Child Maltreatment: Investigating Attitudes and Reporting Practices of School-Based Speech-Language Pathologists

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Abstract

Purpose: Mandated reporting of suspected child maltreatment is an essential step in promoting child safety. Given the age range of maltreated children in the United States, school-based speech-language pathologists (SLP) have an opportunity to play an important role in the prevention of such acts. Understanding the factors that predict an individual's likelihood of reporting abuse can potentially abate maltreatment occurrence and child mortality. The Theory of Reasoned Action (TRA) served as the theoretical framework on which this study was based. The specific aims centred on examining whether a significant relationship exists between school-based speech-language pathologists' reporting practices and their attitudes toward maltreatment (e.g., commitment, confidence, and concern) while controlling for demographic variables (e.g., gender and ethnicity).

Method: This study utilized a convenience sample (*N*=117) of licensed school-based SLPs employed full-time throughout the United States; respondents completed an online survey that used Likert-style questions, short vignettes, and dermatologic images of possible maltreatment. Analysis was completed using hierarchical multiple regression.

Result: The final model explained 85.4% of the variance of reporting practices of school-based SLPs.

Conclusion: The findings suggest that as school-based SLP's attitudes - commitment, confidence, and concern - increase, so does the likelihood they will report alleged child maltreatment.

Keywords: Ethic; Child maltreatment; Schools; Reporting practices; Abuse; Neglect

Introduction

The National Statistics on Child Abuse (2015) reports that nearly 700,000 children are abused in the United States annually (U.S. Department of Health and Human Services, 2015). The consequences of maltreatment are long-lasting and impact children's mental, physical, and behavioural welfare well into adulthood [1]. The United States Department of Health & Human Services estimated that 1,720 children died of abuse and neglect at a rate of 2.32 children per 100,000 in the national population [2]. The Secretary of U.S. Department of Health and Human Services (DHHS) reported more than half of abused children (54.5%) were school-age 7 years or younger. The second largest group (24.1%) of confirmed cases of maltreatment included children ranging from 4-7 years of age [3].

Mandated reporting is an essential step in promoting child safety. Given the age range of maltreated children, school-based speech-language pathologists (SLP) have an opportunity to play an important role in the prevention of such acts. According to the most recent American Speech-Language-Hearing Association (ASHA) membership and affiliation counts, more than half (52.3%) of clinical service providers identified their employment setting as educational or school-based [4]. Understanding the factors that predict an individual's likelihood to report abuse can potentially abate maltreatment occurrence and child mortality. To this end, the field of speech-language pathology is positioned to make a significant impact.

Child maltreatment

The World Health Organization (WHO) defines child maltreatment as: The abuse and neglect that occurs to children under 18 years of age. It includes all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development, or dignity in the context of a relationship of responsibility, trust, or power.

Four subtypes can be distinguished in this comprehensive definition: physical abuse, sexual abuse, neglect, and emotional abuse. Physical abuse is commonly defined as intentional physical injury to a child or deed that results in a physical damage. Sexual abuse comprises human trafficking, including sex trafficking or trafficking of children for sexual reasons (Child Welfare Information Gateway, 2016). Neglect accounts for 75.4% of all abuse and is the failure of a child's caregiver to provide food, clothing, shelter, medical care, or guidance to the degree that the child's well-being is endangered (Child Welfare Information Gateway, 2016). Emotional abuse can be described as "injury to the psychological capacity or emotional stability of the child [as evidenced by change in] behavior, emotional response, or cognition" [5]. The number of children who received a child protective service (CPS) response is alarmingly high with nearly 3.5 million alleged maltreatment acts reported/investigated in 2017(U.S. Department of Health & Human Services, 2019).

