

BEHAVIOR MANAGEMENT: THE KNOWLEDGE AND
COMFORT LEVELS OF SPEECH-LANGUAGE PATHOLOGISTS

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ABSTRACT

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by Grace Bonasera

Speech-language pathologists (SLPs) work with an array of client populations who present with counterproductive behaviors; therefore, it is important that SLPs are equipped with the knowledge needed to identify counterproductive behaviors and implement behavior management strategies. The current study sought to identify how many SLPs have clients with counterproductive behavior on their caseload, what knowledge they have regarding behavior management, where they obtained knowledge about behavior management, how they manage clients with counterproductive behavior, and what their levels of comfort are in working with clients who present with behavioral challenges.

Fifty-three randomly-selected American Speech-Language-Hearing Association (ASHA) certified SLPs from an array of work settings and years of experience completed an anonymous survey that contained questions relating to participants' knowledge, experience, and comfort in using behavior management strategies. Responses to closed-ended questions were analyzed using descriptive statistics, while open-ended responses were coded and reported as frequency counts and percentages.

The findings showed that the majority of participating SLPs are currently serving, or have previously served, clients who require behavior management. The manner in which SLPs have been trained in behavior management is inconsistent, and the majority of SLPs reported that they would have benefitted from more training in behavior management.

Results suggest that SLPs need more formal and consistent training in behavior management than they currently receive to ensure best practices.

Keywords: behavior management, counterproductive behavior, behavioral challenges, speech-language pathology, knowledge, comfort

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CHAPTER I

INTRODUCTION

Speech-language pathologists (SLPs) work with an array of client populations who present with counterproductive behaviors. Counterproductive behavior is defined as any verbal or nonverbal behavior that counteracts the productivity of a task (e.g., refusal, elopement, aggression, avoidance, physicality, defiance, distraction, etc.). Due to the presence of these behavioral challenges in the field, it is pertinent that SLPs are equipped with the knowledge needed to identify counterproductive behaviors and implement behavior management strategies. There is currently scant literature exploring SLPs' knowledge of behavior management or their level of comfort in working with individuals with behavioral challenges. Therefore, it is unclear if SLPs have adequate knowledge on behavior management strategies, and if and where they are receiving formal instruction on how to manage these clients.

To ensure SLPs can effectively serve clients with behavioral challenges, it is important that they receive proper training on the identification and implementation of behavior management techniques. The goal of the current study is to identify the knowledge and comfort levels of SLPs in working with clients who present with counterproductive behaviors. The study will also assess the knowledge and comfort level of SLPs in the implementation of behavior management techniques. Ultimately, ensuring that all SLPs have the knowledge and skills necessary to identify and manage the counterproductive behaviors of their clients will lead to more effective and efficient intervention.

Literature Review

SLPs' Role in Behavior Management

In the Preferred Practice Patterns for the Profession of Speech Language Pathology, the American Speech-Language-Hearing Association (ASHA) affirms that counterproductive behaviors fall within the scope of practice for SLPs (ASHA, 2004). This document states that SLPs must conduct their observation and analysis of clients with an emphasis placed on each individual's communication needs and the reduction of counterproductive behavior. If SLPs are truly tailoring client interactions to the individual's communication needs, there is no limit to the number of clients who would benefit from some form of behavior management, as communication difficulties increase a client's likelihood of presenting with counterproductive behaviors (Carr & Durand, 1985). It is clearly within the role of an SLP to use communication intervention and behavior management together to decrease counterproductive behaviors. Furthermore, this document recognizes the importance of analyzing and interpreting counterproductive behaviors for their underlying communicative purpose, as well as the social and emotional needs the behaviors may be representing (ASHA, 2004). Therefore, it is essential that SLPs are equipped with the knowledge needed to both analyze and determine the proper intervention for counterproductive behaviors, as their underlying purpose is often secondary to an inability to effectively communicate an idea, want, or need.

In addition, the standards set forth for SLPs by ASHA clearly outline the knowledge that SLPs need to work with clients who have behavioral challenges. Specifically, Standard IV-C asserts that SLPs must demonstrate a breadth of knowledge on communication disorders, including social aspects of communication that encompass counterproductive behavior (ASHA,

2016). As affirmed above, behavior management is incorporated within the scope of practice for SLPs in various ways. Therefore, if we expect SLPs to have a breadth of knowledge about communication disorders, education and training in behavior management would be crucial. This document also specifies that clinicians must be able to adapt procedures and intervention plans to meet a client's needs, which would include behavior management. For some of these clients, counterproductive behaviors are their only form of communication, making this knowledge critical to an SLP.

Prevalence and Characteristics of Clients with Behavioral Challenges

Given that counterproductive behaviors serve as a means of communication, these behaviors are more likely to be seen in individuals with severe communication difficulties than individuals with typical communication abilities (Emerson & Bromley, 1995). Specifically, the less an individual is able to effectively communicate, the more likely they are to present with counterproductive behaviors (Carr & Durand, 1985). Many counterproductive behaviors displayed by higher functioning individuals are believed to represent communication, and are precipitated, accompanied, or constituted by certain patterns of verbal interaction (Brinton & Fujiki, 1993). Sigafos (2000) also found that communication difficulties were strongly associated with aberrant behaviors. In the general population, as many as 10% of children have difficulty developing appropriate social skills (Asher, 1990). However, Brinton and Fujiki (1993) suggest that this percentage is much higher in children with disabilities. This strongly suggests that individuals with communication disorders are more likely to present with counterproductive behaviors than their same-aged peers.

