of the masking effect, it is necessary to lower the IQ standard by 130 points to broaden the criteria for determining students' talents with GDL (Nielsen, 2002; Maddocks, 2018). At the same time, it is also advisable to consider talent in specific fields and in different categories based on multi-intelligence types to determine which students with learning disabilities are gifted.

To identify learning disabilities, it is necessary to consider the Processing Strengths and Weaknesses (PSW) models because of their adequate identification and treatment utility (McGrill & Busse, 2016). This model identifies the deficits in learning ability and identifies the causes of cognitive ability of these deficits. In this model, students' strengths in cognitive ability are also clearly identified. Using this model, it is possible to identify learning disabilities and the strengths and giftedness of students with GLD.

The cognitive abilities of students with GLD could be assessed by intelligence tests developed based on the Cattell-Horn-Carroll theory of intelligence such as WISC-IV and WISC-V. According to the intellectual classification levels of the WISC scale and the statistical comparisons of the scale, it is possible to identify the competencies that are the strengths and weaknesses of the students. Under the new perspective on twice-exceptional needs, it is possible to identify giftedness and deficit in cognitive skills. For learning disabilities with giftedness cases, we can consider a score from 120 points (high average) as the standard of giftedness based on the normal distribution of intelligence.

Suggestions for Education

The assessment results should not only determine if a student has giftedness and learning disabilities but should also indicate the strengths and weaknesses of that student. Instruction for students with GLD should be based on the student's abilities and not on the student's disabilities. The following educational support methods for students with GLD should be taken: Increase self-understanding of their talents and limitations to enhance respect for self-esteem and to enhance their viability. Educational goals should develop each individual's giftedness and use strengths to support weaknesses. Educational methods should establish Reasonable Accommodation so that GLD students with deficiencies can learn by their strengths.

Conclusion

It is necessary to develop a new standard for assessing students' giftedness with GLD by adjusting gifted recognition scores. The educational program must make use of the results of the assessment. There should be content that develops giftedness and supports weaknesses. There should be specific educational support methods to help students with GLD to know how to use their strengths in learning to overcome academic difficulties and psychological difficulties and develop their giftedness.

References

Heward, L.W. (2012). *Exceptional children: An introduction to special education (10th Edition)*. Pearson Publisher.

Lovett, B. J., & Lewandowski, L. J. (2006). Gifted students with learning disabilities: Who are they?. *Journal of Learning Disabilities, 39*, 515-527. https://doi.org/10.1177/00222194060390060401

Maddocks, L. S. D. (2018). The identification of students who are gifted and have a learning disability: A comparison of different diagnostic criteria. *Gifted Child Quarterly, 62*(2), 175–192. https://doi.org/10.1177/0016986217752096

McGill, R. J., & Busse, R. T. (2016). When theory trumps science: a critique of the PSW Model for SLD identification. *Contemporary School Psychology, 21*(1), 10–18. https://doi.org/10.1007/s40688-016-0094-x

Nielsen, M.E. (2002). Gifted students with learning disabilities: Recommendations for identification and programming. *Exceptionality, 10*(2), 93-111.https://doi.org/10.1207/S15327035EX1002_4

Yssel, N., Neumeister, K.S., Burney, V., (2020). *Students with special needs who are gifted and talented (Twice Exceptional)*. Oxford Research Encyclopedias.

About the Author:

Thi-Cam-Huong Nguyen who holds Ph.D. in education is Head of Section of Education for Children with Learning Disabilities, Faculty of Special Education, Hanoi National University of Education. Her professional area and her publications focus on cognitive assessment and education of children with learning disabilities in inclusive education settings.

RESIDENTIAL COLLEGE EXPERIENCES FOR INDIVIDUALS WITH INTELLECTUAL DISABILITIES

Mary Lindell and Jessica Daniels

Conceptual Framework and Background

In countries around the world, programs to include individuals with intellectual disabilities (ID) in post-secondary education (PSE) are increasing as an effort to promote inclusion, limit segregation, and improve lifelong outcomes for all people (Strnadová et al., 2018). These PSE initiatives are partly in response to the World Conference on Special Needs Education (UNESCO, 1994), the World Education Forum (UNESCO. 2000), and the UN Convention on the Rights of Persons with Disabilities (United Nations General Assembly, 2006) solidified the rights of people with disabilities to access lifelong inclusive education.

Significant variation exists among the structures, supports, and services offered within PSE programs for individuals with ID across the world (e.g., Ireland, Canada, Iceland, Australia, and United States) as they seek to provide a "normative pathway" to positive adult outcomes for individuals with ID (e.g., Bjornsdottir, 2017; Uditsky & Hughson, 2012, p. 299). Some programs are limited to segregated special education courses, and others offer fully-inclusive options; the most common structure is a hybrid of the segregated and fully inclusive models (Grigal et al., 2013). Further, the level of integration in the social activities and campus community varies by the purpose of the program and the mission of the institution (e.g., a two-year college versus a four-year university), and residential options. As programs are being implemented and individuals with ID are being served in a variety of PSE options, more research and information is needed on the experiences of PSE students with ID, the characteristics and outcomes of students with ID who complete PSE programs, and the impact of programs for students with ID on the broader institutions to which they are included.

Methods

Bethel University's BUILD program is a residential PSE program for individuals with ID whose purpose is to increase college access for historically marginalized students and improve quality of life for these individuals. This research project includes three distinct research studies related to this PSE program: a longitudinal survey, a student experience phenomenological study, and an institutional case study. A six-year longitudinal quantitative study (Gall et al., 1999) explores quality of life (QOL) characteristics (Schalock et al., 2008) of individuals with ID entering and then completing a two-year PSE program. The lived experiences of BUILD students were explored through an empirical phenomenological research approach (Aspers, 2009) while a case study research design explored institutional perspectives of the BUILD program (Yin, 2009).

For this study, part of a broader longitudinal study, the researcher analyzed QOL data of four cohorts of students (n=27) entering a residential college program and compared the PSE student responses to data from larger groups of individuals with ID. Semi-structured individual interviews with six students completing the 2-year PSE program provided rich descriptions to reconstruct the meaning of their collective and individual experiences (Moustakas, 1994). Similarly, semi-structured interviews and transcripts with 15 administrators, faculty, staff, and traditional student mentors at the University were used to explore illustrative questions (Richards & Morse, 2006) about the impact of the BUILD program on the University community. For the phenomenology and case study, three researchers analyzed the interview transcripts, individually coded words and phrases, then collaboratively negotiated and developed themes, and ultimately constructed the meaning of the phenomenon (Moustakas, 1994). The researchers then used existing theory and literature to contextualize the phenomenon while staying true to the experience of the participants (Aspers, 2009).

Results

Results from the longitudinal study indicate that before entering the BUILD program, students with ID were similar to a broader group of individuals with ID on most QOL indicators, strengthening conclusions that post-PSE QOL indicators may relate to the PSE experience. Differences between the PSE participants and others with ID in the areas of community inclusion, choice making, and relationships may indicate that individuals who attend a residential PSE program are demonstrating increased self-determination when compared to a broader group of individuals with ID.

