Raising Sexually Healthy Children for Agency Staff (RSHCAS) Training: An Outcome Evaluation for Toronto Public Health, Sexual Health Program

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Note: *This paper uses the term early learning professional (ELP) throughout and includes a range of professionals (e.g., child care setting administrators, Early Childhood Educators (ECEs), Early Childhood Assistants (ECAs), pre-service students studying to be ECEs) who work with children in numerous settings (e.g. early learning and care centres, Kindergarten class-rooms, home child care).*

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Introduction

Professional Development: Sexual Health Education

The development of sexuality refers to the construction of children's understanding and beliefs about sexuality. In early childhood both development and the social environment guide age-appropriate learning about sexuality. For example, as children begin toilet training they learn about the differences between bodies, functions of genitals, public and private space, and consent. Stemming out of work focusing on ECEs specifically, it is apparent that pre- and post-service training in sexuality is pertinent for ECEs to address the development of sexuality in childhood (Balter, van Rhijn, & Davies, 2016, 2018). The opportunity to learn and deconstruct sexuality for ECEs is limited, with a noted gap in both sexuality content across ECE programs and also a lack of post-service training in Ontario (Balter, et al., 2016; 2018). In preparation for delivering a presentation at the 13th Annual Summer Institute on Early Childhood Development in June 2016, an informal review of sexuality content in Ontario Colleges and Universities offering ECE diplomas and degrees was conducted (Balter et al., 2018). With so many developmental domains to cover in ECE diploma and degree programs, it is not surprising that sexuality was not found to be a required course in any institution. Some institutions have sexuality as an elective course, while others cover sexuality and gender in one lecture. Overall, most institutions left out the content entirely, leaving pre-service training in Ontario weak in the domain of sexuality. The state of post-service training in sexuality for ECEs in Ontario is similar to that of pre-service training.

Balter and colleagues' (2018) study examining ECE perspectives on the development of sexuality training needs found 64.1% of the 64 respondents felt they lacked necessary training, and 68% reported they lacked the ability to confidently address the development of sexuality in early childhood. The majority (74.6%) of ECE participants expressed an interest in post-service training, specifically noting a need for "training that provided factual information on sexual health education topics, instructional strategies for addressing sexuality, and training to increase personal comfort level in addressing sexuality in early childhood" (Balter et al., 2018, p. 38). This study points to the need for both pre- and post-service sexuality training for ECEs to increase their capacity to address sexuality confidently, and in an emergent fashion (Balter et al., 2018).

The benefits of pre- (e.g., Sinkinson, 2009) and post-service (e.g., Lokanc-Diluzio, Cobb, & Nelson, 2007) training in this developmental domain is evident. Specific to professional development offered by public health units for educators, Lokanc-Diluzio et al. (2007) evaluated 11 sexual health professional development workshops for elementary and junior high teachers in Calgary, Canada. Participants (N=127) completed pre-intervention surveys (n=118) prior to the start of the teacher in-service, and post-intervention surveys (n=109) immediately after the professional development session. There were meaningful differences between the pre- and post-intervention surveys such that participants reported increased knowledge and comfort to address sexuality with their students (Lokanc-Diluzio, 2007). Although these findings are promising,

Lockac-Diluzio and colleagues caution the interpretation of these results as the evaluation a) was done based on a quality assurance initiative and not research, b) the completion of the post-intervention survey so shortly after the intervention cannot inform long term change in attitudes, beliefs and values, and c) only descriptive analyses were used.

Across Canada, health units offer pivotal and trustworthy education and information for the public. Toronto Public Health's Raising Sexually Healthy Children for Agency Staff (RSHCAS) training is a unique professional development opportunity for ELPs. Given the previous research on pre- and post-service training in sexuality, it is clear that the RSHCAS training fills a gap for professionals working in early learning settings.

Toronto Public Health's Raising Sexually Healthy Children for Agency Staff Training Overview

Toronto Public Health's Sexual Health Promotion program's mandate is to 'to prevent unintended pregnancy and sexually transmitted infections (STIs)' (Toronto Public Health, 2018, para 3). Although adolescents and adults are the intended audience of this mandate it was argued that focusing education on the early years would act as prevention. The Raising Sexually Healthy Children (RSHC) workgroup states:

> by instilling the need of this kind of education (sexual health) at a young age, along with the ideas of communication, normalizing sexuality, and knowledge, it would carry into the teenage years of these young children, and longitudinally would align with the mandate. When children get older they will be prepared to talk to other adults about sensitive topics such as sexual health (M. Gaffe, personal communication, January 26th, 2018).

The RSHC workgroup further advocated that by taking a proactive, as opposed to a reactive approach, STI and pregnancy rates would be reduced in the adolescent years, among other benefits of talking with children about sexuality.

In 2000, Toronto Public Health's Sexual Health Promotion program recognized that parents, who are critical influencers to children's development, needed to be a focus for programming. The intended outcome of programming for parents was to increase knowledge and awareness on the physical, social, and emotional changes associated with puberty, and offer tangible skills to approach this subject in a positive and approachable way. Based on this, a 2-hour workshop was developed and delivered to parents at school council meetings at the Toronto District School Board (TDSB). This was the beginning of the RSHC trainings.

The RSHC workgroup expanded its outreach from parents/guardians to the child care community who were identified as playing a pivotal role in socializing children. The training is now offered to ELPs as well as parent facilitators from 17 different language communities across the City of Toronto (M. Gaffe, personal communication, January 26th, 2018). The mandate of the RSHCAS training is "to provide current information on raising sexually healthy children in a training format to child care service providers and related service providers" (M. Gaffe, personal communication, January 26th, 2018).

RSHCAS Training Goals:

1. to foster an environment that supports the healthy sexuality of children within the early learning setting; and,
2. to influence agencies/early learning centres to integrate sexual health policies.

RSHCAS Training Objectives:

1. to increase awareness/knowledge of the complexity of sexuality;
2. to reflect and examine one's own attitudes and values on sexuality information acquired during childhood;
3. to review and/or increase knowledge on the sexual growth and development stages of children up to the age of 12;
4. to increase awareness and knowledge of professional practices and support of children's interactions with sexuality and their environments;
5. to increase openness to address the development of sexuality/gender in childhood;
6. to increase open communication related to sexuality;
7. to increase awareness/knowledge of benefits of a sexual health policy; and,
8. to promote workshops to other related service providers (both internal and external).

Raising Sexually Healthy Children for Agency Staff Training Content

The RSHCAS training is a day-long workshop where Toronto Public Health Promoters of Sexual Health facilitate interactive presentations on the following topics: defining sexuality, family of origin, the importance of talking to children about sexuality, childhood sexual development, the benefits of a sexual health policy, an example of sexual health policy, and practical strategies for answering children's questions in childcare settings (M. Gaffe, personal communication, January 26th, 2018). Participants are provided with a resource package of activities and samples of parent handouts.[1] Participants are emailed a RSHCAS training completion certificate after the workshop.