In addition to clearly demonstrating that difficulties in communication are linked to counterproductive behavior, the literature also explores the pervasiveness of behavioral challenges within specific populations. A prevalence study in England found that there was a 60% increase in the number of individuals identified as exhibiting counterproductive behaviors since 1995 (Emerson et al., 2001). Of those with a developmental disability who are in contact with educational, health, or social care services, 5-10% were classified as having ‘more demanding’ counterproductive behaviors. Individuals with restricted expressive and receptive communication were among the individuals who showed ‘more demanding’ counterproductive behaviors as well. Similar results were found in a total population study conducted in Norway (Holden & Gitlesen, 2006). Although these studies were not conducted in the United States, they provide valuable insight into the prevalence of counterproductive behaviors that may be present in the United States, especially in populations with communication deficits.

While there is no information about the prevalence of counterproductive behaviors in the United States, there are prevalence ratings for many of the client populations SLPs serve. As evidenced above, it is clear that difficulties in communication are connected to counterproductive behaviors. While this is a general concept that may be applied to any communication disorder, there are particular diagnoses that are commonly associated with behavioral challenges. Some of these populations include autism, Alzheimer’s disease, dementia, and traumatic brain injury (TBI).

In 2014, the Centers for Disease Control and Prevention released new data on the prevalence of autism in the United States. This surveillance study identified 1 in 68 children as having autism spectrum disorder (Autism Speaks, 2014). While studying autism, Murphy and

her colleagues (2009) found that just over 82% of participants displayed counterproductive behavior, with 96% of those individuals showing more than one form of counterproductive behavior. For those with autism, counterproductive behavior was maintained by automatic reinforcement across a variety of conditions, suggesting in part a non-social purpose for counterproductive behaviors, making these behaviors quite difficult for therapists to reduce (O'Reiley et al., 2010).

Individuals with Alzheimer's disease are also likely to present with counterproductive behaviors. It has been estimated that one in nine individuals age 65 and older have Alzheimer's disease (Alzheimer's Association, 2014). Furthermore, data suggest that 13.9% of people age 71 years and older in the United States have dementia. Staff working with people with dementia reported that they most frequently experience acts of aggression through physical assault and emotional abuse (Bostrom, Squires, Mitchell, Sales, & Estrabrooks, 2011). Staff in communities where people with dementia reside appear to have a good knowledge base for identifying the underlying causes of behavioral challenges, but have a poor understanding of how to properly apply behavior management techniques and further, in seeking out resources available to them. Staff most commonly reported time constraints as the source of this discrepancy (Ervin, Finlayson, & Cross, 2012).

Individuals with TBI may also exhibit counterproductive behaviors. In 2010 in the United States, about 2.5 million emergency department visits, hospitalizations, or deaths were associated with TBI – either alone or in combination with other injuries (Centers for Disease Control and Prevention, 2016). According to Tucker (2001), it is relatively common for children to have behavioral or adjustment issues after experiencing a TBI. Research has shown that up to one-half

of children develop a new emotional or behavioral disorder in the first year after experiencing a moderate or severe TBI. After a TBI, 30-35% of children were found to have an emotional or behavioral disorder. Behavioral symptoms typically seen in both adult and child patients with TBI include disinhibition, apathy, inattention, behavioral immaturity, irritability, increased anger and aggression, impulsivity, social awkwardness and withdrawal, hyperactivity, anxiety, and depression (Noggle, 2010). Families and caregivers reported a broader definition of counterproductive behavior than professionals, and that these behaviors impacted the social and community integration of the individual with TBI (Tam, McKay, & Ponsford, 2015). Most notably, caregivers identified these behavioral challenges as leading to poor social relationships, which was the biggest source of distress and burden for families.

Based on the information presented above, it is clear that SLPs work with a high number of clients who present with counterproductive behaviors. Specific diagnoses such as autism, Alzheimer's disease, dementia, and TBI are typically associated with a set of behavioral challenges. Additionally, communication disorders in general increase an individual's likelihood of presenting with counterproductive behaviors. This means that SLPs will face behavioral challenges from a large variety of clients.

Behavior Management Strategies

A variety of evidenced-based behavior management techniques are present in the existing literature for the aforementioned populations. A thorough search of the current research showed that many techniques were commonly discussed to manage behaviors and have been shown to reduce the frequency of counterproductive behaviors. However, even though these behavioral techniques are discussed in the literature, there are currently no guidelines or policies ensuring

that all SLPs receive formal training in implementing evidence-based behavioral interventions.

Some of the existing evidence-based techniques include:

- Staff training and team collaboration (i.e., interprofessional collaboration and training other staff members on behavioral triggers and management techniques) (Allen et al., 1997; Elleseff, 2014; Fowler et al., 2015)
- Social stories (Crozier & Tincani, 2005; Machalicek et al., 2006)
- Building relationships with clients (DiLuzio, 2015; Warschausky et al., 1999)
- Constructing the treatment environment to have clear expectations, use routines, and support learning (DiLuzio, 2015)
- Reinforcement schedules and differential reinforcement to avoid satiation of any one reinforcer (DiLuzio, 2015; Machalicek et al., 2006; Allen-Burge et al., 1999; Wickstrom-Kane, 1999)
- Assistive devices such as Augmentative and Alternation Communication (AAC) (Durand, 1993; Machalicek et al., 2006)
- Medications (Ervin et al., 2012)
- Functional routines and schedules (Lequia et al., 2012; Machalicek et al., 2006)
- Graphic organizers and visuals (Feeney & Ylvisaker, 2006; Feeney & Ylvisaker, 2008; Machalicek et al., 2006)
- Functional communication training (i.e., individual is taught a replacement communicative action in place of the undesirable behavior) (Carr & Durrand, 1985; Durand, 1993; Reichle & Johnston, 1993; Wickstrom-Kane, 1999)
- Positive behavior support (Buschbacher & Fox, 2003; Ylvisaker et al., 2007)