The empirical phenomenological research study explored the lived experience of students with intellectual disabilities enrolled in the BUILD program. From interviews with six participants, the themes of social experience, independence, safety, and belonging emerged. The findings of this research indicate that the opportunity-rich environment, a network of support, and a community of belonging contributed to the participants' growth in self-determination. Therefore, innovative college programs can be viewed as an intervention to improve or enhance the self-determination of individuals with intellectual disabilities, and these findings offer intervention components to consider in designing and implementing future programming.

Analysis of the transcripts of fifteen University community members revealed the institutional and individual transformation that occurred as a result of the BUILD program. Increased accessibility, appreciation for difference, and relationship and empathy were impactful findings that were meaningfully identified by the majority of participants. Particularly noteworthy, the findings were attributable not only to BUILD students but also to traditional students and community members as well.

Conclusion

The BUILD program is one university's strategic attempt to challenge the marginalizing patterns and practices typically associated with ID in PSE and improve the QOL of adults with ID. As students with ID integrate and succeed on campus, in residence halls, the cafeteria, extracurricular activities, and classrooms, the BUILD program impacts the overall campus ethos and experience for faculty, staff, administrators, and students. Simultaneously, students in BUILD grow in their sense of belonging, self-determination, and self-efficacy as well as independent living and employment skills. The findings of this research project, the implications of the BUILD program and the experience and outcomes of students with ID are critical to future PSE understanding, policy, and practice.

References

Aspers, P. (2009). Empirical phenomenology: A qualitative research approach (The Cologne Seminars). *Indo-Pacific Journal of Phenomenology*, *9*(2), 1–12.

Bjornsdottir, K. (2017). Belonging to higher education: Inclusive education for students with intellectual disabilities. *European Journal of Special Needs Education*, *32*(1), 125–126.

Gall, J. P., Gall, M. D., & Borg, W. R. (1999). *Applying educational research: A practical guide*. Longman Publishing Group.

Grigal, M., Hart, D., & Weir, C. (2013). Postsecondary education for people with intellectual disability: Current issues and critical challenges. *Inclusion*, *1*(1), 50-63.

Moustakas, C. (1994). *Phenomenological research methods*. Sage Publishing.

Richards, M. G., & Morse, J. M. (2006). *User's Guide to Qualitative Methods.* Sage Publications.

Schalock, R. L., Bonham, G. S., & Verdugo, M. A. (2008). The conceptualization and measurement of quality of life: Implications for program planning and evaluation in the field of intellectual disabilities. *Evaluation and program planning*, *31*(2), 181-190.

Strnadová, I., Johnson, K., & Walmsley, J. (2018). "…but if you're afraid of things, how are you meant to belong?" What belonging means to people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, *31*(6), 1091–1102.

Uditsky, B., & Hughson, E. (2012). Inclusive postsecondary education—An evidence-based moral imperative. *Journal of Policy and Practice in Intellectual Disabilities*, *9*(4), 298–302.

UNESCO. (1994). *The Salamanca world conference on special education: Access and quality*. UNESCO and the French Ministry of Education.

UNESCO. (2000). *Education for all: Meeting our collective commitments, World Education Forum; The Dakar Framework for Action*. UNESCO.

United Nations General Assembly. (2006). *Convention on the rights of persons with disabilities*. United Nations.

Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Sage Publications.

About the Authors:

Dr. Jessica Daniels is the Associate Provost for Innovation and Partnerships and Program Director and professor for the Leadership in Higher Education doctoral program at Bethel University. She is a peer-reviewer for the Higher Learning Commission, and her research interests include organizational and systems work, and student success related topics.j-daniels@bethel.edu

Dr. Mary Lindell is the Program Director and assistant professor for Bethel's BA in special education programs. She is the lead faculty for the program leading to licensure for teachers of students with intellectual disabilities. Her research and practice focus on improving inclusive outcomes for individuals with and without disabilities. mlindell@bethel.edu

SOCIAL SKILLS OF PUPILS WITH INTELLECTUAL DISABILITY FOR INCLUSIVE CULTURE

Udeme Samuel Jacob, Esther O. Oyefeso, Oladunni C. Iyanda, and Jace Pillay

Social skills are very crucial skills for life. They influence an individual's presence in the society and ensure adequate contributions to societal needs. Social skills are also important in the classroom as they influence the effect of learning experience either to yield a positive or negative learning outcome. A significant characteristic of persons with mild intellectual disabilities is difficulty forming or maintaining relationships, negatively affecting their academic performance (Jacob et al., 2021). Students with appropriate social skills comprehend the written and implied rules of social interaction and know how to behave in various social situations. Good social skills also enhance healthy friendships between and among regular pupils and those with intellectual disability in inclusive settings. The benefits to be derived from healthy friendships in inclusive settings include emotional health, better self-esteem, more empathy, and improved cognitive function (Newport Academy, 2021). This makes social skills germane to everyone, including persons with intellectual disability.

One of the strategies that may help with social skills for individuals with intellectual disabilities is pictorial illustration. Pictorial illustration involves combining text with image. It is the use of pictures to convey the meaning of a concept to pupils with intellectual disability (Jacob et al., 2021). Another unique strategy for teaching social skills is the use of social stories. These are individualized short stories that describe situations, concepts, or

social skills designed to increase the quality and quantity of social interactions of individuals with intellectual disability.

One factor that may be a moderating effect on the social skills of pupils with intellectual disability is a degree of disability. The degree of disability is the level at which the intelligence quotient of pupils with intellectual disability measures. The degree of disability determines the level at which the pupils with intellectual disability will be affected in acquiring social skills. Mild and moderate categories of intellectual disability were considered in this study. Three (3) hypotheses were drawn to test for main and interaction effects of treatment (pictorial illustration and social stories) and moderating variables (degree of disability) on social skills of pupils with intellectual disability.

Methodology

This study adopted a pre-test, post-test, control group, quasi experimental design with 3×2×2 factorial matrix. Two treatments (pictorial illustration and social stories) and a control group were considered, while degree of disability (mild and moderate) of the participants was considered as the moderating variable. The design is represented thus:

Experimental Group 1: (E1) O_1 X_1 O_4
Experimental Group 2: (E2) O_2 X_1 O_5
Control Group 3: (E3) O_3 O_6

Where: O_1, O_2 and O_3 represent experimental and control group pretest scores, respectively O_4, O_5 and O_6 represent experimental and control group post-test scores, respectively. X_1 and X_2represents the treatment for experimental groups (pictorial illustration and social stories). The participants were thirty pupils with mild and moderate intellectual disability selected from three special schools in two local government areas in Ibadan, Oyo state. Pupils with intellectual disability were purposely selected after the appropriate screening had been carried out. The schools were randomly assigned to treatment groups and the control group.

Instrument: Slosson Intelligence Test – Revised **(**r = 0.91**)** was used to assess intelligence quotient of participants and Children's Social Development Checklist (r = 0.75) was also used. Approval was obtained from the Department of Special Education, University of Ibadan for this study. Pre-test data was obtained before treatment which lasted six weeks (twice a week) with sessions of about 40 minutes. Social skills taught in this study were facial expression (happy, sad, worry, anger) and courtesy (please, excuse me, sorry, thank you and pardon me). Descriptive statistics was used to analyze the demographic data while analysis of covariance (ANCOVA) was used to test the null hypothesis at 0.05 level of significance.

