Objectives

Intensive Behavioural Intervention (IBI) is the treatment of choice for young children with autism spectrum disorders, however outcomes are variable. This variability may be due to child, family, and treatment factors. Research has focused on treatment quantity with little attention given to quality, in part because it is difficult to measure. The York Measure of Quality of IBI (YMQI) is the only systematic measure used to define and evaluate the quality of IBI, based on video segments of children engaged in IBI. It has been shown to have good inter-rater reliability and validity but results from a recent study indicated that it may not measure a unitary construct and perhaps should be broken down into different dimensions. We previously examined three rationally derived sub-scores of the YMQI (technical skill, generalization, and managing problem behaviour) and showed that treatment quality remained consistently good over one year of treatment, but that generalization could be improved.

Methods

As part of a larger study of IBI, monthly videos of 39 children were coded using the YMQI. A multilevel factor analysis of this data will allow us to determine the factor scores. Then, a MANOVA will be used in order to examine the level and trend of the different factors of the YMQI, using three time points per child, over one year in treatment (i.e., every four months). We will compare these results to the previous rationally derived scores.

Results

By examining the factors we will be able to determine whether the YMQI measures different aspects of quality and which of those aspects show drift, improvement, or stability over one year of IBI.

Conclusions

This study is important because the quality of IBI is very rarely examined, and has not been looked at across time in a treatment program. This research will help measure the quality of treatment more precisely, inform future research, and have implications for IBI training and supervision.
Self Reporting of Health Care Experiences and Advice to Future and Current Health Care Practitioners – Influencing a Curriculum of Caring for People with Developmental Disabilities

Objectives

Studies in developed countries have shown that people with developmental disabilities (DD) have poorer health, increased morbidity, and earlier mortality yet are poorly supported by health care systems. Health care provider compassion and empathy have been associated with improved clinical outcomes although these characteristics decline as students move through their training. The Michael G DeGroote School of Medicine’s Niagara Regional Campus, Brock University School of Nursing, Southern Network of Specialized Care (SNSC) and Bethesda have developed an initiative whereby health care students have interactive experiences with people with DD to foster compassionate, person-centered care. Our study advances the concept of involving people with DD as teachers by soliciting their perceptions of health care experiences and advice to enhance the curriculum of caring for health care professionals. The goal of this study is to increase the capacity of health care professionals to provide competent and compassionate care.

Methods

This qualitative research involves eight focus groups of four participants \( n = 32 \). Participants, from Niagara, Brant, Hamilton, & Haldimand Norfolk, will be provided a questionnaire in advance to assist with their preparation. Participants may bring communication aids/care providers to assist with communication. Groups will be facilitated by two health care students and a SNSC Health Care Facilitator. Participant responses to questions about health care experiences will be audio recorded. Participants may submit additional responses using the questionnaire. Focus group transcripts and questionnaires will be analyzed for emerging themes related to medical experiences and advice for practitioners. Investigators will translate this information into achievable recommendations to faculty for curriculum development.

Results

Focus groups are ongoing. Initial analysis from a recent pilot focus group, involving 7 participants, provided several dominant themes. Individuals appreciate efforts by health care professionals to: communicate directly with them; provide information about the process and equipment used for procedures; inquire about anxieties related to medical procedures/equipment; modify approaches and techniques to meet unique emotional and physical characteristics of the individual.

Conclusions

Education of health care professionals is an essential component of addressing health care inequity with this vulnerable population. Effective health care curriculum must address the need for compassion and empathy in addition to knowledge and skill acquisition. This research will provide valuable patient centred recommendations to guide the enhancement of a Curriculum of Caring for People with DD.
A Curriculum for Caring for People with Developmental Disabilities: An Associated Medical Services Phoenix Project

Authors: Kerry Boyd, Becky Ward, Courtney Phillips
1 McMaster University, Hamilton, ON
2 Brock University, St. Catharines, ON
Correspondence: kboyd@mcmaster.ca

Objectives

Communication barriers combined with complex needs can be challenging for healthcare providers and those in need of care. McMaster University, Michael G. DeGroote School of Medicine, Niagara Regional Campus developed, evaluated and advanced a Curriculum of Caring for People with Developmental Disabilities (DD), providing medical and nursing students with three experiential learning opportunities. As a 2013/14 AMS Phoenix Project, people affected by DD are being raised up as educators of future and current healthcare providers, contributing to curriculum enhancement and participating in video-based resources.

Methods

There are three components of educational intervention for healthcare learners and providers: (1) early exposure with an introduction to DD and opportunity to hear from patients and caregivers via video, (2) clinical skills primer with communication adaptations, and (3) clinical application resources enhanced by video.

Results

Learner evaluations of the program, self-report of comfort and competence with the population as well as clinical preceptor observation have been reviewed and used to refine the program. People with DD and relevant care provider involvement is being incorporated into evaluation and planning. Brock University, Center for Applied Disabilities Studies and McMaster University Department of Psychiatry and Behavioural Neurosciences are participating in further curriculum development and qualitative research.

Conclusions

The purpose of the Curriculum of Caring is to generate healthcare providers who are more capable (comfortable, confident, competent) in providing compassionate, person/ family centred, inter-professional care to people generally considered harder to serve. This recently enhanced curriculum complements other initiatives in Ontario and across Canada aimed at promoting excellence in healthcare for all. As an AMS Phoenix Project, the Curriculum of Caring for people with DD has expanded the network of participants as well as potential recipients.
Personal Support Workers’ Perceptions of a 12-Week Adapted Physical Exercise Program Designed for Adults with Autism Spectrum Disorder and an Intellectual Disability

Authors: Kelly Carr, Phillip McKeen, Nadia R. Azar, Chad A. Sutherland, Sean Horton
University of Windsor, Windsor, ON
Correspondence: carrk@uwindsor.ca

Objectives
The objective was to qualitatively explore personal support workers’ perceptions of a community-based adapted physical exercise (APEX) program designed for adults with autism and an intellectual disability (ASD-ID). The completion of this study expanded and complemented our previous work that quantified physical changes among participants as a result of engagement in the APEX program.

Methods
Eleven adults with ASD-ID (mean age = 35.5 years; range = 20–61 years; 2 females) attended a 12-week community-based APEX program focused on the development of motor skills through engagement in whole body circuit training, as well as sports and games. Each participant had an IQ score below 70, with the lowest IQ score being 20. The perceptions of the APEX program held by the support workers (n = 10) of these participants were systematically documented (through audio-recorded, semi-structured interviews following program completion). Verbatim transcripts were analyzed using an inductive approach where common features between meaning units were identified using constant comparisons.

Results
Two broad categories were established: (1) program structure, and (2) participant benefits. Subcategories in “program structure” included ensuring consistency and providing resources. Support workers identified the importance of ensuring a consistent program structure through the order and type of activities provided, and the consistent presence of volunteers. Support workers also noted the ability of the program to provide resources that are often unavailable. The “participant benefits” category included three subcategories: facilitating social interactions, building confidence, and providing unique and novel opportunities. Support workers identified social interactions that were associated with both participant-volunteer and participant-participant relations. The increase in the participants’ confidence was evidenced through examples such as the participants’ increased willingness to enter the program space independently, and the participants’ recognition of their ability to complete increasingly difficult tasks. In addition, the APEX program offered the participants an opportunity to learn new skills, which included standard exercises, as well as bike riding, skipping, and popular games, such as Ping-Pong.

Conclusions
The results of this study suggested that the benefits of the APEX program designed for adults with ASD-ID extended beyond physical measurements, and included the ability to provide an opportunity for social interactions, an increase in confidence, and the development of novel skills. Such benefits derived by the participants are thought to be reflective of the appropriateness of the program structure, which was made feasible through the use of university resources (i.e., undergraduate student volunteers, facilities). This exemplifies the importance of community-university partnerships in providing beneficial opportunities to individuals with disabilities.
The Development and Administration of a Self-Efficacy Questionnaire Designed for Adults with Autism Spectrum Disorder and an Intellectual Disability

Authors: Kelly Carr, Phillip McKeen, Nadia R. Azar, Chad A. Sutherland, Sean Horton
University of Windsor, Windsor, ON
Correspondence: carrk@uwindsor.ca

Objectives

The objective was to develop a self-efficacy questionnaire that is suitable for adults with autism spectrum disorder and an intellectual disability (ASD-ID) and to explore the appropriate protocol for its administration. Since self-efficacy influences activity choice, the ability to measure self-efficacy among individuals with ASD-ID may provide explanations for activity patterns and provide an avenue for positive change in home- and community-based participation.

Methods

The development of the self-efficacy questionnaire included four stages: (1) a review of relevant literature, (2) the gathering of expert opinion, (3) the implementation of control questions, and (4) the application of Picture Exchange Communication System (PECS) to depict the items and the response options on the questionnaire. Following its development, the self-efficacy questionnaire was administered on five separate occasions to 11 adults diagnosed with ASD-ID (mean age = 35.5 years; range = 20–61 years; 2 females; IQ score range: 20–70), in a stepwise fashion. Participants were first required to correctly answer control questions that identified their ability to understand “yes” and “no,” then moved to using three response options of “yes,” “maybe,” and “no,” and finally used a five-point Likert scale (1 – “I can not do” to 5 – “I can do always”). Use of the five-point Likert scale was considered successful if responses appropriately corresponded to answers provided when using three response options (i.e., “yes” corresponded to 4 – “I can do often” and 5 – “I can do always”).

Results

The developmental process resulted in a self-efficacy questionnaire consisting of 17 items. Of these, five were control questions that ensured the participant understood the meaning of “yes” and “no.” The remaining 12 items measure self-efficacy toward sports and games, social skills, and employment or volunteerism. Five of the 11 participants consistently answered the control questions correctly on all five occasions. Of these five participants, two responded using the five-point Likert scale correctly. However, one of these participants responded “yes” to all questionnaire items, while appropriately responding “5 – I can do always.” The second participant responded using the full range of possible response options. The answers provided by this participant when using the five-point Likert scale corresponded appropriately to answers provided when using responses of “yes,” “maybe,” and “no.”

Conclusions

This study offers insight on the use of control questions and PECS to implement a questionnaire using a stepwise approach among adults with ASD-ID. Currently, there is a lack of research, as well as instruments, regarding the self-efficacy of special populations. Therefore, this study should be viewed as a foundation for future work that challenges researchers to seek out unique and creative ways to understand self-efficacy among adults with ASD-ID.
Objectives

While children with developmental disabilities (DD) can be physically present in inclusive community settings, this does not necessarily result in meaningful engagement with others. There is a lack of research about the extent to which children with more severe DD are fully included in these settings. This study focuses on observers’ ratings of children’s play and overall social inclusion in community settings. The study has two purposes: (1) to describe the social and play interactions of children; and (2) to examine social inclusion in relation to child characteristics and contextual variables.

Methods

This study uses a subset of data from the Social Inclusion study of Great Outcomes for Kids Impacted by Severe Developmental Disabilities (GO4KIDDS), and includes 27 children with DD aged 6 to 17 years (63% boys), about half of whom also had autism spectrum disorder (ASD). The children were observed while participating in community activities (e.g., soccer, after-school programs). Trained observers, who had previously conducted formal behaviour observations and interviewed teachers and community leaders, completed a summary form rating the child’s play, social interactions, and overall social inclusion (rated on a 5-point scale). Standardized child assessment data were also available for most children. Scores were taken from the Scales of Independent Behaviour-Revised (SIB-R) Short Form, Vineland Adaptive Behaviour Scales-Second Edition (Vineland-II) and the Stanford-Binet Fifth Edition (SB-5) or the Mullen Scales of Early Learning (MSEL).

Results

Approximately 75% of children were rated as understanding the activity that they participated in and two thirds were rated as behaving similarly to other children. Of the eight types of play recorded, the most common were: Engaged solely with adult(s), Proximity to other children and Joint engagement. Overall, most children were rated as somewhat to very included, but one quarter of the sample had a low social inclusion rating. Adaptive Age from the SIB-R, Social Age from the Vineland-II and Mental Age were moderately to strongly correlated with social inclusion scores (.52,.54,.39, respectively). However, level of social inclusion was not correlated with maladaptive behaviour from the SIB-R (.16) or child’s age (-.04).

Conclusions

This study informs on the social inclusion of children with DD in different community activities and what factors may foster or hinder social inclusion. The results show that maladaptive behaviour did not affect the overall social inclusion rating of the child, suggesting that children with such challenges can still be effectively included in community activities. In addition, many children in this sample spent significant time with adults. This implies that it may be beneficial to provide additional training and support for community leaders so that they could be even more effective at facilitating optimum social inclusion and participation of all children.
Exploring Barriers to Care: Knowledge, Comfort Level, and Attitudes of Primary Care Providers Towards Patients with Developmental Disability

Authors: Ian Casson, Janet Durbin, Elizabeth Grier, Jane Griffiths, Alin Khodaverdian, Johanna Lake, Yona Lunsky, Andrea Perry, Elaine van Melle, Jane Yealland

1 Queens University, Kingston, ON
2 Centre for Addiction and Mental Health, Toronto, ON

Correspondence: ian.casson@dfm.queensu.ca

Objectives

The Queen's Family Health Team (QFHT) is leading a quality improvement initiative to implement comprehensive health exams for patients with developmental disabilities (DD). The initiative seeks to implement evidence from the Canadian Consensus Guidelines on the Primary Care of Adults with DD, which recommends a comprehensive health exam for all adults with DD. The initiative is being implemented using a staged approach. This study collected data during the exploration phase and aims to assess staff readiness to engage in the improvement initiative; determine staff knowledge, comfort level and attitudes towards providing care for patients with DD.

Methods

During the exploration phase, two surveys were given to staff. Survey A assessed staff readiness for change, staff comfort levels, skills and attitudes towards patients with DD. A second exploration survey (B) was subsequently administered providing a more refined, site-specific assessment of staff knowledge and comfort towards providing care for this population. Survey A was completed by 78 respondents and survey B was completed by 23 respondents; majority of respondents from both surveys were physicians. Other respondents included nurses, allied health professionals, management and administrative staff.