- Vibroacoustic music (Lundqvist et al., 2009)
- Environmental changes, such as removing elements associated with behavioral triggers (Allen-Burge et al., 1999)

Though there is much research examining the effectiveness of various behavior management strategies, there is no current research on SLPs' perceptions of their role in behavior management. However, there are studies focused on examining SLPs' role in working with clients who demonstrate violent behaviors. Violence is described as behaviors and actions including threats or intentional harm to individuals or property (Sanger et al., 2004). This is not synonymous with counterproductive behavior, although violence may be categorized as a counterproductive behavior in a therapeutic environment. One study found that SLPs recognized the valuable role they play in prevention programs regarding students involved with violence, but they did not feel well trained to deal with violence, nor did they feel that educators understood their role (Sanger et al., 2004). This suggests that SLPs may understand that behavior management is an important aspect of their services, but do not feel well prepared or educated on the topic.

Purpose of Study

The current study seeks to determine how many SLPs have clients with behavioral challenges on their caseload and how they manage the behaviors of these clients. In addition, this study also investigates SLPs' current level of comfort in working with individuals with behavioral challenges, the knowledge SLPs currently have regarding behavior management, and how they acquired this knowledge. The specific research questions addressed include:

1. How many SLPs have clients with counterproductive behavior on their caseload?

2. What knowledge do SLPs have regarding behavior management?
3. Where do SLPs obtain knowledge on behavior management?
4. How do SLPs manage clients with counterproductive behavior on their caseload?
5. What level of comfort do SLPs have in working with clients with behavioral challenges?

CHAPTER II

METHOD

Participants

ASHA has approximately 186,000 members and affiliates, including audiologists; speech-language pathologists; speech, language, and hearing scientists; audiology and speech-language pathology support personnel; and students. This association was contacted to randomly select 300 working SLPs from their national data file. Inclusion criteria included ASHA membership and a Certificate of Clinical Competence (CCC) in Speech-Language Pathology. Clinicians currently completing their clinical fellowship were not included in this study. Participants were not selected based on years of experience, current work setting, age, or gender to encompass the full diversity of working SLPs.

Although 300 names and addresses were received from ASHA, four surveys were returned to the researcher as undeliverable. Therefore, a total of 296 surveys were successfully mailed. Participants were informed that their participation was completely voluntary, and that no identifiable information was collected to preserve their confidentiality. The current investigation was approved by the Institutional Review Board (IRB) at Central Michigan University to conduct research using human subjects.

A total of 55 surveys were returned to the principle investigator, yielding a 19.58% response rate. Of these, 53 were completed, while the other two were sent back blank due to the participant reporting they had retired. Characteristics of respondents are shown in Table 1 and Table 2. Responses of all participants were included in data analysis, including those who did not complete the entire survey.

Table 1. Characteristics of respondents: Frequency counts and percentages ($n=53$).

Characteristic	Frequency	Percentage
<i>Gender</i>		
Male	3	5.66
Female	50	94.34
Other/prefer not to disclose	0	0
<i>Year of master's degree</i>		
1975-1985	4	7.55
1986-1995	9	16.98
1996-2005	15	28.30
2006-2015	25	47.17
<i>Years working as a SLP</i>		
0-10 years	25	47.17
11-20 years	15	28.30
16-30 years	9	16.98
31+ years	4	7.55
<i>Current work setting</i>		
Early intervention	3	5.66
Preschool	10	18.87
Public or private school	25	47.17
Hospital	10	18.87
Rehabilitation	7	13.21
Center		
Skilled nursing	14	26.42
facility		
Private practice	7	13.21
Other	10	18.87
<i>Past work settings</i>		
Early intervention	4	7.55
Preschool	14	26.42
Public or private school	40	75.47
Hospital	21	39.62
Rehabilitation center	19	35.85
Skilled nursing facility	24	45.28
Private practice	13	24.53
Other	14	26.42

Note. Work settings classified as other included home health, hospice contract, assisted living facilities, university, charter school, clinic, and two unidentifiable acronyms.

Table 2. Characteristics of survey respondents: Descriptive statistics ($n=53$).

Characteristic	Mean	SD	Range
Year of master's degree	2003	9.90	1977-2015
Years working as a SLP	13.22	10.07	1-39
Years in work settings			
Early intervention	2.60	0.89	2-4
Preschool	9.97	9.77	1-30
Public or private school	9.28	9.99	0.5-37
Hospital	4.82	5.62	0.33-24
Rehabilitation Center	3.47	3.40	0.33-15
Skilled nursing facility	4.07	3.82	0.25-18
Private practice	6.43	9.83	1-35
Other	4.77	5.26	1-20

Note. Work settings classified as other included home health, hospice contract, assisted living facilities, university, charter school, clinic, and two unidentifiable acronyms.

Participants represented a wide range of geographic areas throughout the United States. The participants received their master's degree from 25 different locations, and currently live and work in 24 different states. A detailed geographic breakdown of participants by state can be found in Table 3.

