

Center-Home-Based Instruction of Children with Cerebral Palsy from a Symbolic Interactionist Perspective: A First Look

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ABSTRACT

Much of the literature on children with disabilities delved into the promotion of inclusionary practices in education in particular, and in society in general. But there are also studies that dealt with the continuing significance of community or home-based instruction for children who cannot go to school because of severe motor and intellectual disability such as cerebral palsy. This paper seeks to add to the growing literature on children with Special Educational Needs (SEN) by presenting a new way of looking at SEN - through the symbolic interactionist lens of Herbert Blumer. Using a case study approach of five purposively sampled children with mild to profound cerebral palsy, descriptive statistics gathered through the Portage questionnaires showed a remarkable improvement on three domains of the special children's skills - socialization, self-help and communication skills. The improvements in these three domains are indicative of successful symbolic interaction between the parents and the children. Two domains (motor skills and cognitive skills), however, continued to lag behind. The researchers recommend continuous symbolic interaction between the parents and the children in the three domains for these may possibly improve the performance of the children in the two other lagging domains.

Introduction

Recent initiatives in addressing the educational needs of special children have taken an inclusive turn. But the continuing

importance of community and/or home-based education remains because of the social realities that hinder inclusivity in education – lack of inclusive facilities and infrastructure, inaccessibility to assistive

technology, lack of training of teachers on Special Education and inclusive education, and existence of children with severe motor and intellectual disabilities such as cerebral palsy.

Most of the theoretical discussions on children with disability have revolved around critiques of the medical model and praises for the social model. Recent researches have employed critical theory as analytical frame in relation to the intersection of disability with other social categories such as race, class and gender. There is a dearth in global literature, however, in terms of utilizing a symbolic interactionist lens in looking at the center-home-based instruction of children with disabilities, specifically children with cerebral palsy. Thus, this study seeks to address such paucity in the literature by giving an initial look at the center-home-based instruction of Filipino children with cerebral palsy through the symbolic interactionist perspective, by empiricizing the concepts of Herbert Blumer in particular. This paper hopes to give an initial contribution to the growing literature on children with Special Educational Needs (SEN) by offering a new way of looking at disability in the context of education - through a Blumerian lens.

Theoretical Considerations

Early research on the theoretical underpinnings of disability were about the effects of social stigma on individual identity from the symbolic interactionist lens, utilizing Goffman's (1963) ideas on spoiled identity in particular. Disability studies eventually delved into critiques of the medical model and positive reviews of the social model, specifically how the social model better illustrates the social construction of disability in particular social contexts (Conrad & Barker, 2010; Editorial, 2010; Oliver, 2013; Roe et al., 2010). The medical model generally views disability as an impairment that begs intervention,

compared to the social model that treats disability as socially defined and commonly unearths the social structures and social processes, and/or identifies the social actors that create these definitions which hinder the disabled from participating fully in society. But recent literature have taken a "critical turn" in theoretically examining disability (Goodley, 2017; Goodley et al., 2019; Meekosha & Shuttleworth, 2009), in relation to the intersectionality of disability along with other social categories such as race, class and gender (Goethals et al., 2015; Hernandez-Saca et al., 2018). There is also a renewed appreciation of Goffman's (1963) early thoughts on stigma and identity based on recent societal complexities (Abrams, 2014; Darling, 2019; Kowalski et al., 2017). Symbolic interactionism has also been recently utilized in understanding health decline and recovery (Fletcher, 2018; Roe et al., 2010).

In the context of education, the social model found its resonance in inclusive education as the broad theoretical lens that promotes the integration or mainstreaming of children with disabilities in schools along with non-disabled children (Agbon & Mina, 2017; Alkahtani 2016; Allan, 2010; Dockett et al., 2011; Driver et al., 2010; Limaye, 2016; Maciver et al., 2019; Pereira et al., 2016; Tindal, 2017; UNESCO, 2019; UNESCO, 2015; UNICEF, 2014; WHO- UNICEF, 2015). This context is to socialize children into the realities of plurality, diversity and heterogeneity in society. But in the case of children who cannot attend school because of severe motor and intellectual disabilities, special education, community and/or home-based instruction is resorted to (Ajoc, 2019; Coram International, 2018; Paleeri, 2010; Qu, 2015; Robertson et al., 2009; Sharif et al., 2015; Zuurmond et al., 2018).