Results

The results showed that there was a significant main effect of treatment (pictorial illustration and Social stories) on social skills of pupils with intellectual disability (($F_{(1,16)} = 869.504$, $p = 0.000 < 0.05$, $\eta^2 = 0.98$). Estimated marginal means analysis showed that the Pictorial Illustration Group had the highest mean score (39.33) followed by the Social Stories (36.96) then the Control Group) (32.16). There was no significant main effect of Degree of Disability on social skills of pupils with intellectual disability. ($F_{(2,30)} = .009$, $p = 0.991 > 0.05$, $\eta^2 = 0.01$). However, Estimated Marginal Means Scores participants in the Mild category had a mean score of 39.13 while moderate have a mean score of 37.76. There was also no significant interaction effect of treatment and Degree of Disability on social skills of pupils with intellectual disability ($F_{(3,16)} = .658$, $p = 0.590 > 0.05$, $\eta^2 = 0.11$).

These findings correlate that of Oyefeso et al. (2020) who reported significant effect of treatment pictorial illustration on social skills of pupils with intellectual disability ($F_{(2,10)} = 40.415$, $p < .05$). They also reported significant main effect of degree of disability on social skills of pupils with intellectual disability ($F_{(2, 32)} = 8.235$, $p > .05$)

Recommendation

This study concludes that pictorial illustration and social stories significantly enhanced the social skills of pupils with intellectual disability compared to the control group. The finding is consistent with previous submissions by Jacob et al. (2021) that systematic training and support are necessary for pupils with intellectual disability to acquire social skills. Since the degree of disability did not moderate the effect of treatment on social skills development of the pupils with intellectual disability, it is important that the strategies adopted for teaching is appropriate such as pictorial illustrations and social stories. This will help in sustaining their interest in learning irrespective of the degree of disability.

References

Newport Academy (2021). The Importance of Teen Friendship. Retrieved 13 Sept. 2021 from https://www.newportacademy.com/resources/empowering-teens/teen-friendships/

Oyefeso, E. O., Jacob U.S & Adelakun J. (2020). Effect of pictorial illustration and computer assisted instruction on social skills of pupils with intellectual disability in Ibadan Nigeria. *Ibadan Journal of Child Development and Educational Foundations* 2, 1-17

Jacob, U. S., Pillay, J., Ayandokun, O. C., & Oyundoyin, J. O. (2021). Social skills of pupils with mild intellectual disability: do peer tutoring, storytelling and gender play a role? *Universal Journal of Educational Research, 9*(12), 1887–1897. https://doi.org/10.13189/ujer.2021.091201

Jacob, U. S., Pillay, J., & Oyefeso, E. O. (2021). Attention span of children with mild intellectual disability: does music therapy and pictorial illustration play any significant role? *Frontiers in Psychology, 12*, 677703–677703. https://doi.org/10.3389/fpsyg.2021.677703

Contact information

Udeme Samuel Jacob, Postdoctoral Research Fellow, South African Research Chair: Education and Care in Childhood, Faculty of Education, University of Johannesburg, South Africa; Department of Special Education, Faculty of Education, University of Ibadan, Nigeria https://orcid.org/0000-0002-3234-8226 udeme01@gmail.com

Esther O. Oyefeso, Department of Special Education, Faculty of Education, University of Ibadan, Nigeria https://orchid.org/0000-0003-4212-109X estheroyefeso@gmail.com

Oladunni C. Iyanda, Department of Special Education, Faculty of Education, University of Ibadan, Nigeria

Jace Pillay, South African Research Chair: Education and Care in Childhood, Faculty of Education, University of Johannesburg, South Africa https://orcid.org/0000-0002-9432-6014 jacep@uj.ac.za

Biographical Information

Dr Udeme Samuel Jacob is a Lecturer in the Department of Special Education, Faculty of Education, University of Ibadan and Postdoctoral Research Fellow, South African Research Chair: Education and Care in Childhood, Faculty of Education, University of Johannesburg, South Africa. Dr Jacob has to his credit over 18 published articles in local and foreign journals.

Dr Esther Oyefeso is a lecturer in the Department of Special Education at the University of Ibadan, Ibadan, Nigeria. She has a Bachelors, Masters and Doctorate in Special Education. She specializes in intellectual disability and research into how to improve friendship and social skills of persons with intellectual disability.

Ms. Oladunni C. Iyanda is a recent graduate of the Department of Special Education, University of Ibadan. She is currently working with children who have special needs schooling in Government Special School, Lafia, Nigeria. She hopes to commence a Master programme in Special Education soon.

Prof. Jace Pillay is a Professor in the Department of Educational Psychology, Faculty of Education, and holds a South African National Research Foundation Chair in Education and Care in Childhood. His research focus is on the educational, psychological, and social care of orphans and vulnerable children, the mental health of children and youth, and psychosocial support for schools.

TRAINING TEACHERS IN UNIVERSAL DESIGN OF LEARNING

Sujata Bhan and Apoorva Panshikar
Department of Special Education
SNDT Women's University

A curriculum designed to meet the needs of an average visual learner does not take student variability into account and therefore, teachers do not plan learning experiences according to different abilities, cultural backgrounds and aspirations of their learners. The incoming sensory information, such as what we see and hear, is received in the back of the brain, including the occipital and temporal lobes of the brain (Recognition networks), processed and relayed for meaning in the centre of the brain (Affective networks), and is organised

in the frontal lobes for response or action (Strategic networks). While there is no linear progression for this process, this model for thinking about three broad learning networks can be helpful when teachers design learning experiences. Universal Design for Learning (UDL) inspired by advances in cognitive neuroscience research offers a framework that integrates what we know about the learning brain to inform the design of environments that support all learners (Center for Applied Special Technology [CAST], 2018). The framework introduced in the 1990s by CAST details the guidelines and associated checkpoints that align to this neurological organisation and helps educators address the predictable variability in learning that can be expected in any learning environment. CAST focuses its efforts on UDL, especially as it applies to technology-based curriculum and defines it "a research-based set of principles that together form a practical framework for using technology to maximise learning opportunities for every student" (Burgstahler, 2020).

UDL is a way of thinking about teaching and learning that helps give all learners an equal opportunity to succeed. Applying UDL to instructional planning ensures content accessibility and support for varied student needs; however, implementing the UDL framework can be complex, involving strategic planning of curriculum elements including goals, methods, materials, and assessments. Although there is not yet a conclusive body of quantitative research on student outcomes related to UDL, literature documents the benefits that include reduced behaviour problems, increased metacognitive knowledge, and improved access to the curriculum for struggling learners, and improved academic achievement (Aashna & Apoorva, 2019).

Many educators have a basic knowledge of UDL; however, being able to connect one's knowledge about the framework to lesson design and teaching in a particular educational setting is a learned skill. Training focused on UDL applications to lesson planning can equip educators to be able to design instruction to support learner diversity through attention to access and strategic flexibility (Spooner et al., 2007).