Table 3. Geographic breakdown of survey respondents.

State	Master's Degree		Currently Live	
	Frequency	Percentage	Frequency	Percentage
Alabama	1	1.89	1	1.89
California	2	3.77	2	3.77
Florida	2	3.77	3	5.66
Georgia	1	1.89	0	0
Iowa	2	3.77	1	1.89
Illinois	3	5.66	2	3.77
Indiana	1	1.89	1	1.89
Kentucky	1	1.89	2	3.77
Louisiana	1	1.89	1	1.89
Massachusetts	2	3.77	2	3.77
Maryland	2	3.77	4	7.55
Michigan	3	5.66	2	3.77
Minnesota	3	5.66	3	5.66
Mississippi	1	1.89	1	1.89
New Jersey	1	1.89	1	1.89
New York	4	7.55	6	11.54
Ohio	7	13.21	7	13.21
Oklahoma	1	1.89	2	3.77
Pennsylvania	4	7.55	4	7.55
Tennessee	1	1.89	1	1.89
Texas	2	3.77	2	3.77
Virginia	4	7.55	2	3.77
Washington	2	3.77	2	3.77
Wisconsin	1	1.89	1	1.89
Lima, Peru	1	1.89	0	0

Materials

A survey consisting of 28 items was used for data collection. The survey was developed by the investigators to answer the research questions, using a survey developed by Sanger, Moore-Brown, Montgomery, and Hellerich (2004) as a model. Items required participants to select one answer, select multiple answers, use a Likert-style rating scale, or write a novel response regarding their experiences.

Items one through 10 on the survey collected demographic information on participants, information related to their work experience, and general information regarding their current caseload. Items 11-16 investigated specific information about their caseload concerning clients with counterproductive behaviors. Items 17-22 investigated their current knowledge on behavior management, if they received formal training in behavior management, and in what forms they received training. Items 23-25 asked participants to describe how they currently manage clients with counterproductive behavior on their caseload. Finally, items 26-28 assessed participants' comfort levels in working with clients with counterproductive behavior.

A draft of the survey was given to two faculty members and four graduate students in the Communication Disorders department at Central Michigan University for input concerning length, organization, ambiguity, and completeness. Feedback was reviewed to make revisions in developing the final version of the survey.

Procedures

During September 2016, a recruitment letter was sent to 300 SLPs describing the purpose of the study and what their participation would entail. The envelope sent contained a recruitment letter (Appendix A), consent form for an anonymous survey (Appendix B), and a paper copy of the survey (Appendix C). Participants were instructed to review the consent form and complete the survey if interested in participating. Due to the nature of the survey, the investigator was unable to track or control the environment in which the survey was completed.

A quantitative survey design was utilized during this study. Both open and closed-ended questions were used for data collection. Data were analyzed and reported using descriptive statistics, including mean, standard deviation, range, frequency count, and percentage. When a

participant reported a range for any numerical question, the mean value from the range was taken and used for data analysis. Open-ended responses were analyzed for frequency of content.

CHAPTER III

RESULTS

Number of SLPs with Clients with Counterproductive Behavior

The mean caseload size of respondents was 31.15 clients ($SD = 21.29$), with caseloads ranging from six to 83.5 clients. Of these participants, 86.54% reported that they have clients on their caseload who benefit or would benefit from behavior management. The mean number of clients on an SLP's caseload that benefit or would benefit from behavior management was 7.41 ($SD = 10.55$), and ranged from zero to 52.5 clients. On average, the participants reported that 22.97% of their caseloads benefit or would benefit from behavior management ($SD = 23.28$), ranging from 0% to 100%. Throughout their careers, 96.23% of participants have served a client who required behavior management.

On average, SLPs reported seeing a mean of 7.70 ($SD = 11.25$) counterproductive behaviors a day, with responses ranging from zero to 52 counterproductive behaviors seen on a daily basis. Participants were asked to list three behaviors they find most disruptive or see most frequently, and these data have been summarized in Table 4 on the following page.

Table 4. Behaviors seen most frequently or found most disruptive ($n = 49$).

Behavior	Frequency Count	Percentage of respondents who reported this behavior in their top 3
Physical aggression	28	47.46
Refusal/opposition	22	44.90
Verbal outbursts	15	30.61
Noncompliance/passivity	14	28.57
Elopement	12	24.49
Avoidance	9	18.37
Attention difficulties	8	16.33
Impulsivity	7	14.29
Decreased emotional threshold	7	14.29
Agitation/frustration	7	14.29
Throwing items	5	10.20
Lack of relationships/social skills	4	8.16
Stereotypic behaviors	3	6.12
Attention seeking	3	6.12
Confusion	3	6.12
Denying the need for services	2	4.08
Disrespectful to adults	2	4.08
Groping females	1	2.04
Lack of motivation	1	2.04
Isolated by staff	1	2.04

SLPs Knowledge on Behavior Management

While performing clinical practica, 56.86% of participants reported working with a client who required behavior management. Approximately 55.77% of participants received formal training in behavior management, with work experience (86.21%) and in-services (55.17%) being the most common forms of training. Respondents were asked four questions concerning their perceived qualifications and levels of comfort of various roles regarding behavior management. A summary of their responses is provided in Table 5.

Table 5. Perceived qualifications and competencies ($n = 53$).