The Current Evaluation

The current evaluation fills a gap in evidence-based practice (MOHLTC, 2017), as the RSHCAS training has not been formally evaluated. The following outcome evaluation examines changes in RSHCAS training participants' perceptions, knowledge, comfort, and willingness to address the development of sexuality in childhood, and the overall impact of the RSHCAS training. Eight specific research questions and four evaluation hypotheses were identified for the project and are detailed next.

[1] For further information about TPH RSHCAS training materials and handouts, visit www.toronto.ca/health/sexualhealth .

The research questions are:

1. What concerns, if any, do participants have in addressing the development of sexuality in childhood?
2. To what degree does participation in the RSHCAS training contribute to positive changes in participant perceptions of providing sexuality information to children, pre- and post-intervention?
3. To what degree does participation in the RSHCAS training contribute to positive changes in participant **knowledge**, pre- and post-intervention, in addressing the development of sexuality in childhood?
4. To what degree does participation in the RSHCAS training contribute to positive changes in participant **comfort**, pre- and post-intervention, in addressing the development of sexuality in childhood?
5. To what degree does participation in the RSHCAS training contribute to positive changes in participant **willingness**, pre- and post-intervention, in addressing the development of sexuality in childhood?
6. What factors affect willingness to address the development of sexuality in childhood?
7. How do participants explain how they rate the RSHCAS training?
8. What is the overall impact of participating in the RSHCAS training?

The evaluation hypotheses are:

1. Levels of self-reported items measuring perceptions of sexuality education for children will be higher at the time 2 measurement point (post-workshop) compared to the time 1 measurement point (pre-workshop).
2. Levels of self-reported **knowledge** will be significantly higher at the time 2 measurement point (post-workshop) compared to the time 1 measurement point (pre-workshop).
3. Levels of self-reported **comfort** will be significantly higher at the time 2 measurement point (post-workshop) compared to the time 1 measurement point (pre-workshop).
4. Levels of self-reported **willingness** will be significantly higher at the time 2 measurement point (post-workshop) compared to the time 1 measurement point (pre-workshop).

Methods

Procedure

Funded by the University of Guelph-Humber's Research Grant Fund, this evaluation was approved by both the University of Guelph and Toronto Public Health Research Ethics Boards in summer 2016 and 2017, respectively (see Appendices A & B). The evaluation design started as a quasi-experimental design using non-probability sampling to access the study participants (Creswell, 2015). More specifically, a convenience sample of the participants who registered for the RSHCAS workshop was the sampling frame where the intervention group was accessed (Creswell, 2015). A snowball sampling strategy, where registered participants were asked to email study details to colleagues who were not registered in the RSHCAS workshop, was used to recruit the control group. A snowball sampling methodology was used to ensure homogeneity, where participants in the intervention and control groups share similar characteristics (e.g., employment, training) (Creswell, 2015). Homogeneity between intervention and control group participants makes comparisons between groups more accurate. As the shared characteristics are present in both intervention and control groups, researchers can rule out these attributes as a reason for changes they may see in the analyses (Creswell, 2015). Those in the intervention group attended the RSHCAS workshop, and those in the control group did not.

Registration was done via Toronto Public Health and four workshops from September-December 2017 were a part of the evaluation plan. The same four Promoters of Sexual Health facilitated the RSHCAS workshops that were a part of this outcome evaluation. Facilitators also completed a fidelity checklist at the end of each workshop to ensure workshop consistency and document any deviations from the set content. Participants were asked to complete three surveys. The first survey was done online one week prior the intervention, the second was done two weeks post-intervention, and the third was done three months post-intervention. All participants who took part in the study were offered \$10, \$15, and \$20 e-transfers as incentives for the first, second, and third surveys, respectively.

In October 2017, the research team was notified by the Assistant Vice Provost of the University of Guelph-Humber that cash incentives (e-transfers) would no longer be reimbursed to the principal investigator. Simultaneously, the research team had been observing that participation and retention was weak in both the intervention and control groups over the first three workshops. This resulted in several amendments to the project made in December 2017, all of which were discussed and collaboratively decided upon amongst the research team (CBR, n.d.). Although numerous changes were made (see Appendices C, D, E, & F for amendments and approval certificates from both the University of Guelph and Toronto Public Health Research Ethics Boards), the following three amendments require more detailed explanation.

First, the research team was informed that participant registration was often done by an administrator of the early learning setting, rather than the individual attending the workshops themselves, which resulted in numerous workshop participants missing the email describing the study and pre-intervention survey. Thus, an amendment was made to administer the pre-

intervention survey in-person to those who chose to participate in the study 30 minutes prior to the commencement of the RSHCAS workshop. Second, due to a low participation rate for control group participants, the research team decided to drop the control group and change the design to non-experimental. Also, given the low retention rate of participants (both intervention and control groups) completing the two week follow up survey in the September – November 2017 workshops, it was decided to remove the three month follow up questionnaire. The single-case non-experimental design was deemed to be a more appropriate evaluation design that retained the ability to answer the research questions. Third, the e-transfer incentives changed to amazon e-gift cards ($15 pre- and $20 post-intervention surveys) in the middle of the project; however, it is important to highlight that e-transfer incentives were honoured for all participants from the September through December 2017 workshops.

Thus, this evaluation uses a single-case non-experimental design, which reports on the pre- and post-tests from seven workshops in 2017 and 2018 (September 25th, October 26th, November 17th, December 8th in 2017, and, March 2nd, April 25th, and May 29th in 2018). It employs a convergent mixed methods design that "collect[s] both quantitative and qualitative data, merge[s] the data, compare[s] the results, and explain[s] any discrepancies in the results" (Creswell, 2015, p. 543). Furthermore, adopting a mixed methods design provides an integrated approach to answering the evaluation questions (Creswell, 2015). Given the lack of training in sexuality documented in the literature for ELPs, it was predicted that change would happen for all of the participants as a result of taking part in the RSHCAS training intervention.

Data Analyses

Initially, there were 85 responses, which represent participants who filled out both the pre- and post-intervention surveys. Paired sample t-tests were used to determine differences in means between pre- and post-intervention survey items, as such, it was required that we remove control group participants (n=4), as well as those who did not complete the post-intervention survey (n=25), leaving a total of 56 participants. These 56 participants represented 28 participants who completed both pre- and post-intervention surveys. Thus, the response rate was 39% (147 participants in the sampling frame). Fidelity checklists were examined for consistency. Facilitators noted that although every workshop covered sexual health policy, three of the seven workshops did not do a full read-through of an example of a policy for an early learning setting. As the content on sexual health policy is not being evaluated in this project, it was determined that all other content was delivered consistently across the seven workshops.