History

The *Child Abuse Prevention and Treatment Act* (CAPTA) is a federal law that directs federal funds exclusively to assist state efforts in preventing child abuse and neglect. CAPTA requires all states that

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receive funds to provide specific data, to the extent attainable, about children who have been maltreated (U.S. Department of Health and Human Services, 2019). In May 2015, the Justice for Victims of Trafficking Act of 2015 was signed into law. This law includes an amendment that requires each state to report the number of children determined to be victims of sex trafficking. CAPTA reinforces efforts to eliminate child abuse by supporting research, evaluation, technical assistance, and data collection. Furthermore, the funds provided to states are to be used in support of prevention, assessment, investigation, prosecution, and treatment activities as well as grants to public agencies and non-profit organizations. Nonetheless, child maltreatment persists.

The *Individuals with Disabilities Education Improvement Act* (IDEIA), Part B, provides special education and related services to children and youth with disabilities who are 3-21 years of age [6]. This law ensures each child - with a documented disability - a free appropriate public education tailored to his or her individual needs and provides services in the least restrictive environment possible. IDEIA also guarantees the right of children and their guardians to evaluations and access to all meetings and official procedures. Additionally, IDEIA mandates that children with any of 13 possible educationally handicapping conditions be eligible for special education services [7]. Speech/language Impairment is one of the possible conditions and is also one of the most frequently cited across states. Moreover, approximately 13% victims of maltreatment also have a disability. Consequently, school-based SLPs have – historically - reported large caseload numbers, thus increasing the likelihood that many of the children served may also have experienced some form of abuse, neglect, and/or trauma [8].

In most states, professions that engage in regular contact with children are listed as mandatory reporters. These professional groups include health care providers, law enforcement personnel, social service personnel, teachers, childcare providers, and mental health clinicians. Though states may differ with regard to who is a mandatory reporter, anyone who knows or suspects that child abuse has occurred is required by law to make a report, including SLPs [9-14].

Research regarding child abuse reporting practices in the educational setting is abundant; however, the vast majority of the literature is aligned with the classroom setting or teachers identified an estimated 84% of cases of suspected child abuse and neglect in schools are not reported [15]. The literature is clear that under-reporting occurs despite teachers' commitment—and requirement—to the prevention of child maltreatment. Dinehart and Kenny conducted a study with 137 early care and education practitioners (ECE) in Florida which examined reporting practices of child abuse [16]. This study found that 88% of ECE teachers did not report suspected child abuse. Furthermore, Walsh, Bridgstock, Farrell, Rassafiani, and Schweitzer found that compared with teachers working with older children (age 9-12 years) and those working in administrative or specialist roles (e.g., behaviour support teachers), teachers working with younger children (preschool to 8 years) were more likely to identify and report child abuse. Previous research suggests that reporting behaviour may be influenced by teachers' attitudes, detection skills, knowledge and training, social influences, teachers' personal characteristics and features of the abuse [15].

Speech-language pathology

It is plausible that many of the children seen by school-based SLPs may have been victims of maltreatment, given that expressive and receptive language deficits are often co-morbidly linked with child neglect and abuse [17]. Research has shown that children with a history of maltreatment are less verbal, frequently have delays in grammar and vocabulary, have limited receptive and expressive syntactic skills (morphemes and complex sentence construction), as well as delayed semantic skills (multiple word and sentence meanings) [18]. A child's early language problems may also be associated with other developmental disorders including but not limited to: intellectual disability, cerebral palsy, and/or autism spectrum disorders [19]. Moreover, children with disabilities are three times more likely to experience maltreatment than their nondisabled peers.

While the possibility is high that school-based SLPs are potentially one of the first professionals to encounter - and thus suspect - maltreatment, significant deterrents to reporting are suggested: a lack of knowledge of the indicators of abuse or how to report suspicions; anxiety of incorrectly reporting a child as being maltreated and the penalties of that action; and lack of confidence in child protective services to investigate the report [20]. Understanding a professional's attitudes about reporting child maltreatment is an important consideration in the effort at reducing the overall frequency of fatality. Prevention of maltreatment is paramount and is as important as any other mandated roles within the SLP scope of practice. To that end, the Theory of Reasoned Action (TRA) provides a plausible theoretical framework on which this study was based.