Methodology

The current research employed one-group pre-test-post-test design to study the effect of UDL training on understanding and use of UDL principles when evaluating existing open educational resources (OERs) amongst teacher educators and education researchers. A total of 25 teacher educators and education researchers from four countries - Bhutan (n=15), India (n=6), Nigeria (n=2) and Tanzania (n=2) comprised the sample. The number of male (n=12) and female (n=13) participants was nearly the same. The participants of the study ranged from with no prior teaching experience to having 29 years of experience. Pre and post test data was collected using close-ended objective type questions with the help of google forms. For intervention, a six-hour online training programme on UDL and developing accessible OERs via Zoom platform was planned and conducted in a workshop mode. There were three sessions of two hours each followed by a one-hour presentation by the participants on the fourth day. On day one, the fundamentals of universal design and the structures of UDL were explained. On day two brainstorming sessions and group activities were conducted based on the principles learnt on the first day. Lesson plans based on universal design principles were introduced. On the third day, features of accessible OERs were discussed and participants presented lesson plans based on principles of UDL. On the fourth day, the OERs were reviewed with the lens of accessibility and UDL and participants made presentations.

Data Analysis and Results

A significant gain in the mean score t (24) = 3.65, p =.001, d = .57 was observed from pre-test to post-test of the sample indicating that the participants benefited significantly, and this kind of training does have practical value. Female participants (M= 9.15, SD = 3.83) performed significantly better than male participants (M=5.08, SD=2.02), t (23) = -3.28, p=.003, d=.378. Comparison of mean scores obtained by participants in three cohorts – experience of 0-9 years (X1), 10-19 years (X2), and 20-29 years (X3) – was done. Computation of the F statistic, ANOVA indicated that there is a statistically significant difference in the post-test scores of the participants in the three cohorts, F (2,22) = 4.23, p= .027. Further, Tukey HSD/ Tukey Kramer post-hoc test revealed that the relatively inexperienced teacher educators tended to benefit significantly more from the training than the highly experienced and thus, more qualified participants.

Recommendations

Since training in-service teacher educators in the theory and application of UDL for instructional planning is found to be beneficial with greater benefits for relatively new teacher educators, UDL training should be incorporated as part of their continuous professional development programme. Additionally, students

of teacher preparation programmes can be provided these inputs to plan and implement instruction in inclusive settings.

Suggestions for Further Research

Further research is necessary to validate the outcomes of applying principles of UDL in planning instruction in an inclusive classroom in the long term. In the times to come, OERs will be used by teachers extensively and therefore, it's imperative that teachers are able to prepare and choose the OERs which are accessible to all diverse learners in their class. Training in the use and evaluation of OERs will create a foundation to develop accessible and inclusive OERs for students.

References

Aashna, K. & Apoorva, P. (2019). Relearning of the Teachers: Effect of Training in Universal Design for Learning on Teacher's Knowledge and Skills and Learners' Achievement. In K. Graziano (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 1471-1481). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved October 1, 2021 from https://www.learntechlib.org/primary/p/207841/.

Burgstahler, S. (Ed.) (2020) *Creating an Inclusive Learning Opportunities in Higher Education: A Universal Design Toolkit*. Cambridge, MA: Harvard Education Press. Retrieved from https://www.washington.edu/doit/universal-design-education-principles-and-applications

Center for Applied Special Technology (CAST). (2018).Retrieved from https://www.cast.org/binaries/content/assets/common/publications/articles/cast-udlandthebrain-20190501.pdf

Spooner, F., Baker, J. N., Harris, A. A., Ahlgrim-Delzell, L., & Browder, D. M. (2007). Effects of training in Universal Design for Learning on lesson plan development. *Remedial and Special Education, 28*(2), 108-116.

Contact Information:

Prof Sujata Bhan and Dr Apoorva Panshikar
Department of Special Education
SNDT Women's University
Santacruz West
Mumbai – 400049
India

About the authors:

Prof. Sujata Bhan is a Professor and Head of Department of Special Education, SNDT Women's University, Mumbai, India. She has been working in the field of Special and Inclusive Education for the last 29 years. She is an expert committee member of various National Academic Bodies and contributes to the policy decisions for persons with disabilities.

Dr. Apoorva Panshikar is an Assistant Professor at Department of Special Education, SNDT Women's University, Mumbai, India. She has post graduate degrees in Psychology and Special Education (teaching children with Learning Disability), and Ph.D. in Special Education. She is involved in pre-service and in-service teacher education programmes.

APPLYING THE CRA INSTRUCTIONAL SEQUENCE TO IMPROVE BASIC MATHEMATICS KNOWLEDGE AND SKILLS FOR FIRST-GRADE AND SECOND-GRADE STUDENTS WITH INTELLECTUAL DISABILITIES

Tam Le Thi

Conceptual Framework and Background

Basic math skills such as counting, removing or adding objects, addition and subtraction are considered fundamental skills to help students acquire and develop other arithmetic skills in the Math curriculum. Thus, mastery of basic math skills will predict how successful students will be when moving on to more complex math

content (Tucker & Weaver, 2006). However, students with intellectual disabilities face many difficulties even with basic, simple math skills at first (O'Connell & SanGiovanni, 2011). The limitation in performing basic arithmetic skills becomes a barrier for students with intellectual disabilities to effectively participate in learning in inclusive classrooms and solve everyday arithmetic tasks.

According to Anstrom (2006), the concrete-representational-abstract (CRA) instructional sequence helps to establish strong connections between students' levels of understanding as it provides students with instructions in a systematic sequence. Many studies have shown the clear benefits of CRA in supporting children to learn math. In their research, Harris et al., (1995) have shown that following instruction using CRA sequence, students achieved remarkable results in performing multiplication operations. When comparing CRA with traditional teaching strategies, Witzel et al., (2003) determined that students with learning difficulties receiving support based on CRA instruction had better learning outcomes than students taught only through modeling and verbal instructions. In terms of basic calculations, Mercer and Miller (1993) applied the CRA instruction to teach four basic math operations to students with learning difficulties. The results showed that the students performed calculations more accurately. Therefore, the above authors concluded that CRA instruction was a beneficial intervention strategy for students with learning difficulties when learning basic mathematical operations.

Research methodology

Experimental design. This study used the repeated measure design, in which 15 first-grade and second-grade students with intellectual disabilities were selected from inclusive classes. They then received supporting instructions using CRA sequence across 24 weeks. Students worked mainly with manipulative practice exercises (equivalent to the concrete stage in CRA sequence instruction) and practice exercises using illustrations (equivalent to the representational stage of the CRA sequence instruction). The performance of each selected student in basic mathematics knowledge and skills was evaluated after 24 weeks of intervention.

Data collection methods. The research team used the combination of observation and document recording methods. A checklist of targeted basic math skills was developed. All performance of each student based on the checklist was observed directly and recorded weekly. Additionally, students' performance on each exercise in each stage was gathered, analyzed, and recorded after each study session. Students' performance was recorded as follows: *"Level 2" = Do independently and effectively*; *"Level 1" = Do with teacher's supports; "Level 0" = Cannot do by him/herself.*

Results

Students' math improvement. Results following the intervention phase showed that there was a significant change in the basic math skills of fifteen selected students with intellectual disabilities. Prior to the experiment, students completed most of the basic math tasks at "level 0". The group of students with intellectual disabilities participating in the experiment had gained great improvement in their basic arithmetic skills, especially counting skills (15/15 students did at level 2); reading/writing numbers within 10 (12 out of 15 students did at level 2; 3 out of 15 did at level 1); addition within 10 (9/15 students did at level 2; 6 /15 did at level 1); subtraction within 10 (7 out of 15 students did at level 2; 7 out of 15 did at level 1; 1 out of 15 did at level 0); comparison within 10 (15/15 students did at level 2). The recorded positive changes could be considered as the basis for the students to achieve better performance at the next higher stages.