The majority of the items with a five and six point Likert scale were treated as continuous variables, the data set was prepared to conduct paired samples t-tests to examine the difference of means between the pre- and post-intervention tests. The items assessing: a) participants' perceptions of what age sexuality education should begin, b) factors that affect willingness, c) participants rating of the workshop, and d) demographic questions were treated as categorical variables and therefore descriptive statistics using frequencies were computed and percentages analyzed.

Thematic analyses were carried out on the open-ended questions following Braun and Clarke's (2006) six step outline. The analyses on the qualitative questions represents an inductive analysis, "the process of coding the data *without* trying to fit it into a pre-existing coding frame" (p. 83), that uses an essentialist/realist approach, where "a simple, largely unidirectional relationship is assumed between meaning and experience and language" (p. 85). Thematic analyses were carried out for the following open-ended questions: 'Do you have any areas of concern with regards to sexuality/sexual health information for children' (adapted from Ninomiya, 2010); 'Are you seeing an impact related to your participation in RSHC in your day to day practice. If yes, please explain' (created by research team); 'Please explain why you rated this workshop (what their choice was in previous question) that you would recommend to a colleague' (created by research team).

Participants

The age of participants ranged from 23 to 58 years (*n*=21). Twenty-seven participants responded to the question about gender and race/ethnicity. With regards to gender, 93%, identified as women (*n*=25), 1% as man (*n*=1), and one participant self-reported as two-spirited. With reference to race/ethnicity, 4% identified as Black (*n*=1), 26% identified as East Asian (*n*=7), 7% identified as South Asian (*n*=2), 52% identified as White (*n*=15), and 11% or three participants stated there wasn't an option that represented them. Four participants specified their race/ethnicity as Armenian, Hispanic, Polish-Canadian, and, lastly, one participant stated "mixed to choose, I would be eliminating the other". Twenty-eight participants responded to the question about religion and identified as Atheist (8%; *n*=2), Buddhist (4%; *n*=1), Christian (52%; *n*=13), Hindu (4%; *n*=1), and Jewish (8%; *n*=2). Sixteen percent (*n*=4) stated there was not an option that applied to them, and self-reported Catholic (*n*=2), non-practicing Catholic (*n*=1), and Spiritual (*n*=1) as their beliefs. Eight percent (*n*=2) chose not to answer this question.

Participants' (*n*=27) experience working in early learning settings ranged from 2 to 26 years, with infants 11% (*n*=3), preschool children 64% (*n*=18), Junior and/or Senior Kindergarten, 32% (*n*=9), and school aged children 32% (*n*=9). ELPs (*n*=27) specified their roles as registered ECEs 78% (*n*=21) and non-registered ECEs in early learning settings. Fifteen percent of participants reported 'other' which included student, child care assistant, home visitor, supervisor/director, and assistant supervisor. Four participants (15%) reported that their place of employment had a sexual health policy. Half of the participants (*n*=13) reported they didn't know whether a sexual health policy existed in their workplace, while 35% (*n*=9) stated there was no policy. Previous research asking ECEs whether their workplace had a sexual health policy finds similar results with 12.7% confirming a policy, 54% reporting no policy, and the remainder not knowing whether a policy existed or not (Balter et al., 2016). These findings suggest the lack of structure within early learning settings about addressing the development of sexuality.

Measurements

Research team members from Toronto Public Health identified the RSHCAS workshop objectives, and recommendations for the measures were made based on previous work (Balter et al., 2016). Collectively, the research team discussed existing items that aligned with the workshop content as well as items that needed to be created to capture the workshop content. The pre-intervention survey consists of 116 questions, and the post-intervention survey asks 106 questions (see Appendices G and H). The post-test is a duplicate of the pre-intervention survey with the omission of questions identifying the date of the workshop and the reason for participant engagement, questions about the benefits and drawbacks of a sexual health policy in early learning settings, and demographic questions. The post-intervention survey includes three additional questions assessing participant recommendations of the RSHCAS workshop to colleagues and why, and impact of the workshop. The analyses conducted for this evaluation are based on 102 questions (nine demographic questions, 91 questions on perceptions, knowledge, comfort, and willingness, and three questions from the post-test assessing recommendations and impacts of the RSHCAS workshop).

The questions assessing participant knowledge, comfort, and willingness to address specific items related to the development of sexuality in childhood (adapted from Cohen, Byers, Sears, & Weaver, 2004) evaluate the following RSHCAS training objectives:

1. To increase awareness/knowledge of sexuality;
2. To reflect and examine one's own attitudes and values on sexuality information acquired during childhood;
3. To review and/or increase knowledge on the sexual growth and development stages of children, and;
4. To increase awareness and knowledge of professional practices and support of children's interaction with sexuality.

Participants are asked whether they felt 'knowledgeable enough right now to address this topic'; 'feel comfortable addressing this topic right now'; and, 'be willing to address this topic right now' to address 24 items addressing terminology, reproduction and birth, self-touching, family diversity, gender, and sexual abuse prevention for each of the knowledge, comfort, and willingness assessments. Each item was answered on a five-point Likert-type scale (1=Not at all; 2=Slightly; 3=Somewhat; 4=Moderately; 5=Extremely) for each of the knowledge, comfort, and willingness measures (72 questions in total).

The next six questions assess the following RSHCAS training objective #2: to reflect and examine one's own attitudes and values on sexuality acquired during childhood. Participants were asked 'Do you have any areas of concern with regards to sexuality/sexual health information for children' (adapted from Ninomiya, 2010). Next, participants responded to their perceptions of what age developmentally appropriate sexuality/sexual health information should start. Answering options included preschool, Grades K – 3, Grades 4 – 5, and 'there should be no sexuality/sexual health information provided outside of home' (Cohen et al., 2004). Participants were also asked to rate the quality of the sexuality/sexual health information that children receive

in their early learning setting with a six point Likert-type scale (1=very good; 2=good; 3=fair; 4=poor; 5=don't know, 6=there is no sexuality/sexual health information in my child care centre) (Cohen, et al., 2004). Additionally, three statements answered on a five-point Likert-type scale, where 1=strongly agree and 5=strongly disagree, were asked to explore participants' feelings regarding sexuality education in childhood (e.g., 'Sexuality/sexual health information for children should be provided in child care'; 'The child care and parent(s) should share responsibility for providing children with sexuality/sexual health information'; and 'I feel that I have adequate training to address sexuality/sexual health information in my place of work') (Cohen et al., 2004).

The next 13 questions taken from Cohen et al. (2004) assessed the following RSHCAS training objective #5: to increase openness to address the development of sexuality/gender in childhood. Participants were asked to answer factors (e.g., amount of training, administrative support, anticipated reactions from parents) that affect their willingness to address the development of sexuality in childhood on a four-point Likert-type scale (1=makes me more willing; 2= has no effect; 3=makes me less willing; 4=I choose not to answer).