	Number of SLPs who felt competent and/or qualified	Percentage
Being part of a multidisciplinary team serving a student who requires behavior management	40	75.47
Implementing behavior management techniques given by another staff member	46	86.79
Design and implement a behavior management plan on their own	24	45.28
Provide other staff members with information about behavior management	26	49.06

Where SLPs Obtain Knowledge on Behavior Management

As stated above, 55.77% of respondents reported that they have received formal training in behavior management at some point throughout their career. Trainings most often occurred in the form of work experience, which is where 86.21% ($n = 25$) of these respondents reported receiving training. Table 6 provides a full summary of the different types of formal training reported and the number of SLPs who participated in these trainings. Of 52 participants, 17.31% ($n = 9$) reported taking a minimum of one college course devoted primarily to the topic of behavior management. Of all 53 participants, 96% feel they would have benefitted from more formal training in behavior management.

Table 6. Formal training in behavior management ($n = 29$).

Training type	Frequency	Percentage
Undergraduate course	4	13.79
Graduate course	6	20.69
Presentation pre-graduation	0	0
Seminar post-graduation	13	44.83
Work experience	25	86.21
In-service	16	55.17
Other	5	17.24

How SLPs Manage Clients with Counterproductive Behaviors

Many participants did not distinguish a difference between the two survey questions regarding “management” and “interventions or strategies for behavior management”; therefore, responses to these questions were analyzed together. Responses were grouped according to frequency of occurrence, outlined in Table 7.

Table 7. Strategies and interventions for behavior management.

Strategy or Intervention	Number of times mentioned
Positive reinforcement	25
Health or educational team collaboration	19
Visuals or visual schedule	19
Redirection or distraction	18
Rewards	15
Caregiver collaboration	14
Identify the purpose or antecedent of the behavior	13
Coping strategies, counseling, and coaching	12
Client centered activities	10
Develop or implement a behavior plan	10
Remain consistent or establish a routine	9
Breaks	8
Clear expectations or rules	8
Modify the environment	8
Ignore the behavior	7
Push-in model or informal treatment approach	7
Negative consequences	7
Verbal cueing	5
Sensory items	4
Applied behavior analysis (ABA) techniques	4
Replace the undesirable behavior with a new behavior	3
Crisis prevention intervention (CPI)	3
Modeling positive behavior	3
Social stories	3
Paraprofessionals	2
Augmentative and alternative communication (AAC)	2
Giving choices	2
Therapy dogs	1
“Mom voice”	1
Conscious Discipline	1

Participants were also asked to identify barriers they experience while working with clients who present with behavioral challenges. The most common barriers identified were lack of consistency in implementing strategies across people, including staff and family members; interference with therapy activities, slow progress, or a lack of progress; lack of consistency in implementing strategies across settings, including school and home; patient compliance and motivation; time constraints; and lack of education and skills in behavior management. All barriers reported by participants are highlighted in Table 8.

Table 8. Barriers to working with clients with behavioral challenges.

Barrier	Number of times mentioned
Consistency across people	16
Slow progress in therapy	14
Consistency across settings	10
Compliance/motivation	8
Time restrictions	7
Lack of skills/education	5
Funding/laws/policies	4
Group size and dynamic	3
Comorbid challenges	2
Difficulty calming upset patients	2
Destruction of property /safety	2
Feelings of helplessness	2
Techniques only work for a short period of time	2
Lack of support	1
Caseload size	1
Prompt/cue dependence	1
Discriminating between behavioral and pragmatic needs	1
Power struggle between other staff members	1
Behavior plans not always completed	1
No specialists present in the work setting	1
Medications	1

Comfort Levels of SLPs

On average, SLPs rated their level of comfort in working with clients with behavioral needs as a 3.85 ($SD = 0.93$), classified between neutral and comfortable. Comfort levels of participants ranged from two (not comfortable) to five (very comfortable). The frequency of each rating is described in Table 9.

Table 9. Comfort level ratings ($n = 51$).

Rating	Frequency	Percentage
1 (very uncomfortable)	0	0
2 (uncomfortable)	4	7.84
2.5 (uncomfortable-neutral)	2	3.92
3 (neutral)	10	19.61
3.5 (neutral-comfortable)	1	1.96
4 (comfortable)	20	39.22
5 (very comfortable)	14	27.45

CHAPTER IV

DISCUSSION

The purpose of this study was to assess how many SLPs have clients with counterproductive behavior on their caseload, what knowledge they have regarding behavior management, where they obtained knowledge about behavior management, how they manage clients with counterproductive behavior, and what their levels of comfort are in working with clients who present with behavioral challenges. Overall, the majority of SLPs are currently serving, or have previously served, clients who may require behavior management. The manner in which SLPs have been trained in behavior management is inconsistent, and the majority of SLPs feel they would have benefitted from more training in behavior management.

Number of SLPs with Clients with Counterproductive Behavior

The majority of participants reported working with clients who benefit from behavior management, and almost all of the participants had served a client who required behavior management at some point throughout their career. Some SLPs reported a large number of clients on their caseload requiring behavior management, while others reported very few. Although a wide range was established, on average, a substantial number of clients per caseload required behavior management. This information is consistent with the information and inferences derived from the current literature, as having a communication disorder increases the likelihood one will present with counterproductive behaviors and many of the common client populations that SLPs work with are associated with behavioral challenges (Carr & Durand, 1985; Emerson & Bromley, 1995; Sigafoos, 2000).

SLPs most frequently encountered counterproductive behavior in the form of physical aggression, refusal and opposition, verbal outbursts, noncompliance and passivity, elopement, avoidance, and attention difficulties. These data suggest that a variety of counterproductive behaviors are seen by SLPs, and that they will need to be trained in an assortment of techniques, strategies, and interventions to extinguish these behaviors to increase session productivity.