Results

In terms of staff comfort and readiness to change, approximately half of respondents in both surveys, indicated they were in the contemplation stage, meaning they are thinking about changing the way care is provided to patients with DD. In terms of knowledge, staff had fair to adequate knowledge regarding providing care to this population. In terms of comfort levels, on average, respondents felt comfortable discussing the patient’s disability with the patient or caregiver and felt skilled in adapting their communication and approach to a person with DD. However, respondents were neutral towards how they felt regarding their level of knowledge about care issues, familiarity with community resources and availability of proper resources to make accommodations, suggesting increased efforts are needed in these areas.

Conclusions

Primary care providers play an important role in promoting health for people with DD. By understanding the attitudes, comfort levels and knowledge of health care providers towards patients with DD, and the barriers that impede their ability to implement changes in care, we can attempt to better support the needs of primary care providers in addressing the health care needs of individuals with DD.
The Social Inclusion of Children with Developmental Disabilities: A Case Study

Objectives

The social inclusion of children with developmental disabilities (DD) is challenging to define and measure. A typical definition of social inclusion is the person being present and accepted during an activity with peers. However, it is possible that a child can be physically present at an activity without actively participating or interacting with others. The current study explores the experiences of social inclusion of an 8-year-old boy with DD and autism spectrum disorder (ASD), through an in-depth case study describing multiple data sources.

Methods

Data were collected as part of the Social Inclusion Project within the Great Outcomes for Kids Impacted by Severe Developmental Disabilities (GO4KIDDS) Canadian project, which involved 27 children aged 6.7 to 17.5 years old with DD. We interviewed parents (n = 21), teachers and educational assistants (n = 46) and community leaders (n = 33), as well as the child with DD when applicable. Observations at school and in the community were used to complement the interviews. The individual selected for this study is an 8-year-old boy diagnosed with ASD and DD, whom we will call Jordan. Jordan was functioning at about a 3.25 year level on the Stanford-Binet and his language was at a 3.80 year level. Adaptively he scored at a 3.5 year level and his maladaptive behaviour was not significant. We observed Jordan twice with his integrated class at school (during free time on the playground and an indoor recess) and while he was participating in a community activity (integrated day camp). In these settings, we also interviewed an Early Childhood Educator assistant, a camp counselor, a special education teacher and an educational assistant. We also interviewed Jordan's parents.

Results

Interestingly, there were more positive comments about Jordan's social inclusion in the school setting than in the community. Additionally, ratings from the impartial observers when in the school environment were more positive than ratings when observing in the community setting.

Conclusions

Social inclusion is important for all children, including those with DD. The present study demonstrates that the social inclusion of a child varies greatly across situations, lending strength to the idea that it is environmental factors (rather than child factors) that affect inclusion. In the future, we can manipulate these factors to design environments to ensure the successful inclusion of all students.
Positive and Negative Outcomes of Parenting a Child with Developmental Disabilities

Objectives

Recently there has been a call for developmental researchers to explore the positive aspects of parenting a child with a developmental disability (DD). A family stress model was previously developed, however, in keeping with the trends at the time, it focused solely on negative outcomes. The model has since been revised to determine the predictors of both positive and negative outcomes. In the current study, we explore the positive and negative impacts of parenting a child with DD. We examine the relationships between stressors, resources, supports and outcomes by using the revised dual outcome model.

Methods

Data are based on the Basic Survey from the larger Great Outcomes for Kids Impacted by Severe Developmental Disabilities (GO4KIDDS) Canadian project. This online survey collected information about the health, wellbeing, and social inclusion of children with severe DD and their families (n = 459). Outcomes of parenting a child with DD were determined using the Positive Gain Scale ($\alpha = .84$) and the Caregiver Burden Scale ($\alpha = .92$). Stressors examined were: child age, adaptive skills (6 items; $\alpha = .84$), maladaptive behaviour, diagnosis, and mental health difficulty (the latter two single-item parent report). Resources included: SES, marital status, and parent’s mental health (6 items; $\alpha = .90$). Support was operationalized using a measure of social support/participation of the family, constructed for the study (6 items; $\alpha = .78$).

Results

Preliminary analyses (based on $n = 409$) demonstrated that predictors generally show stronger relationships with Caregiver Burden than with Positive Gain. Regression analyses indicate 50% of the variance in Burden is accounted for, with the following variables showing significant coefficients: child’s age, adaptive level, maladaptive behaviour, parent’s mental health, and social support. For Positive Gain, only 12% of the variance was predicted and the only significant predictors were: maladaptive behaviour, parent’s mental health, and social support. These analyses will be recalculated with a larger sample, including French participants, making it more representative of the Canadian population.

Conclusions

If the analyses are consistent with the conclusions of the preliminary analyses, our research supports the fact that we understand more about the predictors of negative outcomes than positive outcomes. As such, this merits further exploration that will allow clinical interventions to target factors associated with positive outcomes of parenting a child with DD.
Strengths and Weaknesses of Children with a Disability: A Mixed Method Analysis of Parent Perception

Authors: Vanessa Colavita, Nidhi Luthra, Adrienne Perry
York University, Toronto, ON
Correspondence: vanessacolavita@gmail.com

Objectives

Although, most of the current literature examines parents’ negative experiences of raising a child with a developmental disability (DD), the past decade has seen an increase in interest on positive aspects. Parenting experiences, both positive and negative, have mostly been examined with respect to child characteristics, such as diagnosis, adaptive or maladaptive behaviour, and IQ, though other potentially important factors such as child’s gender and culture have not been studied. The purpose of the current study is to use an Exploratory Mixed Methods design to examine parent reports of common strengths and weaknesses of their child with a disability. This study will explore two main research questions: (1) What strengths and weaknesses do parents report?; and (2) Are parents’ reports of their child’s strengths and weaknesses different based on the (1) family’s cultural group, (2) child’s diagnosis, and (3) child’s gender.

Methods

A secondary analysis will be done on a subset of data from the Great Outcomes for Kids Impacted by Severe Developmental Disabilities (GO4KIDDS) survey. This survey taps into various child, family and systemic variables related to health, wellbeing, social inclusion and quality of life of children with DD and their families. As part of this survey, parents were asked about their child’s greatest strengths and greatest challenges or problems. From the larger dataset, a subset of 141 parents will be used for this study. An exploratory mixed method design will be used to analyze the content of parents’ responses to the two questions. First, individual parent responses will be coded for reoccurring major themes. Then each participant will be coded for presence/absence of each of these themes. Following this, patterns of themes reported by parents will be described and compared quantitatively, in terms of percentage, and chi-square analyses, based on family’s culture, child’s gender and diagnosis.

Results

Based on parent report of child characteristics, there were 100 male and 41 female children in this sample, with age ranging from 3–19 years ($M = 10.58, SD = 3.5$). Out of these children, 57 were diagnosed with DD and 84 with autism spectrum disorders/autism. In addition, 105 parents were born in Canada and 36 were immigrants from various different cultures such as Western European, Eastern European, Latin American, South Asian, African and Middle Eastern, and East Asian.

Conclusions

This is an exploratory study and the results of this study will help us in understanding parent’s perceptions about their children, including children’s strengths, and how these may differ based on the gender and diagnosis as well as the family’s cultural background.
Bringing Up the Roof – An Evaluation of the Advocates against Abuse Project

Authors: Melodie Cook, Adriana McVicker, Community Living Windsor, Windsor, ON
Correspondence: melodie@clwindsor.org

Objectives

Advocates Against Abuse (AAA) is abuse prevention training that is taught by people with disabilities for people with disabilities. The project is a partnership between Community Living Essex County, Community Living Windsor, Community Living Chatham-Kent, Christian Horizons and Vita Community Living Services. The goal of AAA is to arm people with skills to keep themselves safe in a way that is truly consistent with the values of the developmental services sector and doesn’t undermine the voices and credibility of the people it is intended to assist. The evaluation of the project sought to answer two questions: “Did people who were taught by Trainers who had an intellectual disability using an accessible language curriculum learn the material?” and “What other things did the people involved in the project as Participants, Trainers and Helpers get from the experience?”

Methods

Trainers were people who had an intellectual disability trained to teach using an accessible curriculum. Helpers were agency employees who were trained in achieving a background role to the Trainers. Class participants were people who had an intellectual disability who attended the class. Four abuse prevention classes were held with the same Trainers and Helper. At the end of each class the Trainers asked the class six questions concerning key points of the curriculum. Answers were documented by one of the researchers to assess the participants’ knowledge from the training session. Furthermore, a series of focus groups; one for Trainers, one for Helpers, and two for class participants were conducted. A qualitative approach was used to achieve richer results and avoid formal testing which historically has been intimidating to many of the people involved.

Results

Class participants learned the key elements of the curriculum and identified that having a Trainer who had a disability enriched their experience. They identified that forums to provide this kind of feedback were rare and should occur more often. Trainers and Helpers identified a shift of power which occurred within their relationship. Trainers identified that they had become good teachers and better role models. Helpers identified that learning to step back and take direction from the Trainers enhanced the learning for the Trainers. Helpers were able to transfer this realization to enhance their performance as direct support professionals.

Conclusions

The use of an accessible curriculum successfully resulted in teaching and learning of abuse prevention by people who have an intellectual disability for people who have an intellectual disability. The methodology was limited in measuring skill retention with class participants over time. In addition to highlighting the need to expand the practice of consulting people who have an intellectual disability more meaningfully, the research resulted in the development of an accessible approach to obtain informed consent from participants. The project has influenced the perspective of people who have an intellectual disability as leaders, resulting in direct support professionals discovering a balanced, background, supportive role.
Investigating the Association Between Child Behaviours and Parenting Stress in Families of Children with Fetal Alcohol Spectrum Disorder

Authors: Kelly D. Coons, Alexandra L. Clement, Joseph M. Caswell, Shelley L. Watson
Laurentian University, Sudbury, ON

Correspondence: kd_coons@laurentian.ca

Objectives

Despite a wealth of literature on the experience of stress faced by parents of children with developmental disabilities in general, there is a paucity of research investigating the stress faced by parents of children with fetal alcohol spectrum disorder (FASD). Researchers have indicated that some predictors of parenting stress in families of children with FASD may include impaired executive functioning, poorer adaptive functioning, and externalizing (e.g., hyperactivity/impulsivity, oppositional defiance) or internalizing (e.g., social withdrawal, depression) behaviour problems. Although previous research has identified challenges with some of the parenting stress measures currently employed, in particular the Parenting Stress Index and the Questionnaire on Resources and Stress, there is a need for research exploring the role of child characteristics in relation to parenting stress in families of children with FASD.

Methods

This study is part of a larger mixed methods research project examining the experiences of families raising children with FASD in Ontario, Canada. Informed by the Family Adjustment and Adaptation Response (FAAR) model, 84 adoptive, foster, and biological caregivers of children with FASD from 59 families across Ontario engaged in semi-structured interviews and completed a battery of quantitative questionnaires. Results from two of these questionnaires, the Parenting Stress Index – Short Form and the Child Behavior Checklist, are presented here.

Results

Based on questionnaires filled out by parents of children diagnosed with FASD, strong associations were found between parental stress and reported child behaviour characteristics. Parent ratings on the Difficult Child subscale of the PSI-SF were positively correlated with the following subscales on the Child Behavior Checklist: Anxious and Depressed, $r(28) = .744$, $p < .001$, Social Problems, $r(28) = .624$, $p < .001$, Total Internalizing Behaviours, $r(28) = .763$, $p < .001$, Attention Problems, $r(30) = .678$, $p < .001$, Aggressive Behaviour, $r(28) = .786$, $p < .001$, Total Externalizing Behaviours, $r(28) = .765$, $p < .001$, and Other Problems, $r(28) = .605$, $p < .001$. The Difficult Child subscale was also strongly, positively correlated with Total Behaviour Problems, $r(32) = .853$, $p < .001$, on the Child Behavior Checklist. Surprisingly, age, socioeconomic status, number of children in the family, number of children with FASD, and the first child’s age did not directly correlate with the PSI-SF subscales or total stress.

Conclusions

Because family characteristics were not significantly correlated with parenting stress, child behaviour problems appear to have a stronger influence on reported parenting stress. There is a lack of knowledge when it comes to managing behaviour problems in children diagnosed with FASD, and consequently parents may face challenges obtaining resources or expertise in how to manage the behavioural difficulties to keep their children safe.
Objectives

Current research with families raising children with fetal alcohol spectrum disorder (FASD) reveals that parents and caregivers often do not feel supported by those from whom they expect help, such as doctors, nurses, mental health practitioners, teachers, and legal professionals. Existing literature indicates conflicting levels of knowledge about FASD amongst professionals. Despite the Public Health Agency of Canada's framework for action, in which they identify increasing public and professional awareness and understanding of FASD as their number one broad goal, awareness of FASD still remains low. Because of this lack of knowledge and awareness, parents of children with FASD frequently express barriers in getting help from support networks, medical and mental health professionals, schools, government agencies, and community organizations.

Methods

Following the recommendations for mixed methods designs, this study integrated qualitative research (collected in in-depth, semi-structured interviews) and quantitative research (as measured by a number of psychometric questionnaires). Employing a basic interpretive approach, informed by the Family Adjustment and Adaptation Response (FAAR) model, this study was conducted with 84 adoptive, foster, and biological caregivers of children with FASD from 59 families across Ontario, Canada. Qualitative findings are presented here.

Results

Interpretative phenomenological analysis of the interviews revealed three main themes regarding parents’ experiences in dealing with professionals and the general community in relation to the level of knowledge and awareness of FASD. Parents discussed not feeling supported by those from whom they expect assistance, such as medical professionals, diagnostic teams, mental health practitioners, teachers, and police officers. More specifically, parents discussed the lack of understanding held by professionals regarding an FASD diagnosis and the implications of how FASD may affect their child’s functioning. Parents and caregivers identified the need for more training of professionals and highlighted the importance of increasing awareness of both FASD and addiction issues. Furthermore, parents discussed the lack of perceived support in Ontario and conveyed their feelings that awareness and management of FASD was “better out West,” referring to the Western provinces in Canada, such as Alberta and British Columbia.