Theoretical framework

Theory of reasoned action: The Theory of Reasoned Action (TRA) is predicated on the concept that a person's intentions or behaviours are comprised of two essential factors: attitudes and subjective norms [21]. Specifically, a person's attitude about a given topic can be linked to their emotions and feelings. A person's subjective norms are often biased by their mentors, family, friends, media and/or perceptions of societal expectations. In short, a person's behaviours or actions are often informed and shaped by their feelings and life experiences. From the perspective of child maltreatment, one might posit that a school-based SLP's attitudes and subjective norms directly influence their decision (e.g., action) to report alleged maltreatment. Consistent with previous research, this study isolates the concept of attitudes into three primary areas: commitment (duty), confidence (trust), and concern (emotion) [22,23].

Specific aims: In their previous study, Smith, Mattingly, and Pitts examined the attitudes and associated reporting practices of SLP graduate students across the United States. This study aims to further narrow that gap in the lixterature by examining the attitudes and associated reporting practices of school-based SLP professionals. Specifically, the purpose of this study centred on examining whether a significant relationship exists between school-based speech-language pathologists' reporting practices and their attitudes toward maltreatment (e.g: commitment, confidence, and concern) while controlling for demographic variables (e.g: gender and ethnicity).

Method

All study procedures were approved by the University of South Carolina Institutional Review Board. The current study represents initial findings of the Early Language and Literacy Acquisition study.

This study and all procedures were approved by the University of Louisville Institutional Review Board.

Participants

This study utilized a convenience sample (*N*=117) of licensed school-based SLPs employed full-time throughout the United States. Participants were screened to verify their employment status. This number accounts for those SLPs removed from the sample subsequent to data screening. Participants were recruited via email and asked to complete an anonymous online survey concerning their attitudes about child maltreatment. Participants were invited to participate through their affiliation with ASHA's (American Speech-Language-Hearing Association) SIG 16 (Special Interest Group). SIG 16 is devoted to professionals employed and/or interested in school-based issues. The sample size comprised both males (*n*=3) and females (*n*=114). The gender ratio for this study is consistent across the profession, considering males currently comprise 3.7% of SLPs [1].

The majority of the participants self-identified as white (*n*=115); two participants designated themselves as non-white, ethnic/racial group. The planned analysis for this study is consistent with regression analysis. In order for a regression analysis to provide valid and reliable results, the recommended sample size involving more than two predictor variables is $N > 104 + k$; where N is the number of cases and the predictor variables are referred to as (k). As such, the minimum sample size for this study is 110.

Setting and Instrumentation

School-based SLPs completed the online survey via the Qualtrics platform. Qualtrics is an online survey tool that allows one to create and distribute surveys via the internet. The survey for this study was designed to be accessible via tablet, laptop, smartphone, and desktop computer. The survey was designed to take no more than 15 minutes. It remained open for approximately three weeks (21 days); participants were asked to complete the survey once. It is possible that some respondents may have completed the survey more than once. Prior to accessing the link, participants were informed (via SIG 16 post/link) regarding the possible risks or benefits of the study and the provision of their consent. The language used in both the post and the link read as follows: "Please be aware that your opening, completion, and/or submission of the survey implies your consent to participate". Participants were advised that no foreseeable risks were known other than the possible discomfort in answering personal questions and/or strong emotional responses given the nature of the research topic. The survey requested no personal/individual identifying information. The survey used for this study was patterned after the tools used by Smith, Mattingly and Pitts [19]. It was a combination of demographic questions, a validated instrument, ten short vignettes, and ten dermatologic-based images of possible child maltreatment. Participants were advised that the aforesaid vignettes and images may depict documented cases of child maltreatment. Prior

studies exploring child maltreatment used a Likert-type scale range from 1-7; this study utilized a seven-point Likert-type scale as well.