The next two questions, created by the research team, assessed the following RSHCAS training objective #7: to promote workshop to other related service providers (both internal and external). Participants were asked how likely they were to recommend the RSHCAS workshop to colleagues on a 5-point Likert-type scale (1=very likely; 2=likely; 3= neutral; 4=somewhat unlikely; 5=very unlikely), and then given an opportunity to expand on their response in an open-ended question.

Finally, to capture demographic information participants were asked questions about their age (developed by research team), gender (adapted from Cohen et al., 2004), race/ethnicity, religion (adapted from Cohen, et al., 2004), role in their early learning setting, age of children they work with, and number of years working in early learning (developed by the research team). To provide greater context to participants' workplace settings, they were asked whether their employment setting had a sexual health policy (created by the research team, see Appendix G).

Results and Discussion

What are Early Learning Professionals’ Perceptions of Addressing Sexuality in Childhood?

Qualitative and quantitative data were collected to provide insight into ELPs’ perceptions of addressing sexuality in childhood. Participants were given open-ended questions to express areas of concern with sexuality education for children. Twelve participants answered both pre- and post-intervention surveys and five themes resulted from the thematic analysis: talking with children, talking with parents, no concerns, not enough training/resources for staff and addressing children in a developmentally appropriate way (see Table 1).

Table 1. *Child Care Providers’ Concerns Addressing the Development of Sexuality*

	Pre-test		Post-test	
Themes	%	*n*	%	*n*
Talking with children	50	6	25	3
Talking with parents	33	4	25	3
No concerns	17	2	50	6
Not enough training/resources for staff	42	5	1	1
Addressing children in a developmentally appropriate way	1	1	33	4

It is notable that the respondents who reported they had no concerns (50%; n=6) in the post-intervention survey highlighted an area of concern in the pre-intervention survey. One participant who stated they had no concerns in the post-intervention survey stated “my area of concern is understanding and overcoming the thin line between redirecting self-touch in preschoolers, so they won’t feel embarrassed” in the pre-intervention survey. This suggests that, for this participant, the concerns they had before the RSHCAS workshop were addressed.

Furthermore, while only one participant spoke to the theme of addressing children in a developmentally appropriate way in the pre-intervention survey, 33% (n=4) wrote about it in the post-intervention survey. It is plausible that the RSHCAS training triggered thoughts about what is developmentally appropriate and opened the door to more questions. For example, one participant stated “I am just looking to educate myself more so I get a clear understanding in how I would approach children, parents/guardians of differing issues towards sexual health in a professional [manner] with accurate information” in the pre-test, and stated “I don’t think at 3 years old they need the details”. Although it is likely that this participant had not thought of sexual health education for preschool children before, learning about sexuality with a developmental lens addresses children's learning needs at different ages and stages.

The remainder of the survey questions to capture ELPs’ perceptions are quantitative. For all of the following questions there were 27 participants who responded to the pre-intervention survey, and 25 to the post-intervention surveys. ELPs were asked when developmentally appropriate sexuality education should begin, 52% (n=14) stated in preschool, 30% (n=8) in Grades K-3, and 19% (n=5) in Grades 4-5 in the pre-intervention survey. The results were

similar in the post-intervention survey (*n*=25), with an increase to 64% (*n*=16) of participants believing sexual health education should begin in preschool. Similarly, 70% (*n*=19) of ELPs in the pre- and 80% (*n*=20) in the post-intervention surveys felt they strongly agreed or agreed that sexuality education should begin in early learning settings. These findings align with the mandate and content of the RSHCAS training that highlights prevention, where, for example, access to and knowledge of information about sexuality in the early years lays the foundation to communicating about more complex sexuality issues in the later years. Furthermore, 85% (*n*=23) of participants felt they strongly agreed or agreed that sexuality education should be a shared responsibility between parents and ELPs in the pre-intervention survey; whereas, slightly fewer participants 76% (*n*=19) reported this in the post-intervention survey. Twenty percent of participants reported being neutral to this question in both pre- and post-intervention surveys. Collectively, these findings suggest that ELPs understand the importance of starting sexuality education in the early years, delivered in partnership between parents and ELPs – at home and in early learning settings.

Fifty-six percent (*n*=15) of ELPs reported they were unsure if they had sufficient sexual health training in the pre-intervention survey; whereas, a notable decrease in the post-intervention survey was observed, with 32% (*n*=8) feeling uncertain. This is likely due to the information gained from the RSHCAS workshop. Although there is ambiguity in ELPs' perceptions in the amount of sexual health training they had, 37% (*n*=10) reported the actual delivery of sexuality education in their workplace as 'fair' in the pre-, and 48% (*n*=12) in the post-intervention surveys. This finding suggests that some participants may use their 'common sense' about sexuality and teach from their unique perspectives (Balter et al., 2018). Approximately an equal number of participants stated that they either did not know how to rate the quality of sexuality education in their early learning setting or stated there was no sexuality education in their early learning setting, with 22% (*n*=6) and 24% (*n*=6) reporting this in the pre- and post-intervention surveys.

Knowledge, Comfort, and Willingness

It was hypothesized that participant knowledge and comfort would increase from pre- to post-intervention evaluations. These hypotheses were partially supported. Overall, participants reported significant increases in 12 of the 24 items assessing knowledge (see Table 2) comfort (see Table 3), and four of the 24 items assessing willingness (see Table 4) to address the development of sexuality in childhood.

Table 2. *Pre- and Post-test Comparison of Participant Knowledge*

	Pre-test		Post-test			
Items	Mean	*SD*	Mean	*SD*	*n*	t-statistic (*df*)
1. Understand the different stages of sexual development in children.	3.21	1.03	3.86	.80	28	-2.54(27)*