***The change in thinking manipulation in solving calculation skills*.** The results showed that there was a big change in the manipulation level of students with intellectual disabilities at the beginning, middle and end of the intervention process. To be specific, students in the experiment tended to perform well when they received the support of mathematical manipulative materials, for example, hand – on counters, real objects or visual illustrations, such as visual worksheets on counting or addition. Thirteen of these students with intellectual disabilities changed their basic math skills and continued to use calculation operations at the symbolic level after 24 weeks of support. Especially, two of these students could deal with addition within 10 at the abstract level at the end of the intervention phase.

Recommendations

Most students with intellectual disabilities only perform basic math skills at the concrete and representational level, which means that they need visual or manipulative tools to solve basic math tasks. Practice worksheets should be designed, developed and conducted in a visual and systematic way in order to attract students' attention and increase their interest in learning math topics.

To apply the CRA effectively, teachers or parents should carry out an evaluation for the student with intellectual disabilities to check his or her learning abilities. This helps to determine specific amount of supporting time and types of supporting exercises in each CRA phase for each individual student.

Suggestions for Future Research

Since the sample size of participants was limited, future studies on the same topic may expand the sample size, types, or severity of intellectual disability. To replicate findings and establish evidence on using CRA with students in Vietnamese contexts, future studies are necessary. This may help serve as a basis for application in teaching arithmetic skills to students with intellectual disabilities in Vietnamese contexts.

References

Anstrom, T. (2006). *Supporting students in mathematics through the use of manipulatives*. Washington, DC: Center for Implementing Technology in Education.

Harris, C. A., Miller, S. P., & Mercer, C. D. (1995). Teaching initial multiplication skills to students with disabilities in general education classrooms. *Learning Disabilities Research & Practice, 10*(3), 180-195.

Mercer, C. D., & Miller, S. P. (1993). Using data to learn concrete-semiconcrete-abstract instruction for students with math disabilities. *Learning Disabilities Research & Practice, 8*(2), 89 - 96.

O'Connell, S., & SanGiovanni, J. (2011). *Mastering the basic math facts in addition and subtraction: strategies, activities & interventions to move students beyond memorization* (1st ed.): Portsmouth, NH : Heinemann

Tucker, B. F., & Weaver, T. L. (2006). *Teaching mathematics to all children: Designing and adapting instruction to meet the needs of diverse learners* (2nd ed.): Upper Saddle River, N.J. : Pearson Merrill Prentice Hall

Witzel, B. S., Mercer, C. D., & Miller, M. D. (2003). Teaching algebra to students with learning difficulties: An investigation of an explicit instruction model. *Learning Disabilities Research & Practice, 18*(2), 121–131. https://doi.org/10.1111/1540-5826.00068

Contact Information:
Tam Le Thi
National Center for Special Education
52 Lieu Gia street, Ba Dinh District, Hanoi, Vietnam
letamht@gmail.com

About the author:

Tam Le Thi is working as a researcher in the National Center for Special Education, Vietnam Institute for Educational Sciences. She is the head of the Experimental Department for special education, where she provides special services for students with special needs. Tam graduated from Hanoi National University of Education in Vietnam and Flinders University in Australia. She is now a PhD candidate and studying mathematics teaching approaches for students with intellectual disabilities.

TRAINING TEACHERS IN INDIA/UAE ONLINE: UDL BASICS AND APPLICATIONS

Elizabeth Dalton, Susie Gronseth, Sujata Bhan, and Betty Abraham

In the summer of 2019, the first co-author traveled to Mumbai, India, to volunteer for a month, working with staff and adult participants at an education and vocational center for women with developmental disabilities. During this time, connections were made with university educators in Mumbai, resulting with the collaborative work in Universal Design for Learning (UDL) represented in this paper.

Overview of UDL

Recognition of UDL and interest in its implementation is surging internationally, as countries seek appropriate and evidence-based approaches for achieving inclusive education. This interest has been fueled by several global initiatives on equity and inclusion led by the United Nations Educational, Scientific, and

Cultural Organization (UNESCO). First, the World Declaration on Education for All was developed, which states that "Every person - child, youth and adult - shall be able to benefit from educational opportunities designed to meet their basic learning needs" (UNESCO, 1990). Shortly following this, the Salamanca Statement & Framework for Action, which relates to educational equity rights of children with disabilities, came into being, establishing the "fundamental right of every child to education, the uniqueness of every child's abilities and needs and the importance of designing education systems to address diversity" (UNESCO, 1994). Most recently, the annual Global Education Monitoring (GEMS) Report of 2020, *Inclusion and Education: All Means All,* provides a comprehensive review of global needs and resources for the implementation of inclusive education and identifies UDL as a major means for accomplishing such implementation (UNESCO, 2020).

The framework of UDL was developed to support the design of curriculum and instruction that recognizes and honors the learner variability that exists in all classrooms. This proactive curricular design approach is intended for use in guiding instructional practices and learning environments. It employs a structure that is built upon three core principles based in neuroscience research on how the brain learns. These principles are: 1) provide multiple means of engagement; 2) provide multiple means of representation; and 3) provide multiple means of action and expression (Meyer et al., 2014). Additionally, specific UDL guidelines and checkpoints are available to further support implementation of UDL principles in varied contexts. UDL does not exist in an educational vacuum; rather, it co-exists and is intended to work with other supportive educational frameworks and approaches (Dalton, 2020).

Applying UDL to instructional planning ensures content accessibility and support for varied needs (Courey et al., 2012) through curriculum integration in the learning goals, methods, materials, and assessments. Connecting knowledge of UDL to lesson design and teaching is a learned skill. As Edyburn (2010) asserts, "We must refocus our efforts to train the key stakeholders in UDL principles that make meaningful differences in student engagement and learning" (p. 38).

Course Development

A collaboration was formed among four UDL leaders from Shreemati Nathibai Damodar Thackersey (SNDT) Women's University in Mumbai, India, the University of Houston in Texas, and Dalton Education Services International in Rhode Island. Beginning with an hour-long webinar, "Education Through UDL," that was offered in July 2020, the collaboration grew to the development of a 10-hour virtual "master course" for in-service teachers, rehabilitation professionals, and pre-service teacher educators in India and UAE that took place over two weeks in January 2021. "UDL Implementation from Access to Build to Internalize" focused on the preparation of educators to teach about UDL and to teach using the UDL framework.

Inclusive education strategies, course development for UDL implementation, and classroom best practices were emphasized through the incorporation of readings from *Universal Access Through Inclusive Instructional Design: International Perspectives on UDL* (Gronseth & Dalton, 2020) and follow-up activities and discussions.

The course focused on several key concepts regarding UDL:

- The UDL framework has a horizontal and a vertical orientation of Access-Build-Internalize, aiming to empower learners with self-regulation and executive function skills;
- General (for all) and assistive (to address special needs) technologies can help to support UDL implementation by strengthening access;
- Implementation of the UDL framework should be carried out in conjunction with the curriculum elements of goals, methods, materials, and assessments;
- We need to connect key implementation approaches, namely UDL, curriculum realms, student, environment, tasks, tools framework (SETT), and lesson/curriculum planning;
- Applying UDL in practice should be supported through a learning community, growth mindset, and resources for continued professional development.