Variables

Predictor variables: The validated instrument used to measure the predictor variables of commitment, confidence, and concern was based on the Teacher Reporting Attitude Scale (TRAS) [23,24]. The TRAS is a three component attitude measure comprised of 14 items. The three attitude subscales that have been identified from the TRAS is commitment to the reporting role; confidence in the system's response to reports; and concerns about reporting. There are six questions related to commitment; three questions related to confidence; and five questions related to concern.

Self-administered response choices used a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Example statements per each of the attitudinal dimensions are provided in Table 1. High scores indicate positive attitudes about reporting practices. The original scale displayed good internal consistency and construct validity. Cronbach's α was noted per the following per the individual items: commitment (.77), confidence (.62), and concern (.66); total TRAS scale (.76) [23].

Criterion variable: The instrument used to measure the criterion variable included ten vignettes and ten skin-based images that depict possible types or imitations of child maltreatment. The color-based images and the vignettes were presented individually and were not timed. The color-based images were real photographs. Participants were requested to judge each vignette and image using a seven-point Likert-type scale ranging from 1 (definitely would not report) to 7 (definitely would report). High scores indicate increased awareness to report child abuse. Fifteen of the 20 vignettes (*n*=10) and images (*n*=5) depicted child maltreatment. An example vignette is provided.

Control variables: The demographic section included the control variables of ethnicity and gender. The control variables aided in determining the maximum level of variance for the criterion variable. Gender was coded where 0=male, 1=female, and 2=prefer not to say. Ethnicity was coded where 0=white, 1=non-white, ethnic/racial group, and 2=prefer not to say.

Data Analysis and Blocks

A hierarchical multiple regression (HMR) was used to apply the Theory of Reasoned Action [21] to the attitudinal factors (e.g., commitment, confidence, and concern) and reporting practices of school-based SLPs while controlling for ethnicity and gender. Hierarchical multiple regressions were used as the means of analysis due to the fact that the criterion variable can be predicted based on

Commitment
It is important for speech-language pathologists to be involved in reporting child maltreatment to prevent long-term consequences for children.
Reporting child maltreatment is necessary for the safety of children.
Confidence
I am confident that the appropriate authorities will respond effectively to reports of child maltreatment.
It is a waste of time to report child maltreatment because no one will follow up on the report.
Concern
I would be reluctant to report a case of child maltreatment because of what parents will do to the child if he/she is reported.
I would be apprehensive to report child maltreatment for fear of family/community retaliation.
Example Vignette
Nathan, a 6-year-old white child of a public relations executive and his wife, is repeatedly left outside the house after dark, often as late as midnight. Neighbours have spotted the child wandering five blocks away from the home.

Table 1: Example Statements from the TRAS.

multiple predictor variables. The predictor variables were entered into the regression model consistent with logic and based on similar studies examining attitudes toward child maltreatment and reporting practices [19]. Table 2 provides an overview per each of the four blocks.

Results

Descriptive statistics

Hierarchical multiple regression was used to assess reporting practices of school-based SLPs while controlling for demographic variables. This study utilized a convenience sample of 117 school-based SLPs working full-time across the United States. Table 3 presents the mean and standard deviations for the predictor and criterion variables.

Assumption testing

Assumption testing evidenced no significant violations of normality, homoscedasticity, linearity, and extreme outliers. There was linearity as assessed by partial regression plots and a plot of standardized residuals against the predicted values. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.90. There was homoscedasticity, as assessed by visual inspection of a plot of standardized residuals versus unstandardized predicted values. There were no standardized deleted residuals greater than ±3

standard deviations, no leverage values greater than 0.6, or values for Cook's distance above 1. The assumption of normality was met, as assessed by P-P Plot. Correlation analyses are provided in Table 4 with no correlation coefficient over 0.7. A positive moderate relationship was observed between the predictor variables of commitment and confidence on reporting practices. A strong positive relationship was observed between the predictor variable concerns on reporting practices.