Conclusions

It is imperative that professionals increase their knowledge and understanding of FASD including the physical, neurological, and behavioural features of FASD, as well as the collective family experience. Findings from this study highlight that stressors for families raising children with FASD do not always originate internally within the family system, but rather are often the result of limited support in the greater community.
Triple Diagnoses: What Does the Research Tell Us About the Prevalence of Comorbid Psychiatric Diagnosis, Developmental Disability, and Substance Abuse?

Authors: Elizabeth Cox,1,2 Caitlin McGarry,2 Yona Lunsky1,2
1 University of Toronto, Toronto, ON
2 Centre for Addiction and Mental Health, Toronto, ON

Correspondence: elizabeth.cox@mail.utoronto.ca

Objectives

Little is known about the demographic and clinical characteristics of individuals with a triple diagnosis of developmental disabilities (DD), psychiatric disorder and substance abuse. This lack of information within the healthcare community must be addressed in order to identify and meet the service needs of this population. In order to gain insight into the characteristics of individuals with DD, psychiatric disorder and substance abuse an understanding of how often substance abuse is discussed within current research on developmental disability and comorbid psychiatric disorder must first be established. The current study examines (1) how often substance abuse is included in the discussion of DD and comorbid psychiatric disorder, (2) how often psychiatric disorder is considered in studies of DD and comorbid substance abuse, and (3) how often comorbid psychiatric disorder and substance has been studied in individuals with DD.

Methods

A sampling of English language papers published between 2004 and 2014 that included specific terms and key words related to DD and comorbid substance abuse, psychiatric disorder and comorbid substance abuse, DD and psychiatric disorder, and/or triple diagnosis of DD, psychiatric disorder and substance abuse were reviewed.

Results

Preliminary results suggest that substance abuse prevalence rates are often not included in prevalence studies of DD and psychiatric disorder. Furthermore, triple diagnosis of DD, psychiatric disorder and substance abuse has received minimal attention. Of those studies that do discuss substance abuse, substance abuse is often not associated with DD and comorbid psychiatric disorder.

Conclusions

This poster will investigate how well substance abuse has been addressed in current DD and comorbid psychiatric disorder research. An awareness of how often substance abuse is included in discussions of developmental disability and psychiatric disorder is a critical first step in the development of effective healthcare services for individuals with developmental disabilities, psychiatric disorder, and substance abuse problems.
Exploration of a Structured Swim Program for Children with Developmental Delays

Authors: Andrea Cross, Margaret Schneider

1 McMaster University, Hamilton, ON  
2 Wilfrid Laurier University, Waterloo, ON

Correspondence: crossac@mcmaster.ca

Objectives

With the goal of developing best practice guidelines for pediatric aquatic programs, aquatic researchers must share knowledge and information on the design of aquatic programs and the specific features that are believed to be important to ensure program success. This study explored the influential components of a structured swim program for children with developmental delays. This study was part of a larger study that examined the influence of a structured swim program on the behaviours of children with autism spectrum disorders (ASD) and communication delays.

Methods

This study utilized a phenomenological, qualitative framework to gain the perspectives of the parents, teachers, and volunteers involved in the program. Recruitment took place at a school for children with communication, physical, and developmental disabilities in Southwestern Ontario. Purposeful and criterion sampling were used to seek information-rich cases that could be studied in depth. A total of 43 people agreed to participate (15 children; 13 parents; 2 teachers; and 13 volunteers). Each child participated in a one-hour swim class once a week for 10 weeks with a certified swim instructor. In-depth interviews; open-ended questionnaires; journal entries; background questionnaires; and progress forms were used. Data analysis occurred concurrently with the data collection, resulting in naïve interpretation immediately following data collection and in-depth analysis occurring at a later date. Theoretical saturation was met within each participant group as recurring themes were found.

Results

From the parents’, teachers’, and volunteers’ perceptions it was clear that the structured swim program positively influenced the children’s behaviour. However, the factors responsible for these changes in behaviour were not as clear. Upon detailed analysis of the findings, seven influential components of the swim program emerged from the data. These components included: fun and motivating activity; sensory and therapeutic features; instructor and volunteers; physical activity; toys and games; program structure; and adapted teaching tools. Overall, the comingling of these components seemed to be responsible for the success of the swim program.

Conclusions

This study sheds light on seven influential components that were perceived to interact to create a supportive learning environment. Each component had a unique influence and benefited the children in a multitude of ways. The components that emerged in this study are similar to components identified in previous studies. The consistency across studies supports the prominent role these components may play in ensuring effective aquatic programs for children with developmental delays. While this study provides valuable insight, methodological limitations (i.e., potential researcher and participant biases, participant commitment, participant variability) must also be recognized. Overall, the knowledge gained surrounding the aquatic environment will be useful for teachers, parents, and therapists when designing future aquatic programs.
Tumbling Together: Uncovering the Theoretical Underpinnings of This Intervention Program

Authors: Claire Eamer, Pascal Lefebvre, Daphne Ducharme
University of Ottawa, Ottawa, ON
Correspondence: eamerc@hotmail.com

Objectives

Intervention programs are rarely tailored for children with communication and self-regulation challenges, often leading to informal development of clinical rehabilitation programs. The Tumbling Together program is a unique interprofessional (IP) approach to rehabilitation therapy, designed in collaboration between OT and SLP. This program targets preschoolers with complex developmental profiles, using gymnastics as a medium to provide rehabilitation therapy that effectively enhances communication, occupational performance, and self-regulation. Clinically implemented for over 10 years, the program technique has continually evolved; however, it has only recently been formally analyzed to identify an underlying theoretical model. The goal of this project was to take an in-depth look at: (1) the fundamental concepts of the program; and (2) the underlying theoretical model that illustrates the relationships between concepts.

Methods

Qualitative analysis through grounded theory, using situational analysis.

Results

Fourteen core concepts of the Tumbling Together program are identified as follows: Optimal state (being calm, alert and focused), Integrated skill development, Generalization, Community based program, Interprofessional collaboration, Family centered approach, Movement, Situational learning, Individualization, Peer interactions, Expert/novice pairing, Explicit teaching, Scaffolding, and Additional supports and strategies. A theoretical model stemming from these concepts is also presented.

Conclusions

A theoretical model incorporating core concepts is a first step in evaluating program efficacy. Although the concepts involved are not novel, their unique combination forms a promising intervention approach for the clinical population.
Performance of High-Functioning Adolescents with Autism Spectrum Disorders on an Advanced Theory of Mind Task

Objectives

Theory of mind (ToM) is defined as the ability to ascribe mental states to people and to explain and predict their behaviour in terms of underlying mental states. ToM impairments are consistently reported in young children with autism spectrum disorders (ASD); however, findings in older individuals with high-functioning ASD are less straightforward. The present study aimed to investigate ToM understanding in high-functioning adolescents with ASD using the Reading the Mind in the Eyes Task, which was developed to reveal subtle mind-reading difficulties.

Methods

Forty one participants, 19 with high-functioning ASD (IQ above 70) and 22 typically-developing (TD) adolescents (age range = 12–18 years), participated. ASD and TD groups were matched on mental age. To assess advanced ToM understanding, participants were given the Child version of the Eyes Task. Participants were shown 28 photographs of the eye region of people’s faces and asked to choose which of the four words best described what the person in the photograph was feeling or thinking. The three foil words had the same emotional valence of the target word.

Results

We conducted an independent samples t-test to assess group differences (TD vs. ASD) on the total number of items correct. There were no differences between the TD (M = 21.03, SD = 3.98) and ASD (M = 19.57, SD = 4.00) groups. Results demonstrate that individuals with ASD did not differ in performance from TD controls.

Conclusions

Using the Eyes Task, we did not find support for advanced ToM impairment in adolescents with high-functioning ASD. The Eyes Task may not be assessing the difficulties that high-functioning adolescents with ASD possess. Firstly, it has been proposed that there is a distinction between social-perceptual, and social-cognitive components of ToM understanding. Social-perceptual refers to the immediate judgment of a person’s ToM based on information available in the face and body, while social-cognitive refers to more complex cognitive inferences, requiring contextual information over time. Since the Eyes Task assesses social-perceptual components, it is possible that individuals with high-functioning ASD do not have difficulty with this type of ToM understanding. It is also possible that individuals with ASD may not have problems in interpreting static pictures; however, have difficulties in interpreting real world situations. Some of the methodological and conceptual problems with the Eyes Task may be related to its visual nature, employing static pictures rather than motions. The test is not “naturalistic” and may not assess an individual’s actual ability to identify emotions in moving faces. Individuals with ASD also have a tendency to perform better on explicit tasks (such as a static picture) that can be reduced to a closed problem-solving situation as compared with more naturalistic, spontaneous situations (such as a moving face).
Pain in Children with Cognitive Impairments: The Impact of Children’s Verbal Abilities on Pain Ratings and Perceived Need for Assistance by Caregivers

Authors: Lara M. Genik, C. Meghan McMurtry, Lynn Breau

1 University of Guelph, Guelph, ON
2 Glenrose Rehabilitation Hospital, Edmonton, AB

Correspondence: lgenik@uoguelph.ca

Objectives

Previous research suggests that compared to individuals with little/no experience supporting children with cognitive impairments (CI), respite workers (RW) perceive that a larger percentage of children with severe CI sense less pain than typically developing children. The objectives of this study were to determine: (1) if caregiver ratings of pain intensity were impacted by whether a child with CI was verbal or nonverbal; (2) if caregiver ratings of need for medical and other attention were impacted by whether a child with CI was verbal or nonverbal; and (3) if ratings of pain intensity and need for attention (both medical and other) varied between undergraduate students with little to no experience supporting children with CI and RW with direct experience supporting children with CI.

Methods

Participants consisted of 217 UG ($M_{\text{age}} = 19.63$) and 56 RW ($M_{\text{age}} = 33.37$). Part of a larger online study, participants read and responded to six situational vignettes. Participants were asked to rate the child’s pain intensity and need for medical/other attention on a scale of 0 (no pain/need for attention) to 10 (very high pain intensity/emergency or significant attention required) for each vignette. Each participant completed three vignettes in which the child with CI was verbal, and three vignettes in which the child with CI was nonverbal. The child’s age was consistent across vignettes, and sex was not specified.

Results

Mixed ANOVAs revealed a significant main effect of the participant group on ratings of perceived need for medical attention, $F(1, 247) = 7.87, p = .005$: the average rating across vignettes was significantly lower for RW ($M = 2.19$) than for UG ($M = 2.79$). No other significant between group differences or interaction effects were noted. Likewise, within group differences dependent on children’s verbal abilities were not observed for RW and UG ratings on pain intensity (Verbal: $M_{\text{RW}}: 4.92, M_{\text{UG}}: 5.01$; Nonverbal: $M_{\text{RW}}: 5.03, M_{\text{UG}}: 4.75$), need for medical attention (Verbal: $M_{\text{RW}}: 2.11, M_{\text{UG}}: 2.83$; Nonverbal: $M_{\text{RW}}: 2.27, M_{\text{UG}}: 2.74$), or need for other attention (Verbal: $M_{\text{RW}}: 5.97, M_{\text{UG}}: 5.40$; Nonverbal: $M_{\text{RW}}: 5.75, M_{\text{UG}}: 5.39$).

Conclusions

RW’s ratings of perceived need for medical attention were significantly lower than UG. Further investigation of result implications, such as whether caregivers’ perceptions may impact a child’s likelihood of receiving adequate medical attention, may be warranted. This information could be used to inform educational programming for RW. Further, results suggested that whether a child with CI is verbal or nonverbal does not impact caregivers’ ratings of pain intensity or need for medical/other attention. This is encouraging, as it suggests that caregivers’ pain intensity ratings for children with CI may not depend on whether or not a child communicates verbally.
Comparison of Adaptive Behaviour and Academic Achievement Abilities between Adolescents with Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder

Authors: Layla Hall, Elizabeth Kelley
Queen's University, Kingston, ON

Correspondence: 5lh27@queensu.ca

Objectives

Differential diagnosis between autism spectrum disorder (ASD) and attention-deficit/hyperactivity disorder (ADHD) is complicated by overlap in clinical presentation. To help resolve this problem recent research has focused on clarifying differential symptom profiles of ASD and ADHD; however, little research has compared real life functional abilities between these two populations. Knowledge of variation in such abilities is important for clarifying clinical understanding of the diagnoses, and for creating more individualized recommendations. The current study aims to investigate similarities and differences in adaptive behaviour and academic achievement between adolescents with high-functioning ASD and ADHD.

Methods

Data was collected from 47 adolescents (14 ASD, 13 ADHD, and 20 typically developing [TD]), 11–18 years of age. The ASD, ADHD, and TD groups were matched on mental age. Adaptive behaviour was assessed using the Communication, Daily Living Skills, and Socialization domains from the Vineland Adaptive Behaviour Scales 2nd edition. Academic achievement was assessed using 5 subtests from the Woodcock-Johnson III Tests of Academic Achievement: Story Recall, Understanding Directions, Writing Fluency, Math Calculations, and Math Fluency. Group differences were evaluated using MANCOVA, while controlling for full-scale IQ.