Symbolic Interactionism

In symbolic interactionism, emphasis is placed on subjective meaning or how

routine meaningful interactions among people form 'society' instead of objective structures (Carter & Fuller, 2015). Meanings are conveyed by human beings through symbols such as language, and it is through constant social interaction that meanings are relayed, shared and interpreted. Hence, such conceptualization of society also explains how its basic units, social institutions like the family, are formed, and how these operate on an everyday basis – through social interaction.

In Herbert Blumer's symbolic interactionism, subjective meaning is a product of a social actor's interpretation of the settings or context they are acting in. Blumer's approach can be summarized in the following premises: "(1) human beings act toward things on the basis of the meanings that the things have for them; (2) the meaning of things is derived from, or arises out of, the social interaction that one has with others; (3) meanings are handled in, and modified through, an interpretive process used by a person in dealing with the things they encounter." (Blumer, 1969 in Carter & Fuller, 2015: 3). Hence, meaning is both an outcome of social interaction and of the social actor's agentic interpretation (Dennis, 2011; Redmond, 2015).

Center-home-based instruction can be described as a Blumerian symbolic interaction between the parent and the child with cerebral palsy. The parent as the child's teacher is the conveyor of symbols – the concepts or ideas that the parent teaches the child are relayed to the child through social interaction. Through continuous social interaction with the child in the process of teaching the child (conveying symbols), the child is able to interpret the meanings of the concepts or ideas (symbols). If the parent introduces new ideas, the child will be able to understand the new meanings based on subsequent social interactions pertaining to the new ideas. The success of the symbolic interaction is evidenced by an assessment of

the child after several months of home-based instruction by the parent. Such assessment can reveal if there is an improvement or change in the child's behavior. An improvement or change in the behavior of the child with cerebral palsy is an indication of successful symbolic interaction with his/her parent.

Inclusive Education and Special Education

Much of the recent literature concerning the education of children with disabilities have taken a turn towards inclusive education (Agbon & Mina, 2017; Alkahtani, 2016; Dockett et al., 2011; Driver et al., 2010; Limaye, 2016; Maciver et al., 2019; Pereira et al. 2016, Tindal, 2017; UNESCO, 2019; UNESCO, 2015; WHO- UNICEF, 2015). But the continuing importance of community and/or home-based education remains because of the social realities that hinder inclusivity in education – lack of integrative facilities and infrastructure, inaccessibility to assistive technology, lack of training of teachers on Special Education and/or inclusive education, and existence of children with severe motor and intellectual disabilities such as cerebral palsy (Ajoc, 2019; Coram International, 2018; Labrague, 2018; Paleeri, 2010; Qu, 2015; Robertson et al., 2009; Sharif et al., 2015; Zuurmond et al., 2018).

Therapy and Treatment

Studies on children with cerebral palsy usually centered on occupational therapy and other related therapies and/or medical treatments that can improve the motor skills of the children (Chen et al., 2018; McNish et al., 2019; Monbaliu et al., 2017; Novak, 2014; Novak and Honan, 2019; Peters et al., 2019), with feeding difficulties as exemplifying one of the most challenging motor skill deprivations (Adams, 2009). The role of assistive technology has also been emphasized (Borgestig, 2016; Guerette, 2013).

Importance of Family Engagement

The gendered nature of parenting children with cerebral palsy examined the important role of mothers in caregiving (Gomez, 2017; Madi et al., 2019; Shen, 2016). The role of parents and/or the family of children with cerebral palsy has been a continuing concern because of the nature of the disability – it may require lifetime support (Raver & Childress, 2014; Ray et al., 2009; Wakimizu et al., 2018). The significance of parental involvement in intervention programs is a key factor in long-term achievement results for their children with disabilities (Mitchell & Brown, 2013; Lord et al., 2018; Terpstra et al., 2014).