The master course included the following key activities: Presentations, text readings, breakout group discussions and activities, exit tickets, and homework.

Course Evaluation

The evaluation strategy incorporated data collected through pre-course and post-course surveys and analysis of course artifacts, including chat transcripts, activity documents, exit tickets, reading response submissions, and learner-developed lesson plans. The pre- and post-surveys were distributed to participants

(N=45) via Qualtrics. The surveys contained 15 UDL knowledge items (Grant & Pérez, 2018), rank ordering of potential course outcomes, writing of a course goal statement, and open-ended feedback items. Institutional Review Board (IRB) approval was obtained through University of Houston for protection of human subjects. Survey data are reported for the 30 participants who consented and completed both pre- and post- surveys.

Survey analyses revealed an 8% average increase in UDL knowledge from pre- to post- course. In particular, 83% said the course impacted their prior understanding of UDL "a lot" to "a great deal." Further, 80% felt they achieved their goals for the course to the extent of "a lot" to "a great deal." Other data analyses, including qualitative coding of the course artifacts for emerging themes, continues to be underway.

Recommendations and Future Directions

Preliminary findings from the results of this international training initiative point to the value of shared online professional development experiences to expand and enhance educators knowledge of inclusive educational approaches such as UDL; to the importance of online training for increasing opportunities for international connections and resources; and to the potential impact that input from culturally diverse trainees and educators can have on expanding our understanding of how inclusive design approaches like UDL can be better contextualized for varied environments and varied needs internationally.

Future directions for this work include expansion of preservice and in-service training opportunities for educators in India and its affiliates (such as UAE), and exploration of further research efforts to document the impact of these efforts on expanding the effectiveness of inclusive educational practices in different countries.

References

Courey, S. J., Tappe, P., Siker, J., & LePage, P. (2012). Improved lesson planning with Universal Design for Learning (UDL). *Teacher Education and Special Education, 36*(1), 7-27.

Dalton, E. M. (2020). UDL and connected laws, theories, and frameworks. In S. L. Gronseth & E. M. Dalton (Eds.), *Universal Access Through Inclusive Instructional Design: International Perspectives on UDL* (pp. 3-16). Routledge.

Edyburn, D. L. (2010). Would you recognize Universal Design for Learning if you saw it? Ten propositions for new directions for the second decade of UDL. *Learning Disability Quarterly, 33*(1), 33-41.

Grant, K. & Perez, L. (2018). *DIVE Into UDL: Immersive practices to develop expert learners.* International Society for Technology in Education. Available at https://www.diveintoudl.com/

Gronseth, S. L., & Dalton, E. M. (2020). *Universal Access Through Inclusive Instructional Design: International Perspectives on UDL*. Routledge.

Meyer, A., Rose, D., & Gordon, D. (2014). *Universal Design for Learning: Theory and practice.* CAST Professional Publishing.

UNESCO (2020). *Global education monitoring report 2020: Inclusion and education: All means all*. UNESCO: Paris. Available at https://unesdoc.unesco.org/ark:/48223/pf0000373718

UNESCO (1994). *Salamanca statement and framework for action on special needs education.* World conference in special needs education: Access and quality. UNESCO: Salamanca, Spain. Available at https://unesdoc.unesco.org/ark:/48223/pf0000098427

UNESCO (1990). *World declaration on education for all: Framework for action to meet basic learning needs.* World conference on education for all meeting basic learning needs, Jomtein, Thailand, March 5 – 9, 1990. Available at https://unesdoc.unesco.org/ark:/48223/pf0000127583

Authors' Bios

Dr. Elizabeth Dalton is Senior Consultant for Dalton Education Services International (DESI), Director Emeritus of Development and Research for TechACCESS of RI, and worked for more than 40 years in special education at K-12 and university levels. With training in Universal Design for Learning (UDL) through CAST and Boston College, she consults nationally and internationally in inclusive curriculum development, UDL, and diverse technology implementation. Dalton.ed.services.intl@gmail.com

Dr. Susie Gronseth is Clinical Associate Professor in Learning, Design, and Technology in the College of Education at the University of Houston, Texas, USA. She specializes in learning technologies, teaching strategies, and applications of Universal Design for Learning (UDL) to address diverse learner needs in online, face-to-face, and blended contexts, and was recently elected president of the University of Houston Faculty Senate beginning 2023.slgronseth@uh.edu

Together, Dalton and Gronseth co-edited the recent text, *Universal Access Through Inclusive Instructional Design: International Perspectives on UDL* (Routledge, 2020).

Dr. Sujata Bhan is Professor and Head, Department of Special education, SNDT WU in Mumbai, India with 28+ years of experience in teaching and research. She is a strong proponent of Inclusive Education with passion to create a workforce of teachers who understand and support diversity.bhansujata@gmail.com

Prof. Betty Abraham is Assistant Professor at the Department of Special Education, SNDT WU with 27 years of experience in Special Education. Committed to student success, she is a certified practitioner of ABT, SET, HWT, and Jolly Phonics and is trained in interventions like Brain Gym and Touch for Health & Aquatics.baeducationaltherapist@gmail.com

EARLY CHILDHOOD INCLUSION FOR CHILDREN WITH DISABILITIES: PERSPECTIVES OF SCHOOL ADMINISTRATORS

Huynh Thi Hoang Oanh, Hoang Truong Thuy An,
Nguyen Thanh Hoa, and Nguyen Thi Ngoc Nga

Inclusive education is a social and fundamental approach that has been chosen as a prioritized educational option in most countries for children with disabilities due to its outstanding values in educational rights, social justice, and economic advantages (United Nations). Over the past two decades, the Government of Vietnam has continuously had assertive actions to develop inclusive education, including making changes in the policy system, educational facilities, and individual support services in inclusive schools. Reports from the National Survey on People with Disabilities (UNFPA, 2015; UNICEF, 2017) showed that 81.69% of primary school-aged children with disabilities could attend schools, and approximately 71.4% of primary schools currently included students with disabilities. Specifically, the role of school administrators has been mentioned as one of the key factors in shaping successful inclusive education in mainstream school settings. School leaders need to have the appropriate perception and perspective towards inclusive education because they are responsible for enhancing the awareness of inclusive culture, facilitating teachers' adaptation in teaching, and providing individual support to encourage children with disabilities to equally and effectively engage in inclusive activities (UNICEF, 2017).

School leaders and inclusive education

Research has suggested that school administrators' perceptions reflect their leadership actions of inclusive practices (Marshall & Oliva, 2006; Irvine et al., 2011). Particularly, school leaders who exhibited appropriate awareness demonstrated positive attitudes and readiness to accept children with disabilities in their schools (Irvine et al., 2011). In addition, research findings also emphasized that school principals' positive perspectives could be powerful attributes to creating significant changes to increase inclusive awareness of school staff, administering policies regarding inclusion, and promoting the education of children with disabilities in social communities (Marshall & Oliva, 2006). Moreover, school managers who have appropriate perceptions could allow time and space conditions for teachers to learn about working with children with disabilities and collaborate with special educators in setting educational goals, planning curriculum, and adapting teaching methods to effectively engage all children in-class activities. Furthermore, school leaders with proper perceptions of inclusion also provide flexible decisions in the assessment and progress monitoring for children with disabilities (Schechter & Feldman, 2019).