Items	Pre-test Mean	Pre-test *SD*	Post-test Mean	Post-test *SD*	*n*	t-statistic (*df*)
2. Use correct names for female genitals (e.g., vulva, urethra, vagina, labia, anus).	3.81	.83	4.15	.72	27	-1.67(26)
3. Use correct names for male genitals (e.g., penis, urethra, scrotum, testicles, anus).	3.81	.83	4.04	.85	27	-1.03(26)
4. Use correct functions of genitals (e.g., urinate, stool/bowel movement, pleasure).	4.19	.56	4.07	.83	27	.59(26)
5. Reproduction & Birth: Explain to children of the developmental age of 3 how babies are made (sexual intercourse).	2.59	1.28	3.30	1.17	27	-2.30(26)*
6. Reproduction & Birth: Explain to children of the developmental age of 3 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	2.33	1.14	3.07	1.24	27	-2.69(26)*
7. Reproduction & Birth: Explain to children of the developmental age of 6 how babies are made (sexual intercourse).	2.82	1.33	3.46	1.07	28	-2.54(27)*
8. Reproduction & Birth: Explain to children of the developmental age of 6 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	2.56	1.22	3.15	1.23	27	-2.35(26)*
9. Reproduction & Birth: Explain to children of the developmental age of 11 how babies are made (sexual intercourse).	3.22	1.25	3.56	1.05	27	-1.30(26)
10. Reproduction & Birth: Explain to children of the developmental age of 11 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	3.04	1.09	3.44	1.15	27	-1.79(26)+
11. Reproduction & Birth: Explain how babies develop in a uterus.	3.07	.96	3.52	1.12	27	-2.13(26)*
12. Reproduction & Birth: Explain how babies are delivered (vaginal birth).	2.96	1.13	3.59	1.01	27	-2.40(26)*
13. Reproduction & Birth: Explain how babies are delivered (C-section).	2.89	1.05	3.67	.96	27	-3.15(26)**
14. Self Touching: Setting the boundary that masturbation/ self-touching of the genitals should only be done in private (Males).	3.30	1.23	3.85	1.20	27	-2.58(26)*
15. Self Touching: Setting the boundary that masturbation/ self-touching of the genitals should only be done in private (Females).	3.44	1.09	3.81	1.30	27	-1.68(26)
16. Family Diversity: Including gay (male/ male; female/female), heterosexual (male/female), trans, single parents, extended families, blended families, LGBT families, and adoption in discussion of family.	4.00	1.04	4.11	.97	27	-.50(26)
17. Family Diversity: Including differently abled [e.g., blind, hearing, wheelchair] people in discussions of family.	4.07	1.00	4.41	.57	27	-1.88(26)+
18. Family Diversity: Including different cultures/ethnicities, and belief systems in discussions of family.	4.07	1.07	4.15	.82	27	-.33(26)

Items	Pre-test Mean	Pre-test *SD*	Post-test Mean	Post-test *SD*	*n*	t-statistic (*df*)
19. Gender: Provide access to a wide range of gender-neutral toys.	4.04	1.00	4.08	1.02	26	-.18(25)
20. Gender: Encourage gender-neutral play (e.g., girls playing with dolls; boys playing with cars); in other words, children of any gender choosing to play with any play items regardless of the gender typically associated with them.	4.26	.90	4.52	.75	27	-1.37(26)
21. Gender: Address diversity of gender expression in children.	3.56	.97	3.89	.97	27	-1.51(26)
22. Child Sexual Abuse Prevention: Explain the difference between public and private body parts.	3.85	1.13	4.19	.88	27	-1.56(26)
23. Child Sexual Abuse Prevention: Explain boundaries of who can help with private parts (i.e., parents, childcare workers who help with toilet, a doctor in the presence of parents).	3.63	1.21	4.22	.85	27	-2.47(26)*
24. Child Sexual Abuse Prevention: Explain to children that if an adult or older child does touch their private parts to tell a trusted adult (parent, teacher).	4.00	1.04	4.30	1.03	27	-1.69(26)

+*p*<.1; **p*<.05; ***p*<.01; ****p*<.001

Table 3. *Pre- and Post-test Comparison of Participant Comfort*

Items	Pre-test Mean	Pre-test *SD*	Post-test Mean	Post-test *SD*	*n*	t-statistic (*df*)
1. Understand the different stages of sexual development in children.	3.29	1.16	3.83	.82	24	-2.50(23)*
2. Use correct names for female genitals (e.g., vulva, urethra, vagina, labia, anus).	3.54	1.10	4.08	.78	24	-2.50(23)*
3. Use correct names for male genitals (e.g., penis, urethra, scrotum, testicles, anus).	3.63	.97	4.00	.72	24	-1.99(23)+
4. Use correct functions of genitals (e.g., urinate, stool/bowel movement, pleasure).	4.00	.93	3.96	.81	24	.20(2)
5. Reproduction & Birth: Explain to children of the developmental age of 3 how babies are made (sexual intercourse).	2.79	1.25	3.13	1.12	24	-1.56(23)
6. Reproduction & Birth: Explain to children of the developmental age of 3 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	2.63	1.28	3.13	1.15	24	-1.96(23)+
7. Reproduction & Birth: Explain to children of the developmental age of 6 how babies are made (sexual intercourse).	2.88	1.33	3.42	.97	24	-2.12(23)*
8. Reproduction & Birth: Explain to children of the developmental age of 6 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	2.96	1.33	3.38	.97	24	-1.64(3)

Items	Pre-test Mean	Pre-test *SD*	Post-test Mean	Post-test *SD*	*n*	t-statistic (*df*)
9. Reproduction & Birth: Explain to children of the developmental age of 11 how babies are made (sexual intercourse).	3.21	1.25	3.71	.91	24	-2.30(23)*
10. Reproduction & Birth: Explain to children of the developmental age of 11 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	3.08	1.35	3.63	1.01	24	-1.84(23)+
11. Reproduction & Birth: Explain how babies develop in a uterus.	3.25	1.19	3.83	.87	24	-2.43(23)*
12. Reproduction & Birth: Explain how babies are delivered (vaginal birth).	3.42	1.06	3.54	.78	24	-.62(23)
13. Reproduction & Birth: Explain how babies are delivered (C-section).	3.48	1.00	3.76	.88	25	-1.19(24)
14. Self Touching: Setting the boundary that masturbation/ self-touching of the genitals should only be done in private (Males).	3.33	1.27	4.04	1.00	24	-4.04(23)**
15. Self Touching: Setting the boundary that masturbation/ self-touching of the genitals should only be done in private (Females).	3.25	1.33	4.00	.93	24	-3.71(23)**
16. Family Diversity: Including gay (male/ male; female/female), heterosexual (male/female), trans, single parents, extended families, blended families, LGBT families, and adoption in discussion of family.	4.08	1.06	4.29	.62	24	.-.96(23)
17. Family Diversity: Including differently abled [e.g., blind, hearing, wheelchair] people in discussions of family.	4.04	1.08	4.54	.51	24	-2.40(23)*
18. Family Diversity: Including different cultures/ethnicities, and belief systems in discussions of family.	3.96	1.04	4.38	.77	24	-2.20(23)*
19. Gender: Provide access to a wide range of gender-neutral toys.	4.24	1.01	4.36	.81	25	-.57(24)
20. Gender: Encourage gender-neutral play (e.g., girls playing with dolls; boys playing with cars); in other words, children of any gender choosing to play with any play items regardless of the gender typically associated with them.	4.42	.97	4.46	.72	24	-.21(23)
21. Gender: Address diversity of gender expression in children.	4.00	.90	4.30	.70	23	-1.58(22)
22. Child Sexual Abuse Prevention: Explain the difference between public and private body parts.	4.22	.85	4.30	.88	23	-.44(22)
23. Child Sexual Abuse Prevention: Explain boundaries of who can help with private parts (i.e., parents, childcare workers who help with toilet, a doctor in the presence of parents).	4.08	.97	4.42	.78	24	-1.70(23)
24. Child Sexual Abuse Prevention: Explain to children that if an adult or older child does touch their private parts to tell a trusted adult (parent, teacher).	4.08	1.02	4.46	.72	24	-1.57(23)