Results

A significant multivariate effect for the Vineland ($F(6,86) = 8.81, p < .001$, Pillai's Trace = .76, $\eta^2_p = .38$) was followed up with univariate tests and subsequently pairwise comparisons. The ASD group scored significantly lower than the TD group on all three domains ($p < .001$), and significantly lower than the ADHD group on daily living skills ($p = .005$) and socialization ($p < .001$), but not communication. Additionally, the ADHD group performed significantly lower than the TD group on Communication ($p < .001$) and Daily Living Skills ($p = .009$), but not socialization. A significant multivariate effect for the tests of academic achievement ($F(10,80) = 2.05, p = .04$, Pillai's Trace = .41, $\eta^2_p = .20$) was followed up with univariate tests and subsequently pairwise comparisons. The ASD group scored significantly lower than the TD group only on Story Recall ($p = .01$), and did not significantly differ from the ADHD group on any measures of academic achievement. The ADHD group scored significantly lower than the TD group on Writing Fluency ($p = .01$), Calculations ($p = .004$), and Math Fluency ($p = .006$), but not on the Story Recall task.

Conclusions

The present results provide important insights to variation in adaptive behaviour and academic achievement abilities between individuals with ASD and ADHD. These findings are important for the conceptualization of ASD and ADHD as separate developmental disorders and highlights areas of strength and weakness in each disorder that can guide support and intervention that is relevant to real-life experiences.
Development and Pilot Testing of a Healthy Eating Video-Supported Program for Adults with Developmental Disabilities

Authors: Chwen Johnson
CJ Nutrition Consulting, Hamilton, ON
Correspondence: cbinkley@rogers.com

Objectives

Video technology is a potentially effective means to teach individuals with developmental disabilities (DD) about healthy eating. Research in this area, however, is relatively unexplored. The aims of this study were to develop a video-supported program to teach adults with DD about healthy eating, and to determine the change in participants’ nutrition knowledge post intervention.

Methods

A five-segment educational video, an accompanying workbook, and a facilitator guide were developed to teach basic healthy eating concepts to adults with DD. The characters in the video were portrayed mainly by individuals with DD engaging in everyday activities in various settings. Twelve adults, aged 31–70, with various levels of DD took part in a five-week educational program led by trained facilitators using the materials created. Pre- and post-tests were used to measure knowledge gained from participating in the intervention. The questionnaire consists of 20 questions varying in complexity. The choices are depicted in a picture format and minimum writing is required to complete the form. The instrument was administered before and after the five-week intervention. Pre- and post-test scores were compared to determine knowledge gain.

Results

Seventy-five percent (n = 9) of participants improved their knowledge scores, 8% (n = 1) maintained residue knowledge, and 17% (n = 2) had a decrease in their score. When looking at the overall test scores, five participants (42%) had a pre-test score greater than 60% post intervention; after exposure to the program, twice as many participants attained this level of test score. The result of pre-and post-test scores by question showed that participants performed better for questions pertaining to identification of healthy and less healthy food choices. However, negatively worded questions, questions related to serving sizes, and questions with more than one answer appeared to be challenging to the participants.

Conclusions

The program was effective in increasing knowledge among participants, specifically in the area related to the identification of healthy and less healthy food and beverage choices. For more complex concepts such as serving sizes and food group categorization, participants may require a more comprehensive training program. Findings suggest that questions that are negatively worded, require writing, and have more than one correct answer are best avoided. Key enablers to knowledge gain included: video content developed based on the learning need and cognitive level of intended users; program delivered by facilitators trained in effective teaching strategies; and engaging the participants’ staff, family, and caregivers to provide ongoing reinforcement about healthy eating. The results of the study may help advance the development of an expanded collection of nutrition and health modules and inform future studies about the development of similar video instructions for this target audience.
Interprofessional Education: Addressing Knowledge, Skills and Attitudes Towards Intellectual Disability Through Curriculum and Consumer Engagement with Health Care Students

Objectives

With the deinstitutionalization movement, health care professionals are caring for a greater number of individuals with intellectual disabilities (ID) in their practices, and inevitably require additional training to provide this care. The Division of Developmental Disabilities, Department of Psychiatry at Queen’s University, has responded to this need, developing an innovative educational course based on the competency framework (NICF) of the Canadian Interprofessional Health Collaborative (CIHC), promoting interprofessional education (IPE) and interprofessional collaborative practice (IPC) as they relate to ID curriculum and health care provision. The purpose of this study is to identify Queen’s healthcare students’ change in knowledge, skills and attitudes towards individuals with ID and how these variables affect students’ readiness for interprofessional care. The research targeted graduate students from the fields of medicine, nursing, occupational therapy, physiotherapy and clinical psychology.

Methods

Analyses were completed on 247 pre-post course questionnaires. Results were conducted on mean correct items, separated by discipline and content areas of knowledge, skills and attitudes. Further analyses used paired t-tests to assess the measure of positive change.

Results

Significant differences were found indicating improvements in student knowledge and skills for the majority of disciplines after course participation. A positive trend was found in outcome responses for student attitudinal change towards individuals with ID.

Conclusions

This paper outlines possible improvements in student learning and positive attitudinal change following an educational course concerning optimal healthcare for people with intellectual disabilities. It is proposed that a blended training curriculum of on-line, face-to-face and experiential learning for future healthcare professionals can foster best practice and quality service for this currently underserved population.
The Influence of Music on Functional and Communication Skills of Children with Autism

Authors: De-Lawrence Lamptey
Queen’s University, Kingston, ON
Correspondence: 1ldlnl@queensu.ca

Objectives

The purpose of this study was to investigate the influence of music on functional and communication skills of children with autism. Social skills and self-care skills served as measures of functional skills. Thus, the study sought to improve communication, social and self-care skills of children with autism through music activity at school.

Methods

The multiple baseline across subject design was adopted to assess the effect of music on the dependent variables. Study sample comprised thirty students diagnosed with autism by mental health professionals enrolled at Autism Awareness, Care and Training (AACT), a special school in Accra, Ghana. Participants were screened by their respective caregivers at school using a checklist based on the DSM-IV diagnostic criteria of autism before inclusion. There were three groups of participants based upon three pre-existing classes of AACT. Participants were pre-tested using three sub-scales of the Ghana Adaptive Behaviour Scales measuring communication, social and self-care skills. An educational program was designed to improve upon participants’ pre-test scores on the three sub-scales with the aid of music activity for eight weeks. Post-test scores were recorded weekly for all participants in the various groups.

Results

The effects of music on communication, social and self-care skills were tested by three separate one-way repeated measures analysis of variance per group. The effect of duration of music activity program on communication, social and self-care skills across the three groups of participants was tested by three separate one-way analysis of covariance. Overall, the results revealed that music significantly improved communication, social and self-care skills in all three groups of participants. However, the duration of the music activity program on the dependent variables was not significant across the three groups of participants. Follow up data analysis indicated that the improvements observed in communication, social and self-care skills were significantly sustained nine months after the end of the music activity program among the participants.

Conclusions

The findings imply that music could be an effective tool for improving communication, social and self-care skills of children with autism in special education.
A Mixed Method Analysis of Parents’ Experience of Raising a Child with Severe Developmental Disability

Authors: Nidhi Luthra,1 Adrienne Perry,1 Patricia Minnes2
1 York University, Toronto, ON
2 Queen’s University, Kingston, ON

Correspondence: nidhi@yorku.ca

Objectives

Raising a child with a lifelong disability such as intellectual disability (ID) or autism spectrum disorder (ASD) is challenging for most parents. The results of initial studies, using primarily quantitative and some qualitative methods, indicated that parents only experience negative impact (e.g., parental distress, depression, financial burden) due to factors such as child’s diagnosis and maladaptive behaviour. In the past two decades, based on parents’ qualitative comments, researchers have reported that most parents also discuss positive characteristics of their child and influence on their lives. Most of the early literature on positive impact (e.g., positive change, positive gain, lower parenting stress) was qualitative in nature, and the field gained a quantitative focus only in the last 10–12 years. Although there is an ever growing literature in this field of research, few studies in Canada have looked qualitatively at parents’ report of their experience of raising a child with a DD or ASD, in relation to their child’s diagnosis and gender. The purpose of the current study is to conduct a qualitative thematic analysis of parents’ responses to an open ended question about their experience in raising their child with a disability. Using exploratory mixed methods design, this study will explore how parents articulate their experience of raising a child with DD, and whether their reported experience differ based on their child’s diagnosis (ID vs. ASD) or gender.

Methods

A secondary analysis will be done on a subset of data from the Great Outcomes for Kids Impacted by Severe Developmental Disabilities (GO4KIDDS) Basic Survey. This survey taps into various child, family and systemic variables related to health, wellbeing, social inclusion and family quality of life of children with developmental disabilities and their families. From the larger dataset, a subset of 204 parents will be used for this study. First, all participant responses will be coded for recurring major themes, and then each participant will be coded for major themes and designate these as positive and negative impact. Following this, the themes will be described for parents of male versus female children with a diagnosis of ID versus ASD.

Results

Based on parent report of child characteristics, there are a 139 male and 65 female children in this sample, with age ranging from 3–20 years ($M = 11.4$ years, $SD = 3.9$). All children in this sample were either diagnosed with ID ($n = 92$) or ASD/autism ($n = 112$). Qualitative thematic analysis is currently underway, and detailed results will be reported.

Conclusions

The qualitative results of this study will add to the richness of the parent impact literature obtained through quantitative means.
Building Blocks: Analysis of a Social Skills Lego™ Intervention for Children with Autism Spectrum Disorder

Authors
Jeffrey MacCormack, Ian Matheson
Queen's University, Kingston, ON
Correspondence: jeffrey.maccormack@queensu.ca

Objectives
The purpose of this study is to investigate a non-clinical LEGO™-based social skills intervention (adapted from a clinical model) to identify the most important and effective components of the intervention. The development of play and social skills is important because individuals with autism spectrum disorder may find initiating and responding to social prompts challenging. The intervention was modeled on a previously developed clinical model of LEGO™ therapy; social interactions are woven into the play-structure and require participants develop and practice social skills while constructing LEGO™ projects.

Methods
The intervention included 12 children with a diagnosis of autism spectrum disorder (three with comorbid diagnoses of ADHD), one child with a diagnosis of cerebral palsy, and four typically developing children. The ages of the children participants ranged from 7 to 12 years, and diagnoses of ASD were given by clinical psychologists or specialist diagnosticians. Participants also included ten parents (all mothers) of the child participants and six staff members (five unpaid volunteers and one paid organizer) of the LEGO™ Program. Data sources included observational notes collected by research assistants and semi-structured interviews with participants, staff, and parents of participants. The observation data and interview data were collected at the place of the intervention in a mid-sized urban city in eastern Ontario. Observational notes were taken by the research team. The interview and observation data (30 000 words in total) were coded using Atlas.ti version 7 software using a three-cycle process.

Results
The three steps of the turn-taking sequence include (1) Engineer tells the Supplier what block is required, (2) Supplier gives the block to the Builder, and (3) the Engineer tells the Builder where to place the block. Participation in these social interactions represents the heart of the intervention. The intervention was designed so that the skills required to participate are transferable to other social environments. To reach this end, the coordinator used a four-step intervention strategy: (1) reduce the tension, (2) brainstorm strategies, (3) role-play strategies, and (4) reintegrate into the social environment. The toy lends itself effectively to this intervention because children are motivated to participate with the toy and its use can be harnessed in both open- and closed-activity formats. The 60-minute LEGO™ Program is designed to teach skills and then gradually increase the independence of the participants to utilize those skills.

Conclusions
While past research has demonstrated the success of LEGO™ based interventions in helping individuals with ASD to develop social skills, the present study identifies of specific features that make the intervention effective. The features identified in the present study are explained in detail for the purpose of providing both play-based social skill programs and general social-skill programs to implement these features and improve the success of their programming.
Reaching a Consensus on the Definition of Community

Authors: Rawad Mcheimech, Virginie Cobigo
University of Ottawa, Ottawa, ON
Correspondence: rmche016@uottawa.ca

Objectives

The main objective of this study is to define the term “community.” There are multiple vague definitions of the term found in several disciplines. That may be insufficient to inform the development of policies and services supporting the inclusion of adults with intellectual and developmental disabilities in their communities. Therefore, we need to identify key elements that define any type of community across various disciplines.

Methods

First, a transdisciplinary review of the scientific peer-reviewed literature is conducted to reach a unified definition of community from different perspectives. Reviewed studies are gathered from three disciplines: psychology, sociology, and philosophy. The review is not limited to studies on intellectual and developmental disabilities. The definitions of community used in these published studies will be compared to identify common themes. Three case studies will also be conducted. The participants will be three persons with intellectual and developmental disabilities. They will report their own definition of community. Finally, qualitative analysis will be used to compare the definitions reported in the case studies to the definition developed through the literature review.

Results

Some of the reviewed definitions of community have different themes. That might be due to the differences between the disciplines or the variability of the studied populations. However, the majority of the definitions have common themes that constitute a unified definition of community. The three case studies have not been conducted yet, but participants are recruited and data collection will be completed by the end of February. The definitions that will be provided by the participants will be analyzed to identify the themes similar to those found in the literature review and highlight themes that were not.

Conclusions

The term community is used extensively in the scientific literature without having an operational definition. This study aims to reach a consensus on a clear, unified definition of the term “community.” The definition will guide researchers and experts in community psychology to better understand and improve communities that provide services and supports for persons with intellectual and developmental disabilities. Furthermore, this definition will support studies related to “community” regardless of the researcher’s discipline. There are a few limitations to this study. The main one is the case studies approach that limits the sample size. Further studies using a bigger sample size are recommended to contrast the definition of community to a broader range of life experiences.
Evaluating the Impact of Temple Grandin’s Squeeze Machine: Initial Results of a Six-Week Intervention with Young Adults with Autism Spectrum Disorder

Authors: Meg McQueen, Samantha Lowe, Jessica Jones, Patricia Minnes
Queen’s University, Kingston, ON
Correspondence: meg.mcqueen@queensu.ca

Objectives

Increasing prevalence and visibility of autism spectrum disorders (ASD) in the past two decades has led to a surge in the creation and usage of a variety of interventions. In particular, sensory impairments and sensory-based strategies have become integrated into therapeutic approaches for those on the autistic spectrum. Interventions include Temple Grandin’s “squeeze machine,” which provides full-body “deep pressure” through regulated sensory feedback. However, there is limited empirical evidence supporting the use of this approach. This study hypothesized that young adults with autism spectrum disorder would benefit from application of systematic sensory modulation through sessions in the squeeze machine resulting in reduced maladaptive behaviours.