In Vietnam, the number of children with disabilities participating in inclusive learning at schools, especially preschools, has increased rapidly. With a decisive and central role in the management and implementation of inclusive education, the school administrators' perspectives in early childhood inclusion should be an essential topic of research that needs to be explored more. However, the research on preschool administrators' perspectives of inclusive education for children with disabilities in Vietnam is scarce. This current situation calls for a close examination of perception, perspectives, and challenges of school leadership in inclusive practices for children with disabilities in preschool settings.

Research Methodology

Research aim: The aim of this study was to explore the perspectives of preschool administrators regarding the issues of children with disabilities and inclusive education. Additionally, this study aimed to investigate administrators' perspectives on their challenges shared through the fundamental components of inclusion implementation for children with disabilities.

Research sample: The sample of this study included 30 school administrators at public and private preschools in Binh Duong province, Ho Chi Minh City, and the surrounding provinces. The participants were educators working in leadership positions at inclusive preschools, including school principals, principal assistants and head teachers. They are diverse in terms of work experiences in the field of education from fewer than five years to more than 10 years.

Instrumentation and Procedure: A questionnaire was developed to collect the data from participants. The questionnaire consisted of two parts: The first part was intended to the demographic information of respondents; the second part consisted of 45 statements to find out school administrators' perceptions and perspectives on key components of inclusive education. Furthermore, participants also expressed opinions on the difficulties and challenges of inclusive practices in their schools. The questionnaire was designed in the Google form and sent to the participants after getting their agreement to participate in the research. The data then was collected and analyzed using an excel application.

Results

Types of disabilities and resources at inclusive preschools

In the survey area, children participating in inclusive schools included different types of disabilities: Attention deficit hyperactivity disorder (86,25%), autism spectrum disorder (63,3%) intellectual disability (53,3%), motor disability (26,7%), hearing impairment (30%), and visual impairment (16.7%). In general, resources to support inclusion at preschools were still very limited. Regarding facilities, only 17.2% of preschools had teaching materials for children with disabilities, less than 10% of schools had functional rooms to support the education of children with disabilities. Regarding human resources, about 20% of schools had human resources to support children with disabilities (CWDs) who were mainly from outside the school. Less than 10% of schools have other staff members such as special education teachers, education support staff for students with disabilities, school psychologists, or social workers.

Perspectives on inclusive education

Preschool administrators correctly understood most of the relevant views about inclusive education. More than 90% of managers believed that inclusive education is about respecting the diversity and differences of learners and not discriminating (M= 4.70, rank 1). They also believed that inclusive education was an education model for all people regardless of disability type and degree of disability. However, with the idea that "inclusive education is carried out in educational institutions near where children with disabilities live", the percentage of managers who disagree is equivalent to the number of managers who agree with this idea (nearly 48%). This shows that managers are still confused about the economic benefits of the inclusive education model.

Policy on inclusive education

Nearly 60% of managers agreed that the system of laws and policies on the implementation of inclusive education is complete and clear, and easy to understand. They also actively disseminated these policies to teachers and other school staff (90%).

Adjustment in inclusive education

All managers believed that "Children with disabilities should have their own learning goals suitable to their abilities and needs" and "Children with disabilities can participate in learning activities at different levels. each other based on the child's abilities and needs". 85% of managers agreed that it is necessary to adjust traditional teaching methods when implementing inclusive education; for children with disabilities to participate in small groups to increase their participation in the classroom. Moreover, 50% of managers disagreed that "children with disabilities should be allowed to learn separate content, unrelated to/different from the learning content of the whole class", and "children with disabilities should be exempted or reduced from all content. learning content".

Assessment in inclusive education

All managers agreed that "children with disabilities are graded based on their progress". 93% of administrators agreed that "the school needs to have staff trained in assessing the abilities and needs of children with disabilities" and "the school needs to have an assessment program specifically for children with disabilities". Only more than 45% of managers agreed that the current preschool program can be used to assess children with disabilities in inclusive learning, and 50% of managers agreed that "only need to evaluate children with disabilities in the following areas: child development without delay". Most preschools need information on disability assessment facilities/services to advise parents.

The physical and mental environment in inclusive schools

All managers agreed that inclusive preschools need to organize awareness-raising activities for school staff and parents. Besides, most managers also agreed that "the number of students in the class with children with disabilities should be adjusted", "the inclusive schools need facilities/teaching aids to support CWDs.

Challenges in implementing inclusive education for children with disabilities in preschool

The most difficulty was in adjusting the appropriate number of students in inclusive classes (nearly 65%). The next difficulties were accessing specialized documents on education for children with disabilities, fostering professional knowledge about children with disabilities and inclusive education, and raising awareness about inclusive education for teachers and parents. About 85% of inclusive preschools had little difficulty in recruiting staff to support the education of children with disabilities in the inclusion class and supplementing and adjusting learning facilities for inclusive education.

Conclusion and Suggestions for future research

Research results showed that it was very common for children with disabilities to participate in inclusive and the types of disabilities were varied. However, the conditions of personnel and facilities for inclusive education were still quite limited. The administrators had the right views on the nature of the inclusive education model, appreciated the role of the inclusive education policy system, and understood the adjustments that need to be made in inclusive education. The administrators also recognized difficulties in implementing inclusive education. It is necessary to conduct a survey with a larger sample group, in different locations, at different educational levels, or with different educational forces including administrators, teachers, or parents to get a more holistic view of the research question.

References

Irvine, A., Lupart, J.L., Loreman, T., & McGhie-Richmond, D. (2011). Educational leadership to create authentic inclusive schools: The experiences of principals in a Canadian rural school district. *Exceptionality Education International, 20(2),* 70-88.

Marshall, C., & Oliva, M. (2006). *Leadership for Social Justice.* Pearson Education.

Schechter, C., & Feldman, N. (2019). The principal's role in professional learning community in a special education school serving pupils with autism. *Journal of Special Education Leadership, 32(1),* 17-28.

United Nations. (n.d.). *Convention on the rights of persons with disabilities – articles enable*. United Nations. Retrieved June 17, 2022, from https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html

United Nations International Children's Emergency Fund (UNICEF). (2017). *Children with disabilities in Vietnam.* National survey report on children with disability.

United National Populations Fund (UNFPA). (2015). *People with Disabilities in Viet Nam: Key Findings from the 2014 Viet Nam Population and Housing Census.* Hanoi.

Contact Information:

Huynh Thi Hoang Oanh, Hoang Truong Thuy An, Nguyen Thanh Hoa, Nguyen Thi Ngoc Nga
Ho Chi Minh City University of Education
240 An Duong Vuong Street, Ward 4, District 3,
Ho Chi Minh City, Vietnam
oanhhth@hcmue.edu.vn; anhth@hcmue.edu.vn; hoanth@hcmue.edu.vn ngantn@hcmue.edu.vn

About the Authors:
The authors are lecturers at Ho Chi Minh City University of Education. They hold masters' degrees in Special Education and Psychology. They have the same shared interest and experiences in the field of special education, especially working with children with disabilities in early intervention programs and inclusive settings.

