Communication Disorders Among Persons Experiencing Homelessness

By

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Abstract

The purpose of this exploratory research study was to describe communication disorders among the population of persons experiencing homelessness (PEH). PEH are at increased risk for a variety of health impairments that can result in communication disorders. There has been minimal research on the prevalence and impact of communication disorders among this population. This research study involved a survey completed by staff members at organizations serving individuals experiencing homelessness. The survey included questions about the characteristics of communication disorders among PEH and the impact of communication disorders on the social and occupational functioning of PEH. The results of the survey indicate that the vast majority of respondents worked with PEH with communication disorders and that respondents viewed communication disorders as a major barrier to the social and occupational functioning of PEH. Results of this research study indicate a need and an opportunity for collaboration between speech language pathologists and organizations that serve PEH.
# Table of Contents

ABSTRACT .........................................................................................................................................iii

LIST OF TABLES ..............................................................................................................................iv

INTRODUCTION ..............................................................................................................................1

Homelessness and Health .................................................................................................................2

Traumatic Brain Injury .....................................................................................................................3

Dementia ...........................................................................................................................................3

Social Communication ......................................................................................................................4

Cognitive Impairment .......................................................................................................................5

Speech Language Pathology and PEH ............................................................................................6

METHODS .........................................................................................................................................10

Participants .......................................................................................................................................10

Survey ...............................................................................................................................................12

Procedure .........................................................................................................................................12

Analysis ............................................................................................................................................13

RESULTS ..........................................................................................................................................14

Participant Information ...................................................................................................................14

Communication Disorders .............................................................................................................14

Health Issues ...................................................................................................................................16

Traumatic Brain Injury ....................................................................................................................16
Chapter 1

Introduction

At any given point in time, over half of a million (500,000) individuals in the United States are experiencing homelessness (National Alliance to End Homelessness, 2016). An additional 15 million Americans experience significant housing insecurity and a total of 48 million Americans are experiencing poverty, which is the primary risk factor for homelessness (Hatchett, 2004). While overall rates of homelessness have decreased slightly over the past 5 years, ethnic and racial minorities continue to be disproportionately represented among the population of persons experiencing homelessness (PEH) (Parks, Stevens, & Spence, 2007). For the large majority of PEH, homelessness is not a lifelong or even long-lasting condition; only 17% of PEH are considered chronically homeless or members of chronically homeless families (National Alliance to End Homelessness, 2016). However, the experience of homelessness can be devastating, leading to negative outcomes and increasing the risk for a myriad of health, social, and economic problems.

While research has been conducted into a variety of health and economic concerns affecting PEH, there has been limited research into the communication disorders affecting this population. In a systematic review of health care intervention for individuals experiencing homelessness, speech language pathology services were not included (Hwang, 2005). This study sought to understand the prevalence and impact of communication disorders and PEH. The study focused on the common health impairments (traumatic brain injury, dementia, and social communication disorders) that affect the population of PEH and the communicative challenges and disorders that can result. This study also sought to understand the functional impact of
communication disorders on this population. It was anticipated the communication disorders will impact the social and occupational functioning of individuals experiencing homelessness.

**Homelessness and Health**

Compared to the general population, individuals experiencing homelessness report significantly more medical and health problems. In a 2004 survey, forty five percent (45%) of PEH reported that they were currently experiencing a significant health issue (Hatchett, 2004). While health issues and the experience of homelessness are quite likely interrelated, health impairments are not considered to be a major causative factor in the experience of homelessness. In the same 2004 survey, only 9% of respondents reported that health-related issues as a cause of their experience of homelessness. This may indicate that significant health problems may be viewed more commonly as a result rather than a cause of the experience of homelessness.

The health problems faced by PEH can be compounded by the lack of access to quality health care that many of these individuals face, and this lack of access can persist after the experience of homelessness has ended (Bassuk, Volk, & Olivet, 2010). In general, providing housing to PEH has shown a significant decrease in the utilization of health care services, specifically emergency health care use. However, this decrease in utilization has not translated into an impact on overall physical health for PEH (Hwang, 2005). This may indicate a need for more consistent, high quality health care available to individuals experiencing homelessness, perhaps even after their experience of homelessness has concluded.

In general, the health problems associated with the experience of homelessness can have a negative impact on communication. Conditions associated with homelessness, including malnutrition, trauma, substance abuse, and neurological and psychiatric disorders, can have a negative impact on cognition and language functioning (Parks, Stevens, & Spence, 2007). PEH
are at a higher risk of, and experience higher incidences of, an array of health impairments including traumatic brain injuries (TBI), dementia, cognitive impairments, and social communication impairments that are frequently result in communication disorders.