These findings indicate that most SLPs will need to implement behavior management strategies throughout their career, regardless of setting or client population, at one point or another. Also noteworthy is the variety in type and severity of counterproductive behaviors an SLP will encounter and, therefore, need to be prepared to treat. Since the majority of SLPs will serve clients with behavioral challenges, they should receive proper and consistent training in a variety of behavior management techniques to ensure they are qualified and feel competent in implementing behavior management techniques.

Currently, it is unclear which form of training would be most effective for SLPs. Although SLP students might learn best about behavior management during the real-life clinical experiences provided during their clinical practica, this study found that not all SLP students will serve a client who requires behavior management during their clinical practica. Incorporating more information on behavior management techniques across graduate coursework would allow for more consistency in learning across students and could help ensure that all SLPs are educated in a variety of strategies for a range of client populations and behaviors. Following graduate school, it would be beneficial for practicing SLPs to receive population-specific training for the focus population(s) of their workplace. In-services or workplace trainings that allow hands-on experience in behavior management could meet this need.

SLPs' Knowledge and Training in Behavior Management

During educational practica, only slightly more than half of the participants reported working with a client who required behavior management, and only a small portion of them took a course which focused on behavior management. These data reveal inconsistencies in educational training, as not all graduate students will leave a master's program having experience or education in behavior management. However, all practicing SLPs are highly likely to experience clients with behavioral challenges during their career.

About half of the respondents received formal training in behavior management during their career, most commonly in the form of work experience or in-services. Both these types of trainings would likely take place post-graduation at the discretion of the therapist or employer, suggesting that not all SLPs would participate in these trainings. The majority of participants reported feeling comfortable being a part of a team or implementing behavior management techniques given to them by another staff member, but were not comfortable doing so independently or providing information to other staff about behavior management. Nearly all respondents felt they would have benefitted from more formal training in behavior management. These data demonstrate that SLPs receive inconsistent training in behavior management, if they receive any training at all. This lack of or limited amount of training negatively affects their ability to independently treat the behavioral challenges they will face when providing therapy to many of their clients.

How SLPs Manage Clients with Counterproductive Behaviors

Participants described a number of strategies and interventions they currently use with clients who present with counterproductive behaviors. Despite the inconsistencies in training methods for teaching behavior management to participants, there were a few strategies commonly reported that are supported by research, such as positive reinforcement, interprofessional collaboration, visual strategies, routines and schedules, AAC, and functional communication training.

Most often, it appears that SLPs are depending on positive reinforcement to decrease behavioral challenges. Although this is an evidenced-based practice for behavior management, many participants reported that they had difficulty dealing with more severe behaviors such as physical aggression using only positive reinforcement. This emphasizes the importance of SLPs being trained in a variety of behavior management strategies.

Although a number of behavior management strategies were identified by participants, overall, it was found that most SLPs are consistently using the same few strategies at a high frequency. There were also many evidenced-based approaches not mentioned by the participants, such as music, differential reinforcement, building relationships, and reinforcement schedules. In addition, some of the evidence-based approaches used by participants, such as AAC and social stories, were only reported by a few participants, despite their strong presence in the research (e.g., Crozier & Tincani, 2005; Durand, 1993; Machalicek et al., 2006). Furthermore, some of the interventions listed by participants are not supported by a strong body of research, such as “mom voice” or negative consequences. These findings suggest that while SLPs have knowledge of and are using some evidence-based behavior management strategies, they are only using a few

of the techniques supported by the existing literature and not all of the strategies they are using are evidence-based.

Despite their knowledge and use of evidence-based practices, SLPs reported they are likely to encounter barriers when implementing behavior management strategies. Barriers often inhibit professionals from making adequate progress with their clients. When common barriers are identified, pre-professionals can be trained to navigate these issues when they arise, or avoid them all together. The most common barriers identified in working with clients with behavioral needs were a lack of consistency across people, including staff and family members; interference with therapy activities, slow progress, or a lack of progress; a lack of consistency across settings, including school and home; patient compliance and motivation; time constraints; and lack of education and skills in behavior management. A number of these barriers could be addressed by providing SLPs with adequate education and training in behavior management, which would help them increase progress and participation of their clients as well as give them the ability to educate other staff members and caregivers in behavioral techniques.

Comfort Levels of SLPs

On average, SLPs reported feeling mildly comfortable working with clients with behavioral challenges. Comfort levels of participants ranged from not comfortable to very comfortable, indicating inconsistencies across participants. Although it appears that many SLPs feel comfortable enough to work with clients with behavioral challenges, it is imperative that nearly all SLPs feel comfortable, as the overwhelming majority of them will be serving these clients during their career. It is expected that formal training and education in behavior management would increase these comfort levels.

Study Limitations

While the findings of this study are important in advancing the field of speech-language pathology, a few limitations should be considered while interpreting these results. First, participants were aware that they were participating in a research study and were knowledgeable about the purpose and goals of the study. This knowledge may have influenced the way they responded to questions. However, to increase the chances that participants would respond in a truthful manner, the survey was completely anonymous. In addition, the researcher was not present while the participants completed the survey. Despite these efforts, the responses of participants may still have been influenced by their knowledge that they were participating in a study.