KNOWLEDGE AND THE NEEDS OF PARENTS WHO HAVE CHILDREN WITH AUTISM SPECTRUM DISORDER IN GESTURE COMMUNICATION

Phan Thieu Xuan Giang and Nguyen Thi Thu

Children begin to actively use gestures to communicate at eight to nine months old. For instance, they could shake their heads in disagreement and wave their hands to say bye-bye. At ten months of age, they are able to nod their heads in agreement with parents, caregivers and point objects when they want something. In the single word speaking stage, children usually create gestures and speech together, which is similar to that of adults. According to McNeill (2005), gesture communication and combination between gestures and speech bring a clear message to the listener even if it indicates different expressive ways of communication.

Children with autism spectrum disorder (ASD) do not show the use of gestures or use them late compared to typically developing children at the same age (Wetherby et al., 2004). Children with ASD often use gestures at two years old rather than in their first year. Development of gestures closely correlates to verbal development in early ages of typically and atypically developing children as well. When a child points to an object, it increases the opportunity for the child to use words to name the object in the next few months. This shows that early gestures could facilitate word learning.

Children are also able to use symbolic gestures or common gestures to communicate action information. For example, they move hands to their mouths to show they want to eat or drink, use open hand gestures beside objects or in front of others to receive an item or pull the hand of a parent to point to objects to show that they request the parent to take the item for them. The frequent use of gestures to communicate facilitates processing information through senses, providing information, imitating action, and directing the speaker with information to communicate. Frequent use of gestures to communicate facilitates processing information through senses, providing information, imitating action, and directing the speaker to speak accurately (Iverson & Goldin-Meadow, 2005). Gestures help children express their thoughts to others and increase their ability to learn new words. Observing gestures of a child help parents better understand the child and respond to them by speaking words that the child needs to listen and learn. The deficit of the ability to understand and use of gestures is considered essential in the development of language for children with ASD. In Ho Chi Minh city, we did not know how parents of children with ASD understand gesture development of their children with ASD and approaches they take to help their children with gesture development. This survey aimed to explore parental knowledge and their needs for gesture teaching for children with ASD.

Methods

We designed our own questionnaires with two types of questions: multiple choice and a 5-point Likert scale. After doing trials for selecting appropriate questions, we sent the questionnaires to 116 participants (113 parents and three grandparents). We checked the reliability of the questionnaire by Cronbach's Alpha and analyzed the data using SPSS version 25.0 and provided descriptive and inferential statistics. The language levels of the children ranged from no word (33 children), single word (28 children), phrases (n=35) and to fluent sentences (n=18).

Results

We found that common gestures children often used included *pointing to objects/ things* when talking (21.7%*), waving hand for bye*-bye (17.3%), *opening hand to receive* (17.3%), and *raising digits to implicate numbers* (6.1%). The correlation among language level and gestures for language level correlated to children *"looking at parent and pointing the toys"* they wanted (r=0,279), *nodding for "yes"* (r=0,613), *shaking head for "no"* (r=0,402), and *waving hands to call parents* (r=0,501). Gesture of *"opening hand to receive"* was not correlated to language level. Rating about function of gestures indicated that most parents agreed that gestures played an important role in expressing wants/desires before talking and making communication lively and effective.

Strategies used by parents to help children develop gesture communication ranged from *verbal reinforcement* (very often – 34.6%; often – 53.4%) to *modeling and hand over hand support* (54.3%). The most

effective strategies highly rated by parents when using gestures to communicate to children included both *pointing and naming objects or requesting* and modeling *gestures for children* to imitate (>45%).

Most parents expected to have video clips and lectures on gesture teaching (58.6%), a small number of parents had little needs or no needs (4/116), two out of 116 parents did not need video clips or lectures, two parents did not need extra books and or materials. The parents' ability to get access and support ranged from full access (21.6%) to materials, a lot of access (30.2%), fair access (20.7%), to a little access (25.9%).

Discussion

Most parents participating in the survey understood the meaning of a gesture (66.4%), while others misunderstood gestures, body postures and tone of voice. Parents valued the role of using gestures and strategies to help children develop gestures. All information about gestures was learned from teachers and from books on early intervention. This could be due to parent and teacher collaboration in some centers as well as parental knowledge.

Gestures highly correlated to language levels. The higher the level of language the gestures become more precise. Language level correlated to gestures: *Nodding for "yes"* (r=0.613), *waving hand to call parents* (r=0.501), *shaking head for "no"* (r=0.464), *opening eye and mouth, raising eyebrow to be surprised* (r=0.433)

Some effective strategies used by parents correlated to certain gestures included: 1) Exaggeration (Parents tried to make gestures more lively), *Nodding for "yes"* (r=0.613), *opening hand to receive* (r= 0.393), *raising hand to "yeah" for cheering* (r=0.245); 2) Modeling correlated to *opening hand to receive* (r=0.299); and 3) *Hand over hand teaching* correlated to *opening hand to receive* (r=0.299), *nodding for "yes"* (r=0.207) *waving hand to call parents* (r=0.501). Using verbal reinforcers when the children used gestures was recognized but did not correlate to the ability to use gestures of children.

Limitations

The sample was small. It was collected in three centers in Ho Chi Minh City and did not represent all parents in the Ho Chi Minh City area. The Nhan Hoa center provided some training for parents on teaching gestures, which could have influenced the knowledge of parents. There was not comparison among age ranges of children in using gestures in this survey.

Conclusion

Results indicated that most parents had accurate knowledge about gestures. However, many parents still misunderstood gestures, body posture and tone of voice. Parents received a lot of information from professionals. Parents utilized different strategies to help their child develop gestures. This resulted in some positive outcomes. Parents also needed a lot of support from books, lectures, and training videos for teaching gestures to their children.

Gestures may thus provide a way for new meanings to enter children's communicative repertoires. It may also give children a means for practicing these new meanings, laying the foundation for their eventual appearance in speech. More expansive studies are needed from different centers or hospitals throughout the city to provide further insights about parents' knowledge and needs for gesture teaching materials in different settings.

References

Iverson, J. M., & Goldin-Meadow, S. (2005). Gestures pave the way for language development. *Psychological Science*, *16*(5), 367–371. https://doi.org/10.1111/j.0956-7976.2005.01542.x

McNeill, D. (2005). *Gesture and thought*. University of Chicago Press. https://doi.org/10.7208/chicago/9780226514642.001.0001

Wetherby, A. M., Woods, J., Allen, L., Cleary, J., Dickinson, H., & Lord, C. (2004). Early indicators of autism spectrum disorders in the second year of life. *Journal of Autism and Developmental Disorders*, *34*(5), 473–493. https://doi.org/10.1007/s10803-004-2544-y

Acknowledgment: This study was completed with great support from parents who have children with autism in Nhan Hoa center for supporting development and integrated education, Nang Mai and Alpha centers in Ho Chi Minh City.

About the authors:
Phan Thieu Xuan Giang, MD, physician specialized in psychiatry and developmental disabilities, working at Centre Medical International. Email: drgiangphan@gmail.com
Nguyen Thi Thu, MA, psychologist, speech language therapist, Director of Nhan Hoa Center.
Email: nguyenthupsy@gmail.com