Methods

Five participants, four male and one female, over the age 18, with pre-identified sensory regulation difficulties were selected for an initial trial of the squeeze machine at Kerry’s Place Autism Services, a non-for-profit agency serving youth and adults with Autism across four regions of Ontario. All five participants, in addition to sensory modulation difficulties, had communication impairments and ASD. Quantitative analysis of frequency of incidents of maladaptive behaviours was used as the outcome measure. Each deep pressure session was implemented using a standardized protocol and documentation. Incidence of behaviors occurring during the six weeks prior to the intervention was compared to those during the intervention period itself using a paired t-Test.

Results

No statistically significant differences were found between the pre-intervention and post-intervention data for all participants.

Conclusions

While there was no statistical significant difference overall during the six-week period, the authors hypothesize that the results would be increasingly positive over a greater period of time. Therefore, given the time limitations of the study, they propose for future research of the squeeze machine in relation to both a longer trial period as well as an exploration of staff usage of the machine as an alternative behavioral intervention as compared to or in conjunction with other interventions such as PRNs and restraints.
Medical Student Training and Perceived Knowledge of Developmental Disabilities

Authors: Patricia Minnes,1 Barry Isaacs,2 Alvin Loh,2 Joan Versnel,3 Jonathan Weiss4

1 Queen’s University, Kingston, ON
2 Surrey Place Centre, Toronto, ON
3 Dalhousie University, Halifax, NS
4 York University, Toronto, ON

Correspondence: patricia.minnes@queensu.ca

Objectives

Healthcare for individuals with developmental disabilities (DD) has become a topic of concern and gaps in the provision of health services have been highlighted in Canada, Australia and Britain. Research has documented negative attitudes and stereotyped views of family physicians toward patients with DD and parent reports have emphasized the need for more training of physicians in working with individuals with DD. The purpose of this paper is to describe the knowledge, training, and experience in DD and perceived competence of medical students at two Canadian universities.

Methods

Data were collected as part of the CIHR funded HELPS Inc. project (Health Education and Learning Partnerships Promoting Social Inclusion of Young children with Developmental Disabilities). A sample of 207 second year medical students was recruited from two universities in Ontario. Students completed an adapted version of The McGill Inclusive Education Questionnaire, focused on: (1) students’ self-reported knowledge of DD including assessment and treatment measured on a 4 point scale (i.e., very limited to extensive knowledge); (2) self-reported competency to meet the needs of children with DD measured on a 3 point scale (i.e., low moderate and high competence); (3) total number of training sessions, conferences and workshops on DD attended and (4) helpfulness of this training on a 3 point scale (i.e., not helpful to very helpful).

Results

Medical students reported greater knowledge of assessment ($M = 2.18$, $SD = .49$, maximum = 3.6) than treatment ($M = 1.86$, $SD = .54$, maximum = 3.5) and a limited number of training sessions on DD attended ($M = 3.35$, $SD = 3.95$, maximum = 13) although they rated the training received to be quite helpful ($M = 2.08$, $SD = .59$, maximum = 3). Scores on measures of experience in DD ($M = 1.31$, $SD = .62$, maximum = 4) and perceived competency ($M = .63$, $SD = .65$, maximum = 2) were also relatively low. Three variables emerged as significant predictors of students’ sense of competency: perceived helpfulness of training, $\beta = .16$, $t(118) = 2.34$, $p = .02$, average knowledge of DD, $\beta = .27$, $t(118) = 3.41$, $p = .001$, and average experience, $\beta = .20$, $t(118) = 2.65$, $p = .009$. The interaction of training and helpfulness of training was not significant, $\beta = -.04$, $t(118) = -.67$, $p = .51$.

Conclusions

The results of this study confirm past findings that more knowledge of DD is needed, but they also highlight the importance of experience with persons with DD as another important component of medical education. Further research is needed to investigate knowledge, experience and competency at different stages in training of medical and other healthcare students. In addition, studies are needed to investigate the impact of different types of training on students’ perceived and actual competence and attitudes to towards working with individuals with DD.
The Birds, the Bees, and Autism: Are Children with ASDs Retaining Sex Education?

Authors: Kojo Mintah, Shelley Parlow
Carleton University, Ottawa, ON
Correspondence: kojo.mintah@carleton.ca

Objectives

When high-functioning youth with autism spectrum disorders (ASDs) are integrated into mainstream schools in Ontario, they are required to receive the same sex education as their non-ASD peers. Given evidence that ASD youth are interested in forming sexual dating relationships despite their social difficulties, this policy seems reasonable. However, evidence is emerging that suggests that current sex education guidelines may not be meeting the needs of this special population. The purpose of the current study was to assess whether high-functioning young adults with autistic traits perceive their sex education to be adequate and whether they retain information to support sexual relationships after graduating from high school. We hypothesized that the severity of autistic traits would not affect interests in sex education and dating, but that the presence of these traits would negatively predict sex education confidence and knowledge as well as dating experience.

Methods

A total of 230 first-year university students ($M_{age} = 21.47$ years, 27% male) completed Baron-Cohen et al.'s (2001) Autism Quotient (AQ) online, as well as questions about dating interests, and experience, and about confidence and interests in their sex education, and sex knowledge. The questions were taken from four published autism-sexuality studies. AQ scores ranged from 6–44 ($M = 18.27$). Forty-eight participants scored above 26 (suspected autism) and four of these scored above 32 (clinically significant). All participants reported having received sex education in school.

Results

As expected, autism severity predicted poorer dating experiences, but did not preclude interests in dating or sex education. Autism severity was, however, negatively associated with sex education confidence ($r = -.39, p < .01$) and with self-rated knowledge of sex hygiene ($r = -.34, p < .01$), sex behaviours ($r = -.31, p < .01$), STDs ($r = -.26, p < .01$), reproduction ($r = -.26, p < .01$), sexual relationships ($r = -.22, p < .01$), and puberty ($r = -.21, p < .01$). Autism was also positively associated with self-perceived misconceptions about sex ($r = .22, p < .01$).

Conclusions

Despite being interested in dating and sex education, higher autism scores were associated with reduced confidence and reduced sexual knowledge in a non-clinical, high-functioning sample of young adults. Our findings are compatible with those of a recent survey that found only 12.5% of teachers were confident that their sex education program was helpful to youth with ASDs. We conclude that, while guidelines for sex education may benefit neurotypical children, they do not meet the needs of youth with ASD.
Medication Profiles at Time of Referral to Specialized Outpatient Mental Health Services for Adults with Intellectual Disabilities

Authors: Miti Modi,2 Winnie Lieu,1,2 Mohamad Abbass,1,2 Johanna Lake,1,2 Yona Lunsky1,2
1 University of Toronto, Toronto, ON
2 Centre for Addiction and Mental Health, Toronto, ON
Correspondence: yona.lunsky@camh.ca

Objectives

Although several studies have reported on the medication profiles of individuals with intellectual disabilities (ID) in hospital and community settings, data at the time of referral to psychiatric services has not been well investigated. It has been suggested that by the time individuals access specialist ID psychiatric services, polypharmacy rates can be high and the work of the clinical team can be as much about reducing medications as it is prescribing them. The purpose of this poster is to investigate the psychootropic medication profiles by gender, age group and residential setting of individuals with ID at the time of referral to a specialized outpatient ID service.

Methods

The medication profiles of 501 individuals with ID between the ages of 15 to 73 years referred to the Dual Diagnosis outpatient services at the Centre for Addiction and Mental Health between 2001 and 2012 were reviewed. Their medication profiles were categorized in terms of drug class and number (antidepressants, anxiolytics, antipsychotics, anticonvulsants, mood stabilizers, stimulants, sedatives, non-psychotropic medications, and PRN medications). Demographic information at time of referral included age, gender, and residential setting.

Results

Over half of all individuals referred to this service in a 12-year period were prescribed at least one antipsychotic at the time of referral (53.2%). One in five (21.9%) were prescribed three or more psychotropic medications at once. Older individuals with ID were prescribed significantly higher number of psychotropic medications than those who were younger; \( t(497) = -2.15, p = 0.032 \). Psychotropic medication use was also more common amongst individuals living in group homes than those living in other residential settings; \( t(499) = 4.13, p < 0.001 \). Psychotropic medication use did not differ by gender.

Conclusions

The poster will provide descriptive information on the breakdown of the rates of medication use in individuals with ID for different demographic variables, which will help highlight the number and types of medications prescribed and the prevalence of psychotropic polypharmacy in this population. This should further help us understand the needs of these individuals, which can help hospitals and decision makers when developing future interventions.
Working with Children with Autism Spectrum Disorder and Their Families: Perspectives of Social Workers in an Urban Pediatric Hospital

Authors: Rae Morris,1,2 Barbara Muskat2
1 University of Toronto, Toronto, ON
2 The Hospital for Sick Children, Toronto, ON
Correspondence: rae.m.morris@gmail.com

Objectives

Children with autism spectrum disorder (ASD) are more likely to experience co-occurring medical conditions and use health care services than their neurotypical peers. Social workers with specialized knowledge and expertise in ASD are valuable assets to the health care team. This study examines pediatric hospital social workers’ experiences, skills, and professional development needs when working with children with ASD and their families in the hospital. The objectives of this study were to: (1) understand pediatric social workers’ ASD experience, education and skills; (2) explore pediatric social workers’ perceptions of what they need to enhance their confidence and competence when working with children with ASD and their families; and (3) utilize study results to inform and enhance social work services for patients with ASD and their families.

Methods

This qualitative study employed an interpretive description framework, which focuses on understanding individuals’ experiences and grounding these within the context of health care. Semi-structured interviews provided participants with opportunities to elaborate on topics related to their professional social work experiences with children with ASD and their families in the hospital. Participants are social workers who engage in direct clinical practice at the Hospital for Sick Children. Participants have been recruited across various units in the hospital to allow for diversity in experiences. Interviews are audio-taped, transcribed verbatim, and coded to analyze thematic content. Recruitment will cease when data saturation has occurred, with an expected total sample of 8–12 participants.

Results

Based on preliminary data and previous studies, expected findings include variability in experiences and knowledge regarding ASD within the study sample; scarcity, complexity and challenges associated with community-based service provision with this population; needs for advocacy on behalf of these clients; and recommendations for improvement in social work service delivery for children with ASD and their families at the hospital. Data collection and analysis are in progress and final results are pending.

Conclusions

This study has the potential to contribute to an understanding of the knowledge, experiences, and perspectives of pediatric hospital social workers who work with children with ASD and their families in a hospital setting. Although this study is limited by the homogeneity of the sample size to one specific health care setting, the results of this study may be generalizable in the implications for the enhancement of social work practice for this population. Knowledge translation and dissemination will aim to impact the development of educational approaches and additional ASD-related resources for social work staff in the hospital; as well as augmenting community awareness of social workers as key contributors to family-centered care for patients with ASD and their families.
Objectives

Alcohol consumption during pregnancy has emerged as an important international public health issue complicated by knowledge gaps, a lack of expert consensus, ethical implications, and transforming official policy and guidelines. There is no expert consensus on the effect of low to moderate prenatal alcohol exposure on subsequent child development. While researchers and clinicians agree that heavy maternal drinking patterns cause fetal alcohol spectrum disorder (FASD), the peer-reviewed evidence base reflects a range of contradictory conclusions regarding the risk associated with low to moderate prenatal exposure to alcohol. Fuelling this debate, the initial findings from two large prospective studies from Europe suggest that prenatal exposure to low to moderate levels of alcohol does not result in any clinically measurable effects on the cognitive abilities of preschoolers. The objectives are to: (1) demonstrate the role of health journalism in knowledge translation for health research and consider the implications of contradictory, inaccurate or misleading news reports on maternal drinking and FASD for high-risk populations; (2) illustrate the range of contradictory and inaccurate headlines that have represented FASD in the popular media over the last 10 years; (3) discuss the impacts of these headlines on public health behavior, individual health behavior, policy development, and health professionals’ advice to women; (4) provide recommendations and resources that can guide interpretation of health information and research in popular media; and (5) summarize recommendations for researchers regarding socially responsible press conferences featuring their own research.

Methods

This poster presentation was informed by the results of a literature review and qualitative content analysis of news media using NVivo 10.

Results

Health journalism in the news media has widely framed the results of FASD research in increasingly sensational and inaccurate headlines, building on their competitors’ stories in order to catch the attention of a wider audience.

Conclusions

Striving to simplify a complex area of research for its’ potential “shock value,” news media around the world have offered increasingly contradictory advice pertaining to maternal alcohol consumption. For high-risk populations seeking justification to continue drinking, it is very easy to find popular “news” articles that deny any risk of moderate alcohol exposure to a developing baby. Some headlines even frame alcohol exposure as beneficial to the development of the fetus. These headlines are especially troubling when considering the evidence linking health journalism to population health behaviours: In Canada, health journalism is widely used as the primary source of health information by the general public, healthcare professionals, Policymakers, and other researchers in the scientific media.
Assessing the Need for a Community Mental Health Program
Targeting Preschool-Aged Children with Self-Regulation Issues
in South Eastern Ontario: Tumbling Together

Authors: Danielle N. Naumann, Erin Jansman, Claire Eamer, Cécile Loiselle, Jean Chamberlain
1 Queen's University, Kingston, ON
2 Developmental Services of Leeds and Grenville, Brockville, ON
3 University of Ottawa, Ottawa, ON
4 Ottawa Children's Treatment Centre, Ottawa, ON
5 Brockville General Hospital, Brockville, ON
Correspondence: danielle.naumann@queensu.ca

Objectives

Tumbling Together is a unique comprehensive approach to rehabilitation therapy for preschoolers experiencing issues with speech, mental health, and self-regulation. It recognizes that the physical and social gymnastics environment naturally motivates children to participate in therapy. Over the last 10 years, the technique and goals of the program have evolved to target the mental health experiences of children with a variety of developmental and physical disorders, specifically addressing areas of family functioning, communication, and self-regulation. Tumbling Together has been successfully offered free of charge to community members through non-profit organizations; however, funding for the program is difficult to obtain and many children who would benefit from the program are not served by the funding organizations. The overarching goal of this project is to understand the rehabilitation needs of local preschoolers with self-regulation issues in order to support the development of a sustainable not-for-profit business model that can address these needs. The specific objectives are to: (1) present the history and evolution of the clinical application of Tumbling Together, a unique approach to therapy provision that builds on elements of recreational gymnastics programming; (2) describe the theoretical model and the anecdotal clinical evidence supporting this novel interprofessional approach to therapy provision; (3) discuss the implications of self-regulation issues in preschool-aged children with regards to school-readiness and occupational engagement; and (4) discuss initial findings from local needs assessments.