Another limitation may have been misinterpretation of survey questions by the participants. In an attempt to decrease the likelihood of question misinterpretation, the survey was taken by four SLP graduate students and two faculty members to ensure question clarity before the survey was distributed. While precautionary measures were taken to reduce the risk of confusing questions, participants may still have interpreted questions differently than originally intended. In addition, on one of the questions involving a Likert scale, a rating of five was improperly labeled as “uncomfortable” instead of “comfortable”. Many respondents appeared to notice this error, evidenced by some participants crossing out “un” in the word uncomfortable to reflect the appropriate answer. While it is possible that some respondents may have answered inappropriately on the scale due to this confusion, analysis of each survey showed that most ratings for this question were consistent with the participants’ other responses.

Subject selection and response rate are other possible limitation of this study. Only 300 participants were chosen at random from a list of 186,000 SLPs. This number represents just 0.16% of ASHA members. Furthermore, of those 300 members, only 55 responded. This represents less than one-percent of all ASHA members. Therefore, it is possible that the participants in this study may not be fully representative of the entire population of SLPs.

Future Directions

Given that this was the first study specifically focusing on SLPs' knowledge and use of behavior management and most SLPs serve clients who present with counterproductive behaviors, more research is needed to develop a complete picture of SLPs' knowledge and comfort levels in the utilization of behavior management. Although this study provides some information on this topic, the low number of respondents likely does not represent the full population of SLPs across the country. Therefore, future studies should survey a greater number of SLPs at a national level to get a better representation of the population as a whole.

Additionally, since many inconsistencies in how SLPs are trained in behavior management were identified in this study, future research should investigate various methods of distributing this knowledge to determine the most effective way to educate all SLPs about behavior management. To aid in developing a curriculum that will be applicable for SLPs, future studies should further investigate common counterproductive behaviors seen by SLPs, as well as barriers impeding the implementation of behavior management. It would also be beneficial to examine the efficacy of specific treatment methods for certain types of behaviors to aid professionals in clinical decision making. Finally, prevalence studies examining the number of

individuals with communication disorders that present with counterproductive behaviors would be another useful addition to the current body of research.

Study Significance

Overall, this study found that SLPs serve many clients who present with counterproductive behavior. Research has demonstrated that the presence of a communication disorder increases the likelihood that one will present with counterproductive behaviors, and the current study showed that many SLPs serve a large number of clients who present with behavioral challenges. However, this study identified a gap between the need for SLPs to use behavior management strategies and their comfort and education in regards to behavior management. Furthermore, many inconsistencies were found in how SLPs are trained in behavior management, illustrating that not all SLPs receive proper training. SLPs have voiced that they feel they would have benefitted from formal training in behavior management. These findings suggest that changes should be implemented to assure that all SLPs receive proper and consistent training on the identification and implementation of behavior management techniques, as they will face many clients with behavioral challenges. These changes could occur in graduate coursework, graduate clinical practica, and/or continuing education. Once SLPs are able to confidently and effectively manage counterproductive behavior, intervention for clients who present with challenging behaviors may be provided in a more effective and efficient manner. Ultimately, this will increase the progress and success of many clients with communication disorders.

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Appendix A

Recruitment Letter



Hello,

My name is Grace Bonasera and I am a master's student in the Speech-Language Pathology graduate program at Central Michigan University. I am contacting you to see if you would be willing to participate in a survey study I am conducting as a master's thesis project. This study will examine the current prevalence, knowledge, and comfort levels that SLPs have in implementing behavior management strategies.

Participation in this study will require you to complete an anonymous survey. The survey will take approximately 5-15 minutes of your time, in which you will be asked questions about your caseload, your knowledge and implementation of behavior management strategies, as well as your levels of comfort in working with clients who present with counterproductive behaviors. Although you will not be directly compensated for your participation, it is my hope your information will help shape guidelines addressing formal training in behavior management for SLPs, ultimately increasing the success of our clients.

If you are interested in participating in this study, please review the anonymous consent form to keep for your own records. If you wish to continue, you may find a copy of the survey inside this envelope, along with a pre-addressed envelope to return your survey to me.

I want to thank you in advance for your time, support and participation; it is appreciated beyond words. If you have questions, comments, or concerns at any point during this process, please feel free to contact me or my advisor.

Sincerely,

Grace Bonasera

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Appendix B

Consent Form for an Anonymous Survey



Consent Form for Anonymous Surveys

Behavior Management:

The Knowledge and Comfort Levels of Speech-Language Pathologists

Student Researcher:

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Introductory Statement

You are invited to participate in a survey study being conducted at Central Michigan University.

The current investigation is a part of a master's thesis project, being supervised by the advisor above. Details about this study are discussed below, but if you have any additional questions, please feel free to contact the researchers listed above. It is important that you understand this

information so that you are able to make an informed decision on whether you would like to participate. Your participation in this study is voluntary, and you may refuse or withdraw participation at any time, for any reason, without consequences.

What is the purpose of this study?

The purpose of this study is to assess four critical research questions (listed below) to assess current levels of knowledge and comfort that SLPs have in working with clients who require, or would benefit from, behavior management strategies. By assessing these areas, we can ultimately begin to ensure that all SLPs receive proper training, leading to more effective intervention and client success.

Research Questions:

1. How many SLPs have clients with behavior problems on their caseload, and what are the characteristics of these clients?
2. What knowledge do SLPs have on behavior management, and how did they acquire this knowledge?
3. How do SLPs manage clients with behavior problems?
4. What are SLPs current levels of comfort in working with individuals with behavior problems?

What will I do in this study?