In an effort to help reduce the incidence and prevent further handicapping conditions among children in the Philippines, the Portage system was adapted and contextualized as an early intervention program model to service children with disabilities between the ages of birth to six, as well as their families. Parents are considered as valued partners in education. As parents, they know their child best. They know the child's strengths, abilities, needs, and challenges, and, as a result, they have a vital role in the education of their children. Parents' participation in planning for their children's education and their ongoing involvement and support will positively and meaningfully contribute to the child's education (Currie & Kahn, 2012; Rapp & Ginsburg, 2011).

There is a paucity, however, in utilizing a symbolic interactionist lens in looking at the center-home-based instruction of children with disabilities, specifically children with cerebral palsy. Hence, this study seeks to address the lack in the literature by giving an initial look at the center-home-based instruction of Filipino children with cerebral palsy through the symbolic interactionist perspective, by empiricizing the concepts of Herbert Blumer in particular. A Blumerian

approach to center-home-based instruction will aid in gaining new insights in terms of the symbolic interaction between the parent and the child with cerebral palsy. Such insights may help improve center-home-based instruction or education. Thus, this paper offers an initial contribution to the growing literature on children with Special Educational Needs (SEN) through a new way of looking at disability in the context of education - through a Blumerian lens.

Methodology

This research employed the case study approach and is part of a larger project which aims to promote Center-Home-Based Instruction as an alternative educational delivery mode that facilitates the role of parents as teachers of their special children at home. Center-Home-Based Instruction involves partnership between the Health Center and the home of the parents of children with cerebral palsy, in which the learning and development of children with special needs take place in a range of contexts. It happens at home with the family, in non-normal settings in the community and in formal special education and settings in the different delivery systems of the special education program. In all of these settings, the parents have an important contribution to make in the education of their children, especially parents of children who are identified as having disabilities. Purposively sampled were five (5) parents who were formally trained on effective parenting, behavior modification, and teaching strategies such as task analysis and orientation on the Filipino Adaptation of the Portage Guide to Early Education materials. The Filipino Adaptation of the Portage Guide is for early intervention in the community that involves parents as teachers of their own children with special needs and suited for use in the Philippine setting. These parents implemented the Center-Home-Based Instruction to their children

with cerebral palsy for a period of nine (9) months by taking note of their children's scores. These sons/daughters of the parents or the five (5) children with cerebral palsy are the participants of this study. They are all enrolled in the same special school and are attending the same rehabilitation services (Handicapped Center Lourdes or HCL). Informed Consent was established through the children's parents.

The instruments used in this study include the Diagnostic and Statistical Manual of Mental Disorder (DSM V 2014) and the Gross Motor Function Classification System (GMFCS). These were utilized to classify the type and degree of disability of each child participant. Also used as an instrument in this study is the Filipino Adaptation of the Portage Guide to Early Education or the Filipino Adaptation of the Portage Checklist (FAPC). This study focused on the five (5) domains of the FAPC: socialization skills, self-help skills, motor skills, cognitive skills and communication skills, as perceived by the parents. The descriptive statistics from these five domains, most especially the Pre-Test Scores (scores before the parent's implementation of the Center-Home-Based Instruction) and Post-Test Scores (scores after the parent's implementation of the Center-Home-Based Instruction) of each

child were examined. A difference in the scores is an indication of successful symbolic interaction between the parent and the child.

Findings

Table 1 presents the profile of the participants of this study, three males and two females with chronological age ranges from 7-21 years. The participants' mental age ranges from 2 years to 4 years old, manifesting a degree of mild to profound level of cerebral palsy. All of the participants manifest a low score in one specific skill but manifest deficits in the cognitive skills and some psychomotor skills. This is basically the reason why as a whole their mental age averages at 3 years old. All of the five (5) participants are receiving therapy services. Their entry to formal schooling was their first exposure to early childhood education in a public school and/or a private school. All of the participants were functioning within the preschool level.