Methods

This ongoing study draws on three separate needs assessment methods, including: (1) Environmental scan of South Eastern Ontario to identify opportunities for rehabilitation; (2) Survey questionnaires broadly distributed to South Eastern Ontario families who have self-identified as caring for a child with a developmental disability or self-regulation issue; and (3) Key informant questionnaires to assess the perceptions of rehabilitation professionals and health care providers practicing in South Eastern Ontario.

Results

Preliminary results indicate that the South Eastern Ontario, consisting of Champlain and South East local health integration networks (LHI�s), demonstrates a gap in timely and effective early intervention service provision for preschool-aged children with self-regulation issues.

Conclusions

As described in promotional brochures, Tumbling Together is a well-received approach to therapy that families are prepared to pay for out-of-pocket in order to provide their children with an age-appropriate and engaging functional activity. By offering opportunities for families to enroll their child in Tumbling Together on a fee-for-service basis, we hope to address the self-regulation issues in preschool-aged children to enhance school-readiness, so that pediatric mental health issues do not later develop in childhood and adolescence.
Vocational Readiness for Young Adults with Autism:
Building Partnerships Supporting Transition to Community Living

Authors: Danielle N. Naumann, Henderika E. Penning
Queen’s University, Kingston, ON
Correspondence: danielle.naumann@queensu.ca

Objectives

Formal programming for autism supports Canadian families and children, including school-based programs, funding support for therapeutic interventions, respite care, and other valuable interventions for eligible clientele. At the age of 21, however, young adults with autism become ineligible for many of these programs - a process known as “aging out” that is associated with a jarring decrease in opportunities for occupational engagement and community participation. Professionals in the field of developmental disabilities are often involved in transition planning for young adults with disabilities who have “aged out,” and face a deficit in opportunities for programming placement of their clientele. This presentation features a case study to illustrate the extension of equine-assisted therapy to build social enterprise and successfully create the community environment required to support a person with autism during transition to community living. The objectives are to: (1) describe the barriers and issues associated with transition to community from a parent perspective; (2) discuss the concept of “presuming competence” in people with disabilities, and how it can influence society’s expectations and the opportunities for people with disabilities; (3) apply presumption of competence to a case study and discuss the outcomes in terms of a conceptual framework that supports a shift in the perception of disabilities; and (4) discuss techniques for building community partnerships to support transition to community living.

Methods

The presentation represents a case study, supported by a literature review, clinical observation and lived experience.

Results

Representing an ongoing project, this presentation provides a model example for other interprofessional transition teams to use when planning for clients with developmental disabilities to transition into community living.

Conclusions

An effective approach to facilitating transition into adulthood emerging in the greater disability literature base is that of capacity building at the community level. By consulting with community partners and informing key stakeholders of the strengths and benefits associated with providing opportunities for youth with autism to participate in activities within their organization, professionals in the field of developmental disabilities can facilitate the development of symbiotic partnerships between people with disabilities and communities that are associated with successful transition to adulthood.
Environmental Scan of Programs for FASD in Eastern Ontario in 2012

Authors: Danielle N. Naumann, James Reynolds, Mary Ann McColl  
Queen's University, Kingston, ON  
Correspondence: danielle.naumann@queensu.ca

Objectives

The majority of Canadians with fetal alcohol spectrum disorder (FASD) never receive an accurate diagnosis or appropriate interventions: FASD occurs in 2–5% of Canadians, but is currently only diagnosed in 1%. This discrepancy is due in part to variables including: limited public awareness, insufficient knowledge translation in healthcare, inadequate diagnostic capacity and a lack of harmonized national policy and service coordination. Ontario is the most populated Canadian province, home to Canada’s capital city, and over a third of Canadians. Its emerging provincial strategy for FASD is challenged by additional barriers to effective service provision and utilization. Failure to provide appropriate interventions for individuals with FASD results in the development of debilitating secondary effects that impact individuals, families and communities. This poster presents the results of an extensive environmental scan of the Eastern Ontario region, capturing services for identification, intervention, and diagnosis of FASD in 2012. The outcomes of this project are to: (1) inform Ontario residents, Policymakers, service providers, and program developers on the scope and nature of services for FASD located in the Eastern Ontario region in 2012; and (2) serve as a functional tool for individuals, families, policy-makers, researchers, service providers, and health care providers to maximize existing program use and reduce the effects of secondary disabilities.

Methods

Using the environmental scan methodology, data were gathered through formal and informal sources, and current services for FASD were explored, summarized, and mapped out geographically in order to present a comprehensive review of service availability. These results were supplemented with the results of a scoping review.

Results

Available programming fit into five categories of services for people affected by FASD: (1) Early detection and diagnostic services; (2) Aboriginal approaches to service delivery; (3) Services targeting family and community; (4) Social and education services; (5) Services targeting comorbid disorders. These were mapped onto the geographical region, and four distinct areas of activity in the region emerged with few scattered programs outside these areas.

Conclusions

The eastern region of Ontario represents a population of 3 million residents that are particularly underserviced. People affected by FASD who live in this region struggle to receive a diagnosis, and continue to face barriers to obtaining appropriate support services upon diagnosis.
Fetal alcohol spectrum disorder (FASD) is the leading cause of developmental and cognitive disabilities in Canadian school-aged children. Literature links optimal outcomes to early detection and intervention, yet the majority of Canadians affected by FASD remain undiagnosed or misdiagnosed, resulting in the development of debilitating secondary disabilities and functional outcomes. Despite widespread recognition of the current state of FASD among Canadian policymakers and researchers, diagnostic services for FASD are inconsistent and Canada lacks a coordinated nation-wide diagnostic strategy. Compared to the western provinces and territories, Canada’s eastern provinces offer very few diagnostic and intervention services for families affected by FASD. Of particular concern, this includes Canada’s most populous province of Ontario, home to over a third of the Canadian population.

The specific objectives are to: (1) review the current state of knowledge regarding FASD epidemiology, screening, and intervention in the Canadian primary care environment; (2) describe the emerging role of the Canadian primary care practitioner in FASD diagnosis, screening, and service provision for primary, secondary, and tertiary prevention of FASD; (3) discuss the implications of systematic, attitudinal, and expert knowledge barriers to best practice for FASD in the Ontario primary care environment; and (4) reflect on the application of a proposed knowledge translation tool designed for FASD that addresses the perceived and unperceived learning needs of primary care practitioners.

Methods

Scoping review methodology was used.

Results

Preliminary results indicate that the literature has identified an overwhelming need for a knowledge translation tool that can address the learning needs of primary care physicians in regards to best practices for FASD. Similar to findings in the broader disability literature base featuring primary care, the barriers to FASD screening and service provision faced by people with FASD include those tied to attitude, expert knowledge, and policy (systems).

Conclusions

As the first point of contact in the Canadian health care system, primary care physicians are in the ideal position to prevent, identify, and intervene in FASD; however, they face a range of systematic, attitudinal, and expert knowledge barriers to successful incorporation of best practices within their role. Primary care in Ontario is currently under major reform, providing the ideal environment for leaders in FASD to advocate for the implementation of national FASD screening strategies, and for clarification of primary care physicians’ role in Ontario’s emerging FASD strategy.
Effects of a Community-Based Intervention on Problem Behaviour, Caregiver Stress, and Consumer Satisfaction: Preliminary Outcomes for Two Youth with Dual Diagnosis Who Are Living in Care

Authors: Olivia Ng, Leanne Cornell, Annette Cole
Mackenzie Health, Richmond Hill, ON
Correspondence: olivia.ng@mackenziehealth.ca

Objectives
The Children’s Aid Society (CAS) Dual Diagnosis Mobile Treatment Team is a new initiative in Simcoe County serving children and youth with dual diagnosis who are also living in care. Four partner agencies – The Children’s Aid Society of Simcoe County, Behaviour Management Services, Kinark Child and Family Services, and Children’s Treatment Network – are liaising to bring comprehensive and evidence-based intervention to these children through a mediator/caregiver training model. The long-term goal is to reduce the number of children living in group care and to enable family-based care wherever possible. As part of a broader program evaluation, we examined three outcomes here: problem behaviour, caregiver stress, and consumer satisfaction. Two case studies from this pilot project are presented.

Methods
The impacts of our community-based, 6-month intervention on participants’ problem behaviour are being evaluated using a single-subject AB design (with a follow-up phase) across two male youth with dual diagnosis who are also living in care. From a biopsychosocial lens, a functional behavioural assessment was completed for each participant prior to intervention. Behavioural skills training was provided for all relevant caregivers in the participants’ natural environments; to this end, treatment was “mobile.” Data collection is ongoing, and inter-rater reliability data is being collected on 20% of baseline and intervention observations. The Parenting Stress Index – Short Form (PSI/SF) is being utilized as a pre-post measure of caregiver stress. Finally, a locally-developed feedback questionnaire will be used to measure consumer satisfaction at service discharge.

Results
Baseline levels of problem behaviours were clinically significant (i.e., elevated in frequency, intensity, and/or duration) for both participants. Ongoing data is being collected on the impacts of our intervention on each participant’s problem behaviours. Thus far, pre-test PSI/SF results have revealed significantly elevated caregiver stress.

Conclusions
Preliminary outcomes will be presented on three dependent variables of interest: problem behaviour, caregiver stress, and consumer satisfaction. Results will inform stakeholders on the applicability and feasibility of a relatively short-term community-based behavioural intervention for children and youth with dual diagnosis who are living in care. The Simcoe CAS vision (“Every child and youth thrives within a strong family and community”) will also be discussed in relation to this community collaboration.
A Multi-Site Evaluation of the Peers Program (Program for Education and Enrichment of Relational Skills) for the Improvement of Friendships in Adolescents with Autism Spectrum Disorders

Authors: S. Oczak,1 J. Bebko,1 S. Zdjelaric,1 B. Straith,2 M. Thompson,2 T. MacDonald,2 M. Spoelstra,2 R. Ward,3 S. Duhaime,2 M. Segers1

1 York University, Toronto, ON
2 Autism Ontario, Toronto, ON
3 Brock University, St. Catharines, ON

Correspondence: soczak@yorku.ca

Objectives

In general, friendships in adolescents with autism spectrum disorder (ASD) differ in quantity and quality from the friendships of their typically developing peers. Adolescents with ASD exhibit significant social skill deficits that contribute to academic, behavioural and emotional difficulties. Typically developing adolescents often learn basic social norms by observing others; however, adolescents with ASD often require planned, explicit instruction in order to acquire pro-social behaviours. The UCLA-based Program for the Education and Enrichment of Relational Skills employs evidence-based practice for the instruction of social skills to adolescents with ASD. The present study explores the mechanisms of friendship development in adolescents with ASD, taking into account ASD symptomatology, social skills knowledge and social anxiety while participating in the PEERS program.

Methods

The present study assesses adolescents with high-functioning ASD between the age of fourteen and seventeen across the province of Ontario, Canada. Over fourteen sessions, adolescents and their parents work with group leaders to learn social skills and behaviours that promote friendship development. Data has been collected from both parent and adolescent groups using a battery of standardized and non-standardized assessments. To date, two groups have been assessed (n = 16); however, three groups (n = 25) will have completed the PEERS program by January, 2014.

Results

Data from two groups to date (n = 16) indicate that adolescents are initiating significantly more social activities and have improved their social skills knowledge. Supplementary analyses reveal an inverse relationship between ASD symptoms and social anxiety, suggesting that adolescents with fewer ASD symptoms are expressing heightened anxiety (r = -0.81; p < 0.05). This relationship may indicate that adolescents who are aware of their social and communicative deficits are experiencing anxiety during social activities. Finally, a significant relationship between adolescents’ friendship qualities and social stress was also found (r = .65; p < 0.05), suggesting there is a level of anxiety associated with social interactions.

Conclusions

High-functioning adolescents with ASD are initiating more social gatherings as a result of participating in the PEERS program. There is a level of social anxiety associated with engaging social situations, coinciding with exploring, making and maintaining friendships. It is relevant to address the presence of social anxiety as high-functioning adolescents with ASD attempt to build and maintain meaningful relationships. There are clinical and practical implications supporting the management of social stress in high-functioning adolescents while they form friendships. With increased emphasis on social relationships, adolescent participants may become more comfortable engaging social behaviour; however, additional research is needed to explore this.
The Association between Saccadic Eye Movement Control and Psychometric Testing Among Children with Fetal Alcohol Spectrum Disorder or Prenatal Alcohol Exposure

Objectives

Previous studies have demonstrated that children with fetal alcohol spectrum disorder (FASD) exhibit deficits in measures of eye movement control that probe aspects of attention, inhibition, visuospatial processing, and working memory. The objective of this study was to determine if performance-based relationships exist between psychometric tests and eye movement tasks in children with FASD or prenatal alcohol exposure (PAE) to better understand the damage alcohol exposure causes to the developing brain.