A hierarchical multiple regression was run to determine if the addition of commitment, confidence, and concern individually improved the predictive variance toward reporting practices of school-based SLPs over and above the control variables of ethnicity and gender. Table 5 provides the full model (block 4) inclusive of all predictor variables. R^2 change and the F ratio for R^2 change are also provided.

The results of Block 1, which consisted of the control variables, gender and ethnicity, was not significant, $F (2,114)=1.06$, $p=0.35$. The model in Block 1 accounted for 1.8% of the variance in reporting practices of school-based SLPs. The addition of the predictor variable – commitment - to the model (Block 2) led to a statistically significant increase to an adjusted R^2 of .24, where $F (1, 113)=36.66$, $p<.001$. Block 2 accounted for 25.8% of the variance in reporting practices. The

Block	Predictor Variables
1	Gender and Ethnicity (control variables)
2	Commitment
3	Confidence
4	Concern

Table 2: Blocks for the Hierarchical Multiple Regression.

Predictor Variables	M	SD
Commitment	40.36	2.44
Confidence	11.78	2.13
Concern	15.42	4.45
Criterion Variable		
Reporting	3.94	.30

Table 3: Descriptive Statistics for the Predictor and Criterion Variables (N=117).

	Reporting	Gender	Ethnicity	Commitment	Confidence	Concern
Reporting	-					
Gender	0.12	-				
Ethnicity	-0.07	0.02	-			
Commitment	0.50**	0.22*	0.01	-		
Confidence	0.56**	0.16*	0.01	0.22*	-	
Concern	0.60**	-0.02	-0.13	-0.18*	0.13	-

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)

Table 4: Correlation Matrix for the Predictor Variables (N = 117).

	R2 Change	F Ratio for R2 Change	B	SE	β	t	p
Block 1	0.018	1.06					0.35
Block 2	0.24	36.66					<.001
Block 3	0.21	44.19					<.001
Block 4	0.386	293.6					<.001
Gender			-0.1	0.07	-0.05	-1.34	0.18
Ethnicity			0.03	0.09	0.01	0.34	0.74
Commitment			0.07	0.01	0.55	14.23	<.001
Confidence			0.05	0.01	0.36	9.34	<.001
Concern			0.04	0	0.65	17.14	<.001

Table 5: Hierarchical Regression Analysis—Full Model—(Block 4).

addition of the predictor variable—confidence—to the model (Block 3) led to a statistically significant increase in adjusted R^2 of .21, where F (1, 112)=44.19, p<.001. Block 3 accounted for 46.8% of the variance in reporting practices; an increase of 21% over Block 2. The full model (Block 4) consisted of ethnicity, gender, commitment, confidence and concern. Block 4 was statistically significant with an adjusted R^2=.386, where F (1, 111) =293.60, p < .001. Block 4 accounted for 85.4% of the variance in reporting practices for school-based SLPs; an increase of 38.6% over Block 3.

In the final model, the attitudinal domains of commitment, confidence, and concern each made a statistically significant individual contribution to the model, with concern recording a higher beta value (β=.65) than commitment (β=.55) and confidence (β=.36). A positive relationship exists between reporting practices and all three attitudinal domains.

Discussion

The purpose of this study was to examine whether a significant relationship exists between school-based speech-language pathologists' reporting practices and their attitudes toward maltreatment (e.g., commitment, confidence, and concern). The study controlled for demographic variables including gender and ethnicity. Consistent with Smith, Mattingly & Pitts this study also applied the tenets of the Theory of Reasoned Action [23] hypothesizing that the predictor variables would assist in explaining the variance in therapists' reporting practices. The full model explained 85.4% of the variance suggesting that as school-based SLP's attitudes—commitment, confidence, and concern - increase, so does the likelihood they will report alleged child maltreatment.