The subsequent tables show the effects of the Center-Home-Based Instruction on the children with cerebral palsy specifically on these five domains: socialization skills, self-help skills, motor skills, cognitive skills and communication skills as perceived by

Table 1

Profile of the Participants

Cases	Sex	Chronological Age	Approximate Mental Age (Portage Checklist)	Estimate Degree of Cerebral Palsy	Birth Order	Educational Level	Number of Years in School
A	M	7	2	Moderate Profound (Motor and Self-Help)	1 st	Pre-school	NA
B	F	12	2	Moderate	2 nd	Pre-school	NA
C	F	14	4	Profound	3 rd	Pre-school	NA
D	M	23	3	Mild	0	Pre-school	NA
E	M	14	2	Moderate	3 rd	Pre-school	NA

Table 2*FAPC Results: Socialization Scale*

CASES	SEX	CHRONOLOGICAL AGE	PRE-TEST		POST-TEST		% INCREASE
			ITEM	AGE LEVEL	ITEM	AGE LEVEL	
A	M	7	51	2-3	82	5-6	300
B	F	12	45	1-2	64	4-5	300
C	F	14	45	1-2	73	4-5	300
D	M	14	46	1-2	61	3-4	200
E	M	23	45	1-2	73	5-6	400

Table 3*FAPC Results: Self-Help Scale*

CASES	SEX	CHRONOLOGICAL AGE	PRE-TEST		POST-TEST		% INCREASE
			CARD #	AGE LEVEL	CARD #	AGE LEVEL	
A	M	7	49	1-2	68	4-5	300
B	F	12	55	3-4	86	4-5	200
C	F	14	47	1-3	93	5-6	300
D	M	14	55	1-3	60	3-4	100
E	M	23	86	4-5	100	5-6	300

the parents. If there is an improvement or change in each domain, it is indicative of successful symbolic interaction between the parent and the child.

Table 2 shows the comparison of the pre-test and post-test results on the Socialization Scale. Results show a notable increase in the post-test from 1 year to 2 year old. The difference indicated the remarkable impact of the successful symbolic interaction between the parents and the children. The children became more sociable, friendly and less inhibited in their relationship with others.

Table 3 shows the results of the self-help scale, which implies that the participants' ability to care for themselves had notably improved after the 9-month period for the four participants, A,B,C, and D; but with the exception of Case D whose entry behavior is Card 55 where she can

wipe her nose when prompted and ended on Card #60 where she can blow her nose when reminded. Her self-help skills area is the most difficult thing to do because her disability is in the profound level. A significant increase was observed in one participant, Case E who obtained a percentage increase of three hundred (Card #100), where he can choose, bring and fix the trays after meals. This behavior is a manifestation that he can be trained further for pre-vocational skills and then to vocational education as this program should have already been designed for him as he is already 23 years old. At terminal behavior after learning a total of one-hundred, the two participants have exhibited the ability to do good grooming skills like combing their hair with minimal assistance from their parents while the three participants can already do grooming skills without assistance. These are resonations of successful symbolic interaction between the parents and the children for this domain.

Table 4*FAPC Results: Motor Scale*

CASES	SEX	CHRONOLOGICAL AGE	PRE-TEST		POST-TEST		% INCREASE
			CARD #	AGE LEVEL	CARD #	AGE LEVEL	
A	M	7	0	0	0	0	0
B	F	12	0	0	0	0	0
C	F	14	81	3-4	114	5-6	300
D	M	14	0	0	0	0	0
E	M	23	81	3-4	130	5-6	300

Table 5*FAPC Results: Cognitive Scale*

CASES	SEX	CHRONOLOGICAL AGE	PRE-TEST		POST-TEST		% INCREASE
			CARD #	AGE LEVEL	CARD #	AGE LEVEL	
A	M	7	0	0	0	0	0
B	F	12	0	0	0	0	0
C	F	14	55	2-3	104	5-6	300
D	M	14	0	0	0	0	0
E	M	23	54	2-3	107	5-6	300