+p<.1; *p<.05; **p<.01; ***p<.001

Table 4. *Pre- and Post-test Comparison of Participant Willingness*

	Pre-test		Post-test			
Items	Mean	*SD*	Mean	*SD*	*n*	t-statistic (*df*)
1. Understand the different stages of sexual development in children.	3.48	1.17	3.71	.96	21	-.82(20)
2. Use correct names for female genitals (e.g., vulva, urethra, vagina, labia, anus).	3.52	1.08	3.86	.85	21	-1.32(20)
3. Use correct names for male genitals (e.g., penis, urethra, scrotum, testicles, anus).	3.48	1.12	3.81	.98	21	-1.32(20)
4. Use correct functions of genitals (e.g., urinate, stool/bowel movement, pleasure).	3.90	1.09	3.86	.91	21	.18(20)
5. Reproduction & Birth: Explain to children of the developmental age of 3 how babies are made (sexual intercourse).	2.81	1.17	3.14	1.06	21	-1.38(20)
6. Reproduction & Birth: Explain to children of the developmental age of 3 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	3.52	1.08	3.14	1.01	21	-2.77(20)*
7. Reproduction & Birth: Explain to children of the developmental age of 6 how babies are made (sexual intercourse).	2.67	.80	3.10	1.04	21	-2.12(20)*
8. Reproduction & Birth: Explain to children of the developmental age of 6 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	2.67	.97	3.19	1.03	21	-2.14(20)*
9. Reproduction & Birth: Explain to children of the developmental age of 11 how babies are made (sexual intercourse).	3.05	1.07	3.33	1.11	21	-1.30(20)
10. Reproduction & Birth: Explain to children of the developmental age of 11 how babies are made (assisted reproductive technology [i.e., sperm bank, IVF, surrogacy]).	2.95	1.20	3.48	1.03	21	-1.81(20)+
11. Reproduction & Birth: Explain how babies develop in a uterus.	3.14	1.01	3.52	1.08	21	-1.36(20)
12. Reproduction & Birth: Explain how babies are delivered (vaginal birth).	3.14	1.01	3.29	.90	21	-.51(20)
13. Reproduction & Birth: Explain how babies are delivered (C-section).	3.24	.94	3.48	1.08	21	-.89(20)
14. Self Touching: Setting the boundary that masturbation/ self-touching of the genitals should only be done in private (Males).	3.38	1.32	3.67	1.11	21	-1.00(20)
15. Self Touching: Setting the boundary that masturbation/ self-touching of the genitals should only be done in private (Females).	3.33	1.32	3.67	1.11	21	-1.20(20)
16. Family Diversity: Including gay (male/ male; female/female), heterosexual (male/female), trans, single parents, extended families, blended families, LGBT families, and adoption in discussion of family.	4.10	.94	4.19	1.03	21	-.36(20)

Items	Pre-test Mean	Pre-test *SD*	Post-test Mean	Post-test *SD*	*n*	t-statistic (*df*)
17. Family Diversity: Including differently abled [e.g., blind, hearing, wheelchair] people in discussions of family.	4.05	1.02	4.19	1.03	21	-.50(20)
18. Family Diversity: Including different cultures/ethnicities, and belief systems in discussions of family.	4.14	.96	4.10	.94	21	.18(20)
19. Gender: Provide access to a wide range of gender-neutral toys.	4.52	.81	4.24	1.01	21	1.24(20)
20. Gender: Encourage gender-neutral play (e.g., girls playing with dolls; boys playing with cars); in other words, children of any gender choosing to play with any play items regardless of the gender typically associated with them.	4.52	.68	4.24	1.00	21	1.45(20)
21. Gender: Address diversity of gender expression in children.	4.33	.80	4.38	1.02	21	-.20(20)
22. Child Sexual Abuse Prevention: Explain the difference between public and private body parts.	4.19	.87	4.38	1.02	21	-.78(20)
23. Child Sexual Abuse Prevention: Explain boundaries of who can help with private parts (i.e., parents, childcare workers who help with toilet, a doctor in the presence of parents).	4.24	.83	4.33	1.11	21	-.38(20)
24. Child Sexual Abuse Prevention: Explain to children that if an adult or older child does touch their private parts to tell a trusted adult (parent, teacher).	4.14	.96	4.38	1.02	21	-.96(20)

+$p<.1$; *$p<.05$; **$p<.01$; ***$p<.001$

The content aligning with the following training objectives: a) to increase awareness/knowledge of the complexity of sexuality, and b) review and/or increase knowledge on the sexual growth and development stages of children up to the age of 12, offers an explanation to increases in both participant knowledge and comfort. Specifically, as shown in Tables 2 and 3, paired dependent t-tests resulted in significant increases in knowledge and comfort in addressing sexual development stages in children. There was no increase on participant reports of knowledge or willingness to use proper terminology for genitals. However, significant increases in comfort for the use of proper terminology for genitals resulted. Teaching children the proper terminology for their genitals not only lays the foundation for subsequent sexual health education, but also gives *naming power* to explain and describe themselves and objects in their environment (Kenny & Wurtele, 2008). Naming power is an important part of child sexual abuse prevention, as having shared vocabulary makes disclosures more likely to be understood by adults (Kenny & Wurtele, 2008). The content addressing language throughout the RSHCAS workshop normalizes the use of proper terminology for genitals and is likely the reason for an increase in comfort specifically. To explain the non-significance of knowledge, comfort or willingness on explaining the functions of genitals, it is assumed that ELPs already

possess the knowledge, comfort, and willingness to address the functions of genitals that comes with the routine of toilet training.

Participants reported increases in knowledge, comfort, and willingness on many of the items about reproduction and birth, specifically explaining how babies are made, where they develop, and how they are delivered, to children of different developmental ages. The RSHCAS training provides ELPs sexuality information, while also modelling language regarding how to explain reproduction in a developmentally appropriate way. It is likely that ELPs tread lightly and silence questions about reproduction and birth as fears of negative parental reactions, and a lack of sexual health policy and administrative support may leave ELPs uncertain about how to approach these topics (Balter et al., 2016; 2018). Furthermore, Robinson (2005) discusses how knowing about sexuality and reproduction is in direct opposition to innocence, which may also contribute to omitted conversations. As ELPs are seldom trained in information about the development of sexuality in childhood (Balter et al., 2018), the content on how to talk to children at different developmental stages fills a gap in knowledge in ELPs (Balter, et al., 2016, 2018) resulting in the increases seen here.

Participant knowledge increased for setting boundaries around masturbation/self-touching for males, but not females. It is likely that because the majority of participants identified as women they already have the knowledge about setting boundaries around masturbation/self-touching for females. Comfort levels increased significantly for both males and females. Self-touching is a typical behaviour in early childhood (Family Planning Queensland, 2012), with more self-exploration in the early years than in the middle years (Carroll, 2013). Perhaps normalizing this behaviour as developmentally typical throughout the workshop contributes to ELPs comfort.