The results of this study are largely consistent with those found by Smith, Mattingly and Pitts (2016) with respect to the attitudinal dimension of concern. With a high beta value of (β=.65), concern presented as the strongest predictor of reporting practices among the respondents in the study; this result was similar to the findings by Smith, Mattingly, and Pitts. The attributes associated with concern appear intrinsic to speech-language pathology practice and highlight the general altruistic nature of those in the profession. Inasmuch, Byrne found that men tend to focus more on a macro framework (i.e., society) as opposed to women, whose work appears devoted to the micro (i.e., individual). In effort to make application to this study, male SLPs may appear more interested in solving the overarching problem of child maltreatment in the United States [25]. Their female counterparts may tend to focus on the impact abuse and neglect has on the individual child. Nonetheless, practicing professionals appear concerned about the problem and interested in facilitating improved reporting practices.

Commitment is aligned with ones' obligation to their profession or practice. Ware and Kitsantas equated commitment with efficacy suggesting that both help facilitate effort and persistence. With respect to reporting child maltreatment, the domain of commitment does not appear impacted by status, whether learned graduate student or seasoned practicing professional. Themes surrounding commitment include: prevention, professional responsibility, set guidelines, and intent. With a beta value of (β=.55) commitment presented as a strong predictor of reporting practices among this group. Again, this result mirrors the findings of Smith Mattingly, and Pitts [22].

The attitudinal domain of confidence is aligned with knowledge and trust. Further expand the concept of professional confidence to include the components of roles, responsibilities, practice act, and competency

[26]. For the context of this study, the application is linked to the assurance that law enforcement officials—including administrators - will follow through on allegations of child maltreatment. Surveyed the attitudes of graduate students working toward degrees in speech-language pathology from across the United States and found this domain to not be a significant predictor of reporting practices [19]. It is plausible that their study did not reach statistical significance due the students' inexperience and lack of opportunity identifying and reporting maltreatment. This researcher is quick to note that while confidence did achieve a respectable beta value of (β=.36), the result was lowest among the three targeted domains. Consistent with previous students examining maltreatment and reporting practices, respondents routinely exhibited a reduced degree of confidence among authority figures after filing a claim [9-14,20].

While caution must be exercised in avoiding generalization across settings, the findings of this study may be impactful for university training programs, the profession of speech-language pathology, as well as health-care services in general. The likelihood is high that students who are taught to be consumers of research will utilize such skills as practicing professionals. Relevant university training programs may consider including the topic of maltreatment in their pedagogies and curricula. In many cases, the topic may be easily embedded into existing coursework on cognitive-communication disorders, traumatic brain injury, professional issues, or independent studies.

From a national perspective, ASHA may consider formulating an ad hoc committee or a focus group to investigate the roles and responsibilities of the speech-language pathologist per identification and reporting of child abuse and neglect. This work should include positional statements and/or technical papers on the topic. ASHA currently defers matters related to child abuse and neglect to individual employers or university training programs. Deference to an outside source without published guidelines fosters uncertainty and inconsistent practice.

Limitations

This study is not without limitations. The results, while significant, may not generalize to other therapy disciplines such as physical or occupational therapies. Additionally, the findings may not cross into other employment settings commonplace to rehabilitation such as hospitals, private practices, or home health. Moreover, this study did not account for participants' years of experience working in the public school sector or the populations served (e.g., elementary, middle, high school). It is also possible some participants may have succumbed to response bias given the sensitive nature of the topic. Lastly, the premise of this study centred on attitudes as addressed by other similar studies [22-24]. It may be beneficial to explore the predictive nature of a person's perceptions toward child maltreatment and reporting practices. This is due to the fact that perceptions are often equated to concepts while attitudes are linked to beliefs and feelings [27,28].

Conclusion

Considering this context and this sample, it appears that a large portion of the variance in reporting practices can be explained by the attitudinal dimensions of commitment, confidence, and concern. The results of this study add to the limited body of research linking speech-language pathology and child maltreatment. Children respond to trauma in difference ways. By understanding the factors that predict an individual's likelihood he or she will report abuse, can potentially abate maltreatment occurrence and reduce child morbidity and mortality.

The field of speech-language pathology is well-positioned to identify, prevent and respond.

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