Methods

Participants were children/youth aged 5–18 years diagnosed with an FASD (n = 71), PAE but no diagnosis (n = 20), and typically developing controls (n = 111). Participants completed a neurobehavioral test battery, which included the NEPSY-II subtests of Auditory Attention, Response Set, Inhibition, and Arrows, and the Working Memory Test Battery subtests of Digit Recall and Block Recall. Each participant completed a series of eye movement tasks which included the prosaccade task (automatic saccade toward a visual target), antisaccade task (look away from a target), and memory-guided task (remember the locations of two sequentially presented targets and, after the appropriate go signal, look to the remembered locations of the targets in the order presented). Age-corrected standard scores were obtained and examined for group differences, and correlational analyses were used to test for relationships between psychometric tests and eye movement tasks.

Results

Both the FASD and PAE groups performed worse than controls on psychometric measures of attention and inhibition. Only the FASD group performed worse than controls on the psychometric and eye movement measures of working memory and visuospatial processing. The FASD group made more inhibitory errors on the antisaccade and memory-guided task, and more working memory errors on the memory-guided task. Among the FASD/PAE group, the Inhibition subtest was correlated with inhibitory errors on the antisaccade task but not on the memory-guided task. Within the FASD group, Digit Recall, Block Recall, and Animal Sorting were negatively correlated with working memory errors on the memory-guided task, and Arrows was negatively correlated with visuospatial processing on the prosaccade task but not on the antisaccade task.

Conclusions

These data suggest that psychometric tests and eye movement control tasks assess similar domains of cognitive function, and these assessment tools may be measuring overlapping brain regions damaged by prenatal alcohol exposure. The results of this study demonstrate that eye movement control tasks directly relate to outcome measures obtained with psychometric tests and are able to assess multiple domains of cognition simultaneously, thereby allowing for an efficient and accurate assessment. Eye movement tasks may therefore assist with early identification of children who would benefit from a multidisciplinary diagnostic assessment.
Conceptual Framework on Social Enterprise for Individuals with ASD: From Passion to Productivity

Authors: Henderika E. Penning, Erica Posthumus, Danielle N. Naumann, Hayden Kaack, Carol Bisallion, Susan Hannah

1 Queen’s University, Kingston, ON
2 Dream Catcher Farm, Kingston, ON
3 Communication Specialist, Kingston, ON

Correspondence: heidi.penning@queensu.ca

Objectives

Turning a love of horses into a social enterprise - can this dream come true? Driven by limited employment opportunities for individuals with autism spectrum disorder (ASD) and inspired by one boy’s love of horses, a small but passionate group of people comprised of a youth with ASD, his mother, community support worker, teacher, occupational therapist and the stable owner intend to find out! Social enterprises directed towards marginalized populations focus on enhancing work participation, the skills necessary to be successful in work and other social venues, and to affect a range of social outcomes associated with enhanced income and community participation. They also make a number of contributions to the communities in which they operate. Thus, social enterprises contribute to the economic base of communities while improving individual work skills, independence, and social/emotional functioning. The challenges to realizing this boy’s dream and how they might be overcome is the focus of this poster/presentation.

Methods

Participatory action research, informal and clinical evaluation of a case study.

Results

Social enterprise can be created through community partnerships fostering the presumption of competence.

Conclusions

Openness to changing our beliefs and actions regarding the competence of people with autism allows us to embrace a strength-based viewpoint from which to create collaborative goals. These include goals aimed at vocational readiness in order to facilitate client-centered opportunities for successful transition to adulthood and meaningful vocation. Describing a case study featuring a local initiative, this poster presentation opens the floor for discussion around social enterprise between members of academia, community, and people with disabilities.
Experiences of Adoptive Parents Raising Children with Developmental Disabilities in Ontario, Canada

Authors: Jenna M. Pepper, Shelley L. Watson, Kelly D. Coons
Laurentian University, Sudbury, ON
Correspondence: jpepper@laurentian.ca

Objectives

Historically, researchers have suggested that raising an adopted child with a developmental disability is associated with the experience of parenting stress. Recently the focus of adoption research has shifted towards the supports necessary for minimizing stress, facilitation of the adoption process, and the positive aspects of raising adopted children with developmental disabilities. Furthermore, adoption processes vary provincially. Canadian resources focusing on social support and financial resources are available in Ontario for parents who have adopted children with disabilities, but little detail is known about the actual needs and resources of those families.

Methods

Data collection is ongoing, but participants are being recruited through fetal alcohol spectrum disorder, autism, and Down syndrome support groups across Ontario, Canada. Eligibility criteria include families who have adopted at least one child with a developmental disability and residency in Ontario. Using a mixed-methods approach, informed by the Family Adjustment and Adaptation Response (FAAR) model, family members are asked to complete five questionnaires, including the Parenting Stress Index (Short Form), Family Crisis Oriented Personal Scales, Child Behavior Checklist, Questionnaire on Resources and Stress (Friedrich's Short Form), and the Hope Scale. In addition, qualitative, semi-structured interviews are being conducted in order to understand the experiences of parents raising adopted children with developmental disabilities. Qualitative interviews will be analyzed using Interpretative Phenomenological Analysis. Differences in family adaptation factors (e.g., parental stress, social support, financial resources) with regards to the adoptive child's disability will be examined, as well as the positive or special benefits of raising an adopted child with a developmental disability.

Results

Data collection is in progress and full results will be available for this poster, but preliminary analysis of interviews with families of adoptive children with FASD and Autism reveals that parents experience frustration with the diagnostic process, especially when there is no contact with the birth family, challenging child behaviours, a lack of understanding held by professionals, and a lack of perceived support in Ontario.

Conclusions

The present study will provide a picture of the experiences of adoptive parents of children with developmental disabilities in Ontario. The results of this study will inform Ontarian adoption agencies of unmet adoptive families’ needs as well as which services are considered to be most useful by parents.
The Transition from Intensive Behavioural Intervention Programs to the School System: The Experiences of the Transition Team

Authors: Stephanie Price
Laurentian University, Sudbury, ON
Correspondence: sprice@laurentian.ca

Objectives

The transition from Intensive Behavioural Interventions (IBI) to the education system can be challenging; however, moving to an inclusive setting is a significant opportunity for students with autism spectrum disorder (ASD). Students with ASD may experience challenges in school, but literature suggests that they should still have access to public education with appropriate supports. The transition can be a time of great change and can be stressful for families, because it facilitates new relationships, expectations, competencies, intervention formats, and service models in an unfamiliar setting, which can have long-term consequences for children. Therefore, the transition from early intervention must be carefully planned, founded on the unique strengths and needs of each child, and should be conducted in collaboration between families, early intervention providers, and school or community staff. The purpose of the current study was to examine the views and perceptions of those involved in the transition of students with ASD from IBI to school in Northern Ontario.

Methods

Using a mixed-methods approach, members of multiple transition teams were asked to complete the Transition Beliefs Inventory and the Transition Practices Questionnaire to assess their transition beliefs and experiences. A total of 11 IBI staff, 10 school staff, and one parent and/or guardian participated.

Results

With regard to transition beliefs, a significant difference was found between IBI and school staff for the involvement of families in the transition, where IBI staff felt more strongly. Participants stressed the importance of planning, training, communication, mutual understanding, and the involvement of parents and frontline staff as being required for successful transitions. Furthermore, school staff reported that inclusion is indeed occurring, beyond simply being put in an inclusive classroom.

Conclusions

The beliefs and experiences of families and the transition team can impact the decisions made and strategies used to support children with ASD in the school system. The results of this study suggest that the transition from IBI to an inclusive setting is occurring as outlined by the North region Autism Intervention Program and the Connections for Students model. The results of this study will be used to inform continuous improvement of service and practices.
Camps on Tracks: Inclusion of Campers with Autism Spectrum Disorders and Other Disabilities in Summer Camp

Authors: Jocelyn Prosser, Carmen Hall, Kimberly Maich

1 Fanshawe College, London, ON
2 Brock University, St. Catharines, ON

Correspondence: j_prosser2@fanshaweonline.ca

Objectives

This project evaluated the effectiveness of implementing the *Camps on TRACKS* program in one municipal summer camp in Southwestern Ontario to enhance the social skills of campers with autism spectrum disorder (ASD) and other developmental disabilities through a peer-mediated social skills approach. The study was expanded from a pilot study the previous year to investigate the impact of the program on the social interactions of the participants. To enhance rigor, this phase of the program measured treatment fidelity and inter-rater reliability to ensure the program was being run as the manual intended and that data collection was consistent.

Methods

Nine participants diagnosed with an ASD or other developmental disability participated in this project. Participants were enrolled in an inclusive, city-led summer camp, and were 5 to 12 years of age. An ABAB single-subject design was used to evaluate the social interactions of campers with peers and adults in various environments across the day. Additional questionnaires, including the Autism Social Skills Profile and the Peer Interaction Rating Scale were used to evaluate the social skills of campers prior to and after the weeklong camp. Social validity was measured through a questionnaire completed by parents and peers along with a treatment fidelity checklist. The single-subject data was collated and graphed for visual analysis of trend, level, and variability. The Wilcoxon signed-rank was completed to assess questionnaire data.

Results

The results of the study demonstrated a significant difference in results from the two social skills questionnaires administered prior to and after the child attended the summer camp. The single-subject results demonstrated a decrease in interactions from adults for three of the participants with an increase in interactions from typically developing peers for five campers. Social interactions of campers with a disability were similar to or above the average rate of typically developing campers’ skills in the same situations.

Conclusions

The results of this study have significant influences on the expansion of the peer-mediated literature to demonstrate the intervention’s positive effects in an inclusive, community setting. In addition, the results will be of great benefit to municipalities who want to enhance the social experience of campers with disabilities in camp, utilizing a research-based intervention.
The Role of Sensory Processing in Audiovisual Integration of Speech in Autism Spectrum Disorder

Authors: Stacey Reyes, Magali Segers, James Bebko
York University, Toronto, ON
Correspondence: jbebko@yorku.ca

Objectives
The ability to integrate sensory information from the multisensory world around us into a unified whole is fundamental to cognitive functioning. Individuals with autism spectrum disorder (ASD) process sensory information atypically which can alter perception; speech perception in particular. Among the most salient factors influencing multisensory integration is the temporal relationship between stimuli. Audiovisual events in which auditory and visual components are temporally “out of sync” are incorrectly reported as synchronous by individuals with ASD. Thus, there tends to be a greater period of time over which asynchronous auditory and visual input are perceptually bound as a unified event among individuals with ASD. This “window” of time within which multisensory information is perceived as occurring together is known as the temporal binding window (TBW). The current study examines the relationship between the audiovisual integration and sensory processing in ASD.

Methods
Adults with ASD between 17 and 30 years of age completed a synchrony judgment task whereby participants indicated whether videos were synchronous or not. Videos showing either linguistic or non-linguistic stimuli were presented at varying degrees of asynchrony, (temporal offsets) between auditory and visual components. A TBW was determined by identifying the range of temporal offsets at which synchrony was reported. The Adolescent/Adult Sensory Profile (AASP) was administered as a measure of sensory processing. Items are organized according to the sensory processing categories of: Taste/Smell, Movement, Visual, Touch, Auditory, and Activity Level which are further organized into functional categories: Low registration (lack of response to sensory information), Sensory Sensitivity, Sensation Avoiding, and Sensation Seeking. Data collection is ongoing, with data collected on 8 adults with ASD to date.

Results
A significant inverse relationship between overall sensory processing and the TBW size for linguistic stimuli was found \( (r = -0.794, p = .019) \). The strongest relationships were between the Sensation Avoiding subscale and linguistic TBW \( (r = -0.922, p = .001) \) and between the Visual Processing subscale and linguistic TBW \( (r = -0.935, p = .001) \). Strong relationships were also found between the linguistic TBW and various sensory processing subscales: Low Registration \( (r = -0.718, p = 0.45) \), Sensory Sensitivity \( (r = -0.795, p = .018) \), and Auditory Processing \( (r = -0.831, p = .011) \).

Conclusions
Findings suggest that the relationship between sensory processing and audiovisual integration is stronger for speech stimuli. Sensory sensitivity was also found to be inversely related to audiovisual integration. Individuals with ASD with greater sensory sensitivity tended to have a smaller TBW. A smaller TBW indicates increased sensitivity to audiovisual asynchrony and therefore greater precision in judging simultaneity of audiovisual events. This in turn enables greater efficiency of speech integration. Identifying the link between individual sensory differences and multisensory integration may elucidate key sensory and perceptual underpinnings behind language impairments in ASD. These results challenge the literature suggesting a universal multisensory processing deficit in ASD by revealing differences according to sensory functioning.
An Independent Program Evaluation of the Secret Agents Society for Youth with Autism Spectrum Disorders

Objectives

Children with autism spectrum disorders (ASD) often struggle with social skills, and this can lead to problems in many areas of daily life. There is empirical support for the use of social skills training groups (SSTGs) for improving social skills among youth with high functioning ASD. There is currently no common, agreed upon approach for teaching social skills to children with ASD, and one major limitation is that frequently only the authors of manualized interventions evaluate the interventions, limiting our knowledge of how generalizable a program is to the typical service provider environment. The Geneva Centre for Autism recently decided to utilize the Secret Agents Society as a manualized SSTG for their clients. The Secret Agents Society is a cognitive behavioural social skills group intervention for children with ASD that has been shown to be efficacious in fostering social skills in children with ASD through a large randomized controlled trial. The purpose of the current study was to assess the effectiveness of the Secret Agents Society within a community agency.

Methods

Children between the ages of 8 and 12 and their parents were invited to participate in this study. Inclusion criteria included: (1) ASD diagnosis, (2) parent and youth report of difficulties with social skills, and (3) overall IQ above 70. Six children (5 males, 1 female) were selected for the group (Age range = 9–12 years, \( M = 10.5, SD = 1.04 \)). The Secret Agents Society program includes nine 2-hour child group sessions and follow-up, concurrent parent support sessions, teacher tip sheets and phone calls, and school staff involvement. Measures were administered to parent and child at Baseline (before group session began), Endpoint (last week of group session), and Follow-up (3 months after group sessions have ended). The child’s school teacher was also mailed a package of measures to complete at Baseline, Endpoint and Follow-up.