Presented in Table 4 are the results of the pre-test and post-test in the Motor Scale. Only two of the participants show marked improvement in their motor skills. It may be inferred from these results that the parents' successful symbolic interaction facilitated the development of the children's motor skills. It was observed that of the four scales, this had the lowest results as noted in the percentage of increase. Three of the participants (Cases A, B and D), for example, did not achieve improvement as they are in the profound level on motor skills and maximum assistance are needed for they are in wheel chairs. Hence, intensive physical and occupational therapy are needed, as well as regular medical attention to improve their motor skills. All these free services are provided at the Handicapped Center Lourdes (HCL). Case C's entry behavior was Card #81, which means that the child could put together and form a three-piece puzzle, and

the terminal behavior (Card # 114) showed that the child could jump with minimal assistance. The entry behavior of Case E is Card # 81, where he could form a three-piece puzzle and form a board. His exit behavior was Card # 130, indicating that he could pick up an object on the ground while running. The general results show that most of the participants' gross motor and fine motor skills are not yet well developed, hence, therapy sessions should be done for life. The results also imply that symbolic interaction between the parents and the children were generally not that successful for this domain.

The Cognitive Scale in Table 5 shows that growth in self-awareness and awareness of the environment were noted in two of the participants (C and E). There were indications that a beginning cognition of number concepts and the ability to make comparisons and retell stories in sequence

Table 6*FAPC Results: Communication Scale*

CASES	SEX	CHRONOLOGICAL AGE	PRE-TEST		POST-TEST		% INCREASE
			CARD #	AGE LEVEL	CARD #	AGE LEVEL	
A	M	7	54	1-2	73	4-5	200
B	F	12	0	0	0	0	0
C	F	14	52	1-2	92	5-6	300
D	M	14	53	1-2	72	4-5	200
E	M	23	53	1-2	86	5-6	300

were gradually developing as observed in the improvement of participants. Cases A, B and D, however, did not show marked improvement as their cognitive abilities are in the profound level. This implies that intensive early childhood interventions for these three participants should be continued, including their therapy sessions. Case C's entry behavior was that she could sing a 5-line song (Card#55), and her exit behavior (Card#104) showed she could tell the date of her birthday. Case E's entry behavior was (Card# 54) where he could write diagonally in a 4-inched square paper. His exit behavior was (Card#107) where he can draw a ½ figure or an object. This also implies that symbolic interaction between the parents and the children were generally not that successful in this domain.

The Communication Scale in Table 6 shows the data collected in the pre-test and post-test of the respondents. This generally implies successful symbolic interaction between the parents and the children for this domain. Initially, it was evident that two of the children's communication skills were very low. Case A had an entry behavior of Card 54 where he can name objects and pictures according to its kind such as toys, animals and foods. His terminal behavior is Card #73 where he can say the Filipino words "ate," "lolo," "lola," and "kuya." It implied that his communication skills can be further developed and enhanced with continuous speech therapy as well

as physical and occupational therapy, to prepare him for further enrichment in his intellectual skills. Case B has severe difficulties in communication skills. She does not have an entry behavior for this area, hence, a sign language program may be designed for her to learn how to communicate her needs through lip and sign language. It is also recommended that, for her communication skills to be developed, she can be assisted by speech therapy. Case C had the entry behavior of using the article 'the' when spoken to and when asked to name objects and pictures (Card# 52), and her exit behavior is Card # 92 where she can correctly use the Filipino terms, "kahapon," "bukas," "ngayon." Case D had an entry behavior of Card # 53 where he could use the article "the" in telling things. His exit behavior is Card # 72 where he can point what is wrong in a picture presented to him. And lastly, Case E's entry behavior was Card # 53 where he could also use the article "the" in telling things. His exit behavior is Card # 86 where he could explain if a place identified is far or near, and if objects are placed on top or if it is located below.

Discussion and Conclusion

The results of the Filipino Adaptation of Portage Checklist empirically validates Herbert Blumer's symbolic interactionist perspective, specifically the remarkable

improvements seen in the children with cerebral palsy within the three domains where routine symbolic interaction is important in meaning making – socialization skills, self-help skills and communication skills. Constant and routine symbolic interaction between the parent and the child has effected healing on these aspects of the child that are primarily social in nature. Such results are consistent with previous studies that mention the essentiality of social development in the treatment and/or interventions concerning children with cerebral palsy (Driver et al., 2010; Lord et al., 2018; Novak, 2014; and Paleeri, 2010).