This study requires you to complete a survey. You will be asked a series of questions, to which you will respond by clicking the appropriate response, or typing your desired answer into a text

box. After completing the survey, you will submit your answers by clicking “submit.” This survey is anonymous and participation is voluntary.

How long will it take me to do this?

The survey should take between 5-15 minutes to complete.

Are there any risks of participating in the study?

There are no anticipated risks or discomforts associated with participation in this study.

What are the benefits of participating in the study?

Long-term benefits of this study will include insight into the current knowledge and levels of comfort SLPs have in implementing behavior management techniques. Ultimately, this will help ensure that all SLPs are trained and confident in behavior management strategies, resulting in more efficient treatment of individuals with communication disorders.

Will anyone know what I do or say in this study (confidentiality)?

No individual identifiable information will be collected from you during this study. No one will be able to identify your participation in this study, including your employer or educational institution.

Will I receive any compensation for participation?

You will not receive any direct compensation for your participation.

Who can I contact for information about this study?

For more information, please contact the researchers listed above, or you may contact Central Michigan University's Institutional Review Board using the information listed below.

You are free to refuse to participate in this research project or to withdraw your consent and discontinue participation in the project at any time without penalty or loss of benefits to which you are otherwise entitled. Your participation will not affect your relationship with the institution(s) involved in this research project.

My return of this survey implies my consent to participate in this research, that I am 18 years of age or older and have been given a second copy of this form to keep for my records.

If you are not satisfied with the manner in which this study is being conducted, you may report (anonymously if you so choose) any complaints to the Institutional Review Board by calling 989-774-6401, or addressing a letter to the Institutional Review Board, 104 Foust Hall Central Michigan University, Mt. Pleasant, MI 48859.

Appendix C

Survey



Department of Communication Disorders

2168 Health Professions Building

Mount Pleasant, MI 48859

(989) 774-1415

Behavior Management: Knowledge and Comfort Levels of Speech-Language Pathologists

Please take a few minutes to fill out this survey on your knowledge and experiences related to behavior management. Your answers will be kept confidential. Thank you for your participation.

Demographic Information

What is your gender?

- Male Female Other Prefer not to disclose

In what year did you earn your master's degree in speech-language pathology?

In what state did you complete your master's degree?

What state do you currently live in?

In total, how many years have you worked as a speech-language pathologist?

In what settings do you *currently* work (check all that apply)?

- | | | |
|-----------------------------------------|---------------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Preschool | <input type="checkbox"/> Hospital | <input type="checkbox"/> Private practice |
| <input type="checkbox"/> Public school | <input type="checkbox"/> Rehabilitation center | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Private school | <input type="checkbox"/> Skilled nursing facility | <input type="checkbox"/> Other: _____ |

In what settings have you *previously* worked (check all that apply)?

- | | | |
|-----------------------------------------|---------------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Preschool | <input type="checkbox"/> Hospital | <input type="checkbox"/> Private practice |
| <input type="checkbox"/> Public school | <input type="checkbox"/> Rehabilitation center | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Private school | <input type="checkbox"/> Skilled nursing facility | <input type="checkbox"/> Other: _____ |

For how many years did you work in each of these settings (complete all that apply)?

- | | | |
|-----------------------------------------------|---------------------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> Preschool _____ | <input type="checkbox"/> Hospital _____ | <input type="checkbox"/> Private practice _____ |
| <input type="checkbox"/> Public school _____ | <input type="checkbox"/> Rehabilitation center _____ | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Private school _____ | <input type="checkbox"/> Skilled nursing facility _____ | <input type="checkbox"/> Other: _____ |

Caseload Description

How many clients are currently on your caseload?

Briefly describe your caseload, including the age range and disorders of the clients you see.

Do you have any clients on your caseload who benefit/would benefit from behavior management?

Yes | No

If yes, approximately how many clients?

Have you served clients who require behavior management during your career as a speech-language pathologist?

Yes | No

Approximately how many instances of counterproductive behaviors do you see on a daily basis?

List the three behaviors that you find to be the most disruptive and/or see most frequently.

1. _____

2. _____

3. _____

Behavior Management

How do you manage clients on your caseload with behavioral challenges?

What interventions/behavior management strategies do you use to manage counterproductive behaviors?

What barriers do you experience when working with clients who have behavioral needs?

Knowledge of Behavior Management

Which of the following do you feel qualified/competent in (check all that apply)?

- Be part of a multidisciplinary team serving a student who requires behavioral supports
- Implement behavior management techniques given to you by another staff member
- Design and implement a behavior management plan for a client on your own
- Provide other staff members with information about behavior management strategies

Have you received any formal training in behavior management?

Yes | No

If so, when?

- Undergraduate course Seminar post-graduation Other: _____
- Graduate course Work experience Other: _____
- Presentation pre-graduation In-service

Did you take one or more college courses devoted primarily to the topic of behavior management?

Yes | No

If yes, please list the names of the courses, as well as which level they were offered (i.e., undergraduate, graduate, etc.)?

As a student, did you perform clinical practica with any clients who needed behavior management?

Yes | No | N/A

Comfort in Behavior Management

How comfortable do you feel working with clients who have behavioral needs?

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | N/A |
| (very uncomfortable) | (uncomfortable) | (neutral) | (comfortable) | (very comfortable) | |

Do you feel you would have benefitted from more formal training in behavior management?

Yes | No

If so, in what form would you like to receive more training (e.g., work place training, graduate courses, etc.)?

Additional Feedback

Please share any additional information that you believe we should know.

Thank you for taking the time to fill out our survey. Your participation is greatly appreciated.