A human rights perspective acts to normalize different identities and experiences. Of the three items making up the family diversity sub-scale, participants reported increases in both knowledge and comfort to including differently-abled (e.g., those who are blind, have hearing impairments, or require wheelchairs for mobility) people in discussions of family. Knowledge, comfort, or willingness did not change for the inclusion of lesbian, gay, bisexual, transgender (LGBT) families and diverse culture, ethnicities and belief systems. Perhaps the information on inclusion for differently-abled families was newer for RSHCAS participants. Furthermore, none of the items addressing gender were found to be significant for knowledge, comfort or willingness. Collective understanding of gender has evolved to an understanding of gender as a continuum rather than a binary (Rahilly, 2015). It is plausible that ELPs taking part in this evaluation are already versed in gender development and non-stereotypical gender play.

Lastly, participants reported significant increases in knowledge on one of three items comprising the child sexual abuse prevention sub-scale. Participants reported an increase in knowledge in their ability to explain boundaries of who can help with private parts. Informing children that no one can touch their genitals is common practice. However, doctors and/or nurses, parents, and ELPs are an exception to this message, during check-ups, bath time, diapering and toilet training. Naming the specific people and explaining why they are able to

help with private parts provide practical information that participants may not have had prior to the RSHCAS training. Furthermore, there were no increases in knowledge, comfort, or willingness to explain the difference between public and private body parts, or to explain to children that if anyone touches their private parts to tell a trusted adult. Previous research shows that the most commonly cited type of sexuality education ECEs receive is child sexual abuse prevention (Balter et al., 2018), which is explicit in distinguishing the differences between public and private as well as violating touches from anyone.

What Factors Affect Willingness to Address the Development of Sexuality in Childhood?

There are no notable changes in most of the 13 factors assessed between the pre- and post-intervention analyses. Parental reactions, either positive or negative, seem to impact ELPs' willingness to address the development of sexuality in childhood. Of the 27 participants who responded to the pre-test, 85% (*n*=23) stated they are more likely to address the development of sexuality when they anticipated positive parental reactions. The post-test responses were similar to that of the pre-test with 76% (*N*=26, *n*=19). Conversely, when participants anticipated negative parental reactions they reported being less willing to address sexuality, with 46% (*N*=26, *n*=12) and 64% (*N*=25, *n*=16) reporting this in the pre- and post-intervention assessments respectively. It is not surprising that parental approval or disapproval is an influential factor that guides whether ELPs are willing to address sexuality. Incorporating sexual health policies within early learning centres would provide clear guidelines for both parents and ELPs on how sexual development is addressed in the early learning setting.

Furthermore, given that slightly more than half of participants stated that teaching content that conflicts with personal beliefs had no effect on their motivation, both pre- (52%, *N*=25, *n*=13) and post-intervention (56%, *N*=25, *n*=14) surveys provided insight to the ability of ELPs to put aside their biases and address what is necessary. Similarly, half of the participants (*N*=26, *n*=13) reported that their personal comfort talking about sexuality made them more willing to address sexuality in the pre-test survey; whereas, a decline in participants reporting this (32% (*N*=25, *n*=8) is seen in the post-test survey. Interestingly, the numbers shifted from the 'more willing' to the 'had no impact' option in the post-test survey with 28% (*N*=25, *n*=7) of participants stating this, compared to 19% (*N*=26, *n*=5) in the pre-test survey. This may be an outcome of learning about the development of sexuality in childhood. These findings shed insight to the possibility that a one-day professional development workshop, although informative, does not contribute to changes in the deeper factors affecting motivation.

Would Early Learning Professionals Recommend the Raising Sexually Healthy Children for Agency Staff Training?

Overall, of the 22 participants who responded to the post-intervention question asking if they would recommend the RHSCAS training to a colleague, 68% (*n*=15) stated 'very likely' and 32% (*n*=7) reported 'somewhat likely. Twenty-one participants elaborated on why they rated their recommendation as they did. Three themes, information and resources (*n*=16),

inclusiveness (*n*=4), and discomfort in sexuality education (*n*=3), were present within the responses. Of the participants who discussed information and resources, most spoke about how helpful and practical the information was. One participant stated, "I think the information was very useful, especially for educators who work with school aged children. I think it gave some great tips for preschool groups as well". Another stated "Very informative on how to speak to children about considerably sensitive subjects. Would recommend to preschool and after school teachers". Some participants wanted more information about talking with families as illustrated by the following respondent, "[t]he workshop provide[s] [useful] information and resources. Would be helpful to get a few more strategies how to talk to families about raising sexually healthy children". These comments represent an acknowledgement of necessary information about sexuality that ELPs require while working with different age groups.

The theme of inclusion is represented by comments about identity and diversity. One participant mentioned, "it is a good reminder regarding how encouraging we should be and allow children to define their own identities". Another participant highlighted that inclusion is pivotal to the field of early learning, they stated "[a]n awareness and sensitivity to feelings, inclusion, and others are very important as childhood educators". One participant wanted more information about diversity, they stated "[i]t was a great workshop. I wished it touched more on understanding different sexuality in children". Addressing the many identities we as humans carry is implicit to sexuality education and contributes to practicing from a holistic perspective.

Lastly, the theme of discomfort is represented by assumptions made about those who may feel uncomfortable with addressing sexuality in childhood. Participants' comments reflect their awareness that not everyone is comfortable addressing sexuality in childhood. One participant stated, "some co-workers will benefit and use the information and others will not, due to their beliefs and background". Another disclosed their perception of their colleagues in their workplace, "currently, in my centre, there are many staff who either from their cultural reasons or faith based reasons, they would feel uncomfortable or challenged by the type of questions or comments that children would make". Sexuality education is a contentious issue, thus it is not surprising that there is an awareness that some will not be comfortable addressing sexuality in childhood.

What are the Impacts of the Raising Sexually Healthy Children for Agency Staff Training?

Thirteen participants responded to this question, with 62% (*n*=8) responding favourably, and 38% (*n*=5) who stated there was no impact. Three of the participants who reported experiencing no impact explained that there had not yet been an opportunity to apply the information, for example, "no issues have come up in order to use strategies/incorporate discussions in our centre. So impact has not been felt". Another pointed to the fact that the information is not as applicable with different ages, for example, "It started a conversation but has not had much impact in the infant room". These responses reflect that ELPs are waiting for an opportunity to use the knowledge learned from the RSHCAS training, and are willing to share the information with colleagues.