The two other domains where most of the children with cerebral palsy did not show much improvement, motor skills and cognitive skills, are reflective of the more biological nature of these domains as these require more intensive motor and cognitive therapeutic sessions in the HCL. But the remarkable improvement in the three social domains may possibly be catalytic in the eventual improvement of the two other biologically-nuanced domains, because these may make the child more receptive to new and more therapy-related instructions given by their parents and/or the HCL Therapist in relation to their motor and cognitive skills. This opens the possibility of the importance of continuous symbolic interaction between the parent and the child as a healing or therapeutic component.

Generally speaking, the data results are satisfactory since the participants of this research were expected to have a stagnant development at a certain point of time. Parents as partners in educating their special children are very vital in the successful achievement of these children in the school. The center-home based instruction subscribes as an alternative educational service delivery scheme which facilitated reaching out for children to learn the skills with parents as their first teachers

(Lord et al., 2018, Raver & Childress, 2014). Utilizing the Filipino Adaptation of the Portage Guide for Early Educations was a suitable and appropriate guide in developing the social, self-help, motor, cognitive and communication skills of children with cerebral palsy.

Based on the results of this study, the social aspect of intervention in the context of family or home-based education must be deemed equally important in facilitating the educational outcomes of children with severe cerebral palsy. Though such emphasis on the social dimension of intervention does not go to the extent of advocating for the inclusion of children with severe cases of cerebral palsy in inclusive education settings, it allows them or gives them an array of opportunities or possibilities for social interaction without subjecting them to the rigors and stresses of mainstream schooling. Such intervention has not been emphasized in previous and existing literature on children with severe cases of cerebral palsy, and the symbolic interactionist lens was able to unearth the significance or importance of the social.

Recommendations

Based on the findings of this study, these suggestions or policy recommendations are offered by the researchers:

Early Childhood Home-Based Instruction for use by parents whose special children cannot avail of basic education in the public/private schools and/or for special children who have severe motor and intellectual disabilities (or are highly immobile) should be promoted. It is also advisable for parents to engage with their special children in socialization activities outside the home (e.g. malling, walking in the park) to reiterate similar symbolic interactions in different social contexts. This may help or facilitate the adaptability

of the special children in different social environments.

It is imperative to create bigger incentives, subsidies and/or discounts for parents of children with severe motor and intellectual disability in order to assist them in the logistical and economic components of caregiving (e.g. procurement of assistive technology; bigger discounts for food and other grocery items, medicine, clothing apparel, etc.), because it is a painful reality that caregiving may last a lifetime. Such bigger incentives, subsidies and/or discounts can help ease the parents' burden. In addition, entrepreneurial opportunities (family business) for families with special children can help a lot in financial support. It is also an employment opportunity for special children with mild to moderate disabilities (e.g. can help count/in the inventory of fruits in a small fruit store)

Media should involve or include children with cerebral palsy as the main character or hero in a television series, film or commercial advertisement. Center-home-based instruction in television, film or commercial clips can also be shown. This is to sensitize the viewing public about the social realities or implications of cerebral palsy.

Since this research is limited in terms of scope and methodology (a qualitative approach with few cases), areas for further inquiry may employ quantitative methodologies with large samples. The conjectural discoveries in this paper regarding the possibility of the essentiality of the social domains in the eventual improvement of the two other biologically-nuanced domains are also worth looking into. Such inquiries will determine the degree (or lack thereof) to which continuous symbolic interaction between the parent and the child may facilitate healing, or such can be possibly integrated as a component in relation to motor and cognitive skill therapies or treatments.

Other areas for future research may involve research questions concerning how children with mild cerebral palsy are performing in inclusive schools in the Philippines. The specific aspects of lag or issues in differentiated instruction in terms of mixing special children with the rest of the student population is also an interesting point of inquiry. There is also a need to explore the effectiveness of multi-modal assessment (e.g. portfolios, exam, creative works, etc.) in an inclusive education setting. The preparation of pre-service teachers for special education and/or inclusive education as well as the quality of their preparation is also worth looking into.

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