Results

Based on parent report, social skills significantly improved by the end of the group for 83% \( (n = 5) \) of the children. Three months later, social skills remained significantly improved for 80% \( (n = 4) \) of the children (data was unavailable for one child at follow-up). Symptoms of anxiety decreased for one child. Of the four teachers to complete measures, there were significant changes in social skills for 50% of the children.

Conclusions

Results from this study suggest improvements were made after youth participated in the program. Youth, parents and teachers reported a variety of benefits from participating, and improvements were seen both statistically and qualitatively.

While preliminary results suggest the program is valuable for youth and families, future program evaluation should be conducted to lend further support to these findings.
Objectives
There has been some literature to reflect the stress and strains as well as daily hassles that families in Northern Ontario have experienced in regards to obtaining favourable quality and quantity of resources for children and adults with autism. Families that are under psychological duress often have unstable variations of any combination of family stressors, family resources, and family members in regards to maintaining stability. This knowledge of severity in terms of balancing these demands is often a predictor to triggers and changes that can be found within the family dynamic. When the family is in crisis, stressors often outweigh resources which tips the scales in a certain direction and alterations are needed in order to maintain a balance on demands and coping.

Methods
A mixed methods study was conducted with 25 biological caregivers of children with autism in Ontario, Canada. Employing a basic interpretive approach, informed by the Family Adjustment and Adaptation Response (FAAR) model, semi-structured, qualitative interviews were conducted. Participants also completed a number of quantitative questionnaires, including the Family Crisis Oriented Personal Scales, the Questionnaire on Resources and Stress, the Parenting Stress Index Short Form and the Family Resource Scale.

Results
Interpretative phenomenological analysis of the interviews is expected to reveal some themes regarding level of satisfactions with regards to formal vs. informal supports for their children with autism; the differing perspectives, if any, among mothers and fathers; and parents’ perspectives on how services are meeting the needs of the family as a whole. Constituent sub-themes are also expected to reveal what has helped families adapt to raising a child with autism. Participant’s responses to individual items on each quantitative measure will be considered and discussed in their relation to the qualitative findings.

Conclusions
Understanding what families do in order to transform from a family in crisis to a family that is successfully adapting is important when implementing appropriate family supports. It is crucial to investigate the depth and severity of stressors and the ways in which informal and formal resources can be used to diminish the intensity of stress and to increase coping behavior for the family unit and each individual member.
Objectives

Intensive Behavioural Intervention (IBI) is the treatment of choice for children with autism spectrum disorder (ASD), however program outcomes are highly variable. Recent studies have examined factors related to the child (such as age and IQ) and intervention (such as model of supervision), however the parent and family component remains largely unexamined. There is minimal literature suggesting that high parental stress may be associated with less positive child outcomes, but many other parent factors have never been examined in this context. This presentation will look at the relationship between a range of parent factors including psychosocial factors (e.g., parental distress and family coping), parent's involvement in their child’s IBI program, and demographic factors (such as Socioeconomic Status (SES) and maternal employment) and children’s outcomes after one year of IBI.

Methods

The sample consists of the parents of 28 children in Ontario’s publicly funded IBI program. These data come from a larger waitlist controlled study of Ontario’s IBI program. Data were collected through interviews and questionnaires from the parents, and standardized assessments of the children at entry to IBI and after one year in the program. The parent factors examined include: (1) Demographic factors (SES, marital status, and maternal employment status); (2) Psychosocial factors and Family Coping [F-COPES]; and (3) Parent Involvement in IBI. Outcome variables include children’s cognitive rate of development at the 1-year assessment, and parents’ perception of children’s progress after one year in the program.

Results

Parental distress was moderately correlated with children’s cognitive rate of development ($\rho = -0.41$) and parental perception of children’s progress ($\rho = -0.32$). Family coping was weakly correlated with cognitive rate of development ($\rho = 0.19$) and strongly correlated with parental perception of children’s progress ($\rho = 0.53$). SES was moderately correlated with cognitive rate of development ($\rho = 0.33$) and weakly correlated with parental perception ($\rho = -0.19$). Marital Status was weakly correlated with both outcomes: ($\rho = -0.06$) and ($\rho = -0.20$) respectively. Maternal employment status was strongly correlated with cognitive rate of development ($\rho = 0.64$) and weakly correlated with parental perception ($\rho = 0.11$). Finally, parental involvement in IBI was moderately correlated to both outcomes: (\rho = 0.45) and (\rho = 0.33) respectively. The results of a regression analysis describing which family factors predict children’s outcomes will also be presented.

Conclusions

These findings provide an initial picture of the relationship between several family factors and children’s outcome in IBI. This information helps to elucidate the relationship between parent and child factors, and helps us to understand how certain family factors may be impacting on children’s outcomes in treatment.
Enhancing Health Care for Children with Developmental Disabilities Through Interprofessional Practice

Authors: Cailin Stamarski,1 Paula Barata,1 Krista Sibbilin2
1 University of Guelph, Guelph, ON
2 Canadian Mental Health Association, Guelph, ON
Correspondence: cstamars@uoguelph.ca

Objectives

Children with developmental disabilities (DD) often require care from many professionals. Accessing separate health care providers can lead to overlap and redundancies, which results in less effective care. In a southern Ontario municipality, a system was developed to provide easier access to care for children aged 0–6 years with DD. Within this system, a group of health care agencies engage in interprofessional practice - a collaborative, team-based approach to care involving individuals who work within and across settings. However, barriers to the implementation of this system of interprofessional practice have been encountered. This study investigates problem areas and potential improvements regarding interprofessional practice within this group of agencies.

Methods

This research focused on professionals who work with children with DD and who engage in interprofessional practice. These professionals include early interventionists, occupational therapists, public health nurses, resource consultants, speech and language pathologists, social workers, physical therapists, recreation therapists, and others. Three methods of data collection were used to identify the main deficiencies surrounding interprofessional practice in the current system: (1) meetings and targeted interviews with health care professionals (n = 10); (2) a short survey given to health care professionals (n = 17); and (3) an online survey given to health care professionals (n = 57), which was developed using the literature review, findings from the interviews, and responses to the short survey.

Results

Identified problem areas were staff/agency communication, confidentiality, role clarity, intake and referral processes, and time constraints. Three recommendations were proposed: (1) implementing an annual system-wide training program that educates staff in interprofessional practice and the roles of each agency within the system; (2) standardizing the confidentiality policies and communication, referral, and consent processes across agencies with respect to clients; and (3) improving communication within service planning teams by implementing a computer-based information exchange system for professionals within a service planning team and appointing a leadership position within these teams to improve client management issues.

Conclusions

The results of this study provide insight into the barriers of interprofessional practice among health care providers and how such barriers may be successfully addressed in future interprofessional collaborations. This research supports the argument within the literature that interprofessional practice is an effective way to improve outcomes for children with DD and their families. Ultimately, this research can inform other health care providers how to successfully implement a more collaborative model of care for children with DD.
Indicators of Emotion Regulation and Co-regulation in Children with Autism Spectrum Disorder

Authors: Kendra Thomson, Victoria Ting, Katherine Wincentak, Lisa Chan, Jonathan Weiss
York University, Toronto, ON
Correspondence: jonweiss@yorku.ca

Objectives

Children with autism spectrum disorder (ASD) often have difficulties with emotion regulation (ER), a complex, multicomponent process that affects all individuals including parents. The continuous adjustment of actions and intentions in response to anticipated actions of others is referred to as co-regulation. The purpose of these exploratory analyses is to assess the feasibility of using multiple indicators of ER and co-regulation in children with ASD and their parents.

Methods

Participants and data in this case-series design are from participants who met inclusion criteria for a larger emotion regulation intervention study. Participants include four children diagnosed with high functioning ASD, confirmed through clinician report and by meeting clinical cut-offs on the Social Communication Questionnaire and Social Responsiveness Scale. The mean age of the participants (1 female) was 9 years, 7 months ($SD = 1.32$, range = 8.11–11.2), and the mean FSIQ-2 was 99 ($SD = 7.23$, range = 90–105). The four mothers of the children also participated. First, we assessed ER and co-regulation by coding 5-minute video recordings of the child and his/her mother during an Emotion Discussion Task, where the dyad discussed a time when the child felt anxious, angry and happy. We chose a behavioural and global coding scheme that has demonstrated effectiveness as a measure of child ER (e.g., child physical self-soothing) and parent scaffolding (e.g., prompting and physical comfort) in children with ASD. To ensure reliability, coders were trained and met an acceptable level of agreement (80%) on practice videos before scoring the participant data. Secondly, we collected a physiological measure of arousal in children and parents during the Emotional Discussion Task by using the Affectiva Q-sensor, which measures electrodermal activity (i.e., skin conductance) through microSiemens ($\mu$S).

Results

Video recordings are currently being analyzed, and the poster will present data on the various metrics that represent facets of ER in three ways. First, we will report the correlations in child-mother dyads in terms of behavioural codes and physiological data during the Emotion Discussion Task. Next, we will temporally compare behavioural codes from each dyad to selections of the physiological data, which will be visually presented. Finally, we will report change scores in child electrodermal activity with changes in the emotion discussion task.

Conclusions

The poster will provide important information pertaining to the use of various indicators of ER and co-regulation in children with ASD and their parents.
Theory of Mind and Social Skills Development in Children with Autism Spectrum Disorders

Objectives

Theory of Mind (ToM) can be defined as the ability to understand the feelings, intentions, and motivations of others. The ability to effortlessly and instantaneously modulate to another's perspective which emerges early in typical development, is a hallmark deficit in autism spectrum disorders (ASD). The unfortunate consequence of these deficits is the reported disparity of friendship and high levels of loneliness among individuals with ASD. Few treatment studies, however, have attempted to teach perspective-taking skills within the context of an intervention targeting friendship skills. The current study examines the effectiveness of a parent-assisted intervention for children with ASD targeting ToM and skills required for making and keeping friends.

Methods

Forty-five children with a high-functioning ASD, 6–13 years of age, participated in this study (M = 9.09, SD = 1.81). Children were assigned to a ToM group (n = 18), a Children's Friendship Training (CFT, n = 11), or a Delayed Treatment Group (DT, n = 16). Ten weeks of concurrent classes were held for children and caregivers in both intervention groups. The ToM group received instruction via PowerPoint lessons using comic strips to depict social scenarios; lessons were followed by game play. Descriptive measures conducted pre-intervention included the Vineland Adaptive Behavior Scales-Second Edition and the Autism Spectrum Quotient: Child Version. Outcome measures conducted before, immediately after, and three months post intervention included the Strange Stories Test, the ToM Inventory (ToMI) and the Social Responsiveness Scale (SRS). Each child participated with at least one caregiver.

Results

No significant group differences were found at baseline on descriptive or outcome measures. Preliminary analyses conducted show that following participation, children in the ToM group, compared with the DT group improved significantly on total SRS scores, $F(2,42) = 5.748$, $p = .006$, $\eta^2 = .22$. They also showed significant improvement on the SRS Social Communication Interaction Index of the SRS, $F(2,42) = 5.189$, $p = .01$, $\eta^2 = .198$. Although not specifically targeted, improvements were also found on the SRS subtest of Restricted Interests and Stereotypical Behaviours, $F(2,42) = 3.587$, $p = .036$, $\eta^2 = .146$. Anecdotally, children appeared to enjoy participation and group leaders reported ease in delivering the curriculum. Parents reported that their children appeared more confident and willing to take initiative in social interactions following participation. Pending results include an analysis of potential changes in adaptive behaviours as well as the maintenance of gains made three months post-intervention.

Conclusions

The results of this small-scale study provide support for the efficacy of a social skills intervention that may feasibly be delivered by educators and therapists. While this study cannot speak to long-term effects, the encouraging findings suggest that it is possible to increase skills required in friendship and reduce interfering behaviours by simultaneously teaching perspective-taking skills.
Respondent Factors in Parents of Children with Developmental Disabilities Reporting About Family Quality of Life

Objectives

Family quality of life (FQOL) is an umbrella construct that aims to capture the different aspects of family life and the level of functioning within those areas. Since this is a relatively new area, not many published FQOL measures currently exist, and much research is needed to evaluate these measures. One published self-report measure of this construct is the Family Quality of Life Survey-2006. A recent examination of the FQOLS-2006 revealed that significant predictors of an overall FQOL rating were the mental health and marital satisfaction of the reporting individual. This finding suggests that this FQOL measure, although aiming to capture a picture of the entire family, may be greatly influenced by factors of the respondent. The purpose of the current study is to explore other respondent factors that may be contributing to an overall FQOL rating. It is hypothesized that a number of respondent factors will play a significant role in the overall FQOL rating.

Methods

GO4KIDDS is a Canadian team project exploring the health, well-being, and social inclusion of school aged children with severe Developmental Disabilities (DD) and that of their parents. The sample for this study includes 68 ethnically and socioeconomically diverse caregivers of children aged 5 to 19 with a diagnosis of DD. Most of the children have additional diagnoses, including autism spectrum disorder, Down syndrome, and cerebral palsy. These parents were individually interviewed using the FQOLS-2006, which is made up of nine domains: Health of the Family, Financial Well-Being, Family Relationships, Support from Other People, Support from Services, Influence of Values, Careers, Leisure and Recreation, and Community Interaction. Each domain gathers qualitative as well as quantitative information.

Results

The data for this study has been collected and analysis is currently underway. A hierarchical regression will be conducted and relevant descriptive information will be reported. The outcome variable in the regression will be the overall FQOL rating, comprised of attainment of, and satisfaction with, overall FQOL. The predictor variables that will be included are the family member most involved in the everyday life of the family and the child with DD, mental health of the respondent, and whether the respondent has given up their career or education to care for the child with DD.

Conclusions

The results of this study will contribute to the FQOL literature evaluating what this construct is really measuring. It is important to establish if FQOL measures are truly capturing a picture of the entire family rather than just one individual.