Four themes, communication, increased confidence, increased comfort, and increased knowledge were patterned out of the responses from participants who reported impacts. Sixty-three percent of participants (n=5) wrote about communication, which denotes knowledge sharing with children, parents, and staff. One participant stated, “I educated the staff members and we order[ed] the pamphlet for all the parents”. Another stated, “Yes, it has assisted in day to day [i]nquiries from parents and other staff”. Thirty-eight percent of participants (n=3) discussed increased confidence. One participant stated “I am more confident knowing how questions should be answered, e.g., ‘what do you think’? ‘That is a great/important question, let’s find out together with your parents’ etc.” Twenty-five percent of participants (n=2) reported on increased comfort. One participant stated, “I am better able to answer questions that the children have, and more comfortable using the correct terms for body parts”. The vast majority, 88% of participants, (n=7) wrote about the RSHCAS workshop increasing their knowledge. One participant's comments summarize the groups statements, “it [the workshop] helped answer some questions I have about how to properly deal with pleasuring in the classroom, [in] a way that does not shame the child”.

Recommendations

A majority of participants reported that sexuality education should be a joint partnership between parents and ELPs. Furthermore, the findings illustrate that parental reactions, positive or negative, impact ELPs’ willingness to address sexuality. In Bailystock’s (2016) analysis of the controversy surrounding the Ontario Ministry of Education’s Health and Physical Education Curriculum (that includes sexual health education), she states, “the liberal state must be committed to providing mandatory sex education as a matter of justice” (p. 11) for school-aged children. We propose that addressing the development of sexuality and gender in the early years is also a matter of justice and recommend early learning settings to adopt a policy that reflects the education in this developmental domain. Thus, inclusion of how to communicate a sexual health policy to parents is pertinent content to be included in the RSHCAS workshop.

Second, in light of the findings on ELPs concerns with sexuality/sexual health education for children, it is suggested to reinforce the content on developmental appropriateness. Although only a few participants spoke to this theme, previous research findings show uncertainty about what ELPs understand as being developmentally appropriate (Balter, et al., 2016; 2018). Numerous factors (e.g., religion, culture) influence strong opinions about what is developmentally appropriate, however there is ample research from the child sexual abuse (e.g., Frederich & Trane, 2002) and general sexual development (e.g., Carroll, 2013) literature that provides an evidence based answer to this question. Including more content that aims to normalize sexuality stems from this developmental approach.

Third, as only four of the 24 items assessing willingness to address the development of sexuality were significant, it is encouraged to conduct further research on best practices for professional development that action change. The Canadian Guidelines for Sexual Health Education (Public Health Agency of Canada, 2008) outline a philosophy of practice to deliver

sexual health education. One of its principles is training and administrative support, whereby "[s]exual health education should be presented by confident, well-trained, knowledgeable and nonjudgmental individuals who receive strong administrative support from their agency or organization" (p. 23). This evaluation demonstrates that participants feel the RSHCAS workshop enhances some of these elements, but it takes a village to create an environment where this philosophy can come into fruition.

In a review of the literature on best practices in professional development (PD), Han (2014) states "effective PD should include learning experiences not just developing knowledge for practice, but also developing knowledge in practice and knowledge of practice" (p. 172). Han continues to describe a model of best practices to teach children about social competence which is inclusive of "providing opportunities for participants to receive feedback on their implementation", and "guiding participants to reflect on their own practices" (p. 173). The practice of feedback or coaching and reflection has been referenced in numerous studies examining best practices approaches to professional development for educators (e.g., Hadley, Waniganayake, & Shepherd, 2015; Pianta, 2011). Given this, perhaps ELPs could be encouraged to explore opportunities for peer mentorship. This would provide an internal opportunity for ELPs to reflect on their practice and receive ongoing feedback, leading to an increase in staff capacity to address the development of sexuality in childhood and result in more consistent support for children.

From the findings of this evaluation, and as suggested in Balter et al., (2018), an interdisciplinary partnership of professionals working in the field of sexuality should explore developing a curriculum on sexuality education for early childhood. This would act to support ELPs practice of addressing development holistically and simultaneously clarifying developmentally appropriate content for children at different ages.

Limitations

First, the evaluation design results in several limitations in interpreting the outcomes. The findings of this evaluation cannot determine whether the RSHCAS workshop caused the changes seen in this report as the design does not lend itself to causal analyses (Creswell, 2015). The change in evaluation design at the midpoint of the project resulted in the deletion of the third measurement point at three months post-intervention. As such, it cannot be concluded whether increases in different aspects of perceptions, knowledge, comfort, or willingness will translate into action. Future evaluations should employ post-intervention follow up, past two weeks, to get a better understanding of the longer term impacts of increases in knowledge, comfort, and willingness. Future evaluations should also use a more robust evaluation design such as a randomized control trial (RCT), which would allow for the causes of changes to be determined as well as comparisons between groups to be made (Creswell, 2015).

Second, the small sample should caution on how the findings in this report are understood. Results cannot be generalized to the general population of ELPs based on a small sample size (Creswell, 2015). Furthermore, to calculate one-tailed tests of significance a

minimum of 64 participants are required (Onwuiegbuzie et al., 2004, as cited in Collins, 2003), therefore the statistical analyses presented here are less robust due to the small sample size and should therefore be interpreted with caution (Olesya Falenchuk, personal communication, October 2017). Feedback from workshop participants and Toronto Public Health workshop facilitators offer insight in explaining the small sample size; notably, the length and literacy level of the survey acted as a barrier. In the future, a more simplified survey may render a larger participation rate.

Third, bias is a known issue in both self-reported data (Rosenman, Tennekoon, & Hill, 2011) and volunteer self-selection (Creswell, 2015). Self-reported data response bias, where "some individuals might offer biased estimates of self-assessed behaviour, ranging from a misunderstanding of what a proper measurement is to social-desirability bias, where the respondent wants to 'look good' in the survey, even if the survey is anonymous (Rosenman, et al., 2011, p. 320) is likely. Self-selection or volunteer bias suggests that there is something qualitatively different about participants who choose to volunteer to be involved in research than those that do not. Given both of these biases, results should be interpreted in light of the knowledge that both response and self-selection biases may be present.

Lastly, in the Time 1 survey, open-ended questions assessing participants' perceptions about the benefits and drawbacks of a sexual health policy, aligning with the RSHCAS training objective 'to increase awareness/knowledge of benefits of a sexual health policy' were asked. These questions were not asked in the Time 2 survey which is a limitation of this study. However, understanding how ELPs perceive the impacts of a sexual health policy is important information that can perhaps be integrated into future RSHCAS training.

Conclusion

This evaluation contributes to a deeper understanding of the successes of the RSHCAS training and filling a gap in sexuality education for ELPs, while also providing evidence for the RSHCAS training (MOHLTC, 2017). Recommendations have been made to reinforce the success of the RSHCAS training by emphasizing parent-educator communication of an early learning setting sexual health policy and exploring peer mentorship opportunities for ELPs. As the province of Ontario is going through sexual health education curriculum repeals, this is an opportune time to think about and understand the importance of providing developmentally appropriate education for children as being a proactive and preventative strategy to the sexual health and well-being of children as they grow into adolescents and adults.

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