**Traumatic brain injury.** Traumatic brain injury (TBI) is significantly more common among individuals experiencing homelessness than among the general population (Hwang et al., 2008). According to a 2008 study, the traumatic brain injury prevalence rate among individuals experiencing homeless was 53%, and a 2015 study found that over fifty percent (50%) of PEH screened reported a history of serious head injury (Depp et al., 2015). This is significantly higher than the prevalence of TBI among the general population, which is approximately 8.5%. Many of the risk factors for homelessness and traumatic brain injury, such as childhood physical abuse, are overlapping. Additionally, PEH are at an increased risk for physical injury and assault. The risk of traumatic brain injury is directly linked with the experience of homelessness; the more years a person has experienced homelessness, the more likely the person is to experience one or more traumatic brain injuries.

For individuals experiencing homelessness who have a history of TBI, there are a number of health concerns. PEH with a history of moderate to severe TBI are at increased risk for seizures, decreased overall physical and mental health, and substance abuse problems (Hwang et al., 2008).

**Dementia.** Individuals experiencing homelessness are not routinely screened or evaluated for dementia; consequently, no United States national data on the prevalence of dementia in this population is currently available. According to an Australian study, it is estimated that approximately 10% of PEH experience dementia (Australia’s Alzheimer’s Inc, 2016). The highest risk factor for dementia is age, and the median age of PEH is rising. Additionally, the
early stages of dementia are often misdiagnosed by service providers, preventing PEH from receiving the appropriate services (“Alzheimer’s/Dementia Expert Panel for Department of Aging and Adult Services”, 2009). Due to the increased rates of substance abuse, PEH may be at increased risk of alcohol-related brain damage (ARBD), which can include Wernicke’s encephalopathy and Korsakoff’s psychosis (Gilchrist & Morrison, 2005). In a study in an European hostel, 26% of adult male individuals experiencing homelessness had a form of alcohol-related brain damage (Gilchrist & Morrison, 2005).

**Social communication.** Social communication disorders have been rarely studied in the population of PEH, although new research indicates a link between social communication disorders and the experience of homelessness. A 2015 Welsh study indicated that 12% of PEH surveyed were identified as having an autism spectrum disorder (ASD). The connection between autism and the experience of homelessness is not strongly supported by current research, although anecdotal evidence from outreach personnel support the claim that a significant number of PEH have autism spectrum disorders (“Link between Autism and Homelessness”, 2016).

In general, social communication deficits have been noted among PEH and can result in negative impacts. For example, participation in substance abuse recovery programs, such as Alcoholics Anonymous and Narcotics Anonymous, require some degree of social participation, and can be negatively impacted by social communication deficits. Meetings are conducted in a group format, and socialization with relationship-building among attendees is highly encouraged and touted as imperative to the continued recovery process. (Caravella et al., 2012).

**Cognitive impairment.** General cognitive impairments can co-occur with TBI, dementia, and social communication disorders, and cognitive impairments can result in communication disorders. There is considerable variability in the research into cognitive
impairments among individuals experiencing homelessness. Studies report rates of global impairments between 0% and 82% (Bousman et al., 2010). For example, a 2010 study of adults entering outpatient psychiatric treatment found no significant differences in neuropsychological functioning between adults experiencing homelessness and adults who had never experienced homelessness (Bousman et al., 2010). However, systematic reviews on the topic indicate a greater prevalence of cognitive impairment among PEH. The average prevalence of cognitive impairment among PEH is between 5 to 8 times greater than the general population (Depp et al., 2015). A pooled screening of over two thousand PEH, about one quarter screened positive for cognitive impairment (Depp et al., 2015). Veterans experiencing homelessness also experienced higher rates of cognitive impairment than compared to their peers. Additionally, veterans with cognitive impairment experienced higher levels of hostility (Backer & Howard, 2007). Cognitive impairment can also result from mental health conditions. Cognitive impairment is a core characteristic of schizophrenia; nearly all persons affected by this disorder demonstrate some degree of cognitive impairment (Medalia & Richardson, 2005). In terms of the characteristics of cognitive dysfunction, a preliminary conclusion may be that slower cognitive processing speeds and reduced executive functioning abilities may be associated with homelessness (Bousman et al., 2010).

Cognitive impairments can have significant impact on the occupational and social functioning of PEH. Cognitive deficits are a strong predictive factor of poor occupation and social outcomes (Burra, Stergiopoulos, & Rourke, 2009). Research suggests that cognitive dysfunction is most likely a risk factor for homelessness and cognitive deficits are likely a limiting factor in the success rates of occupational training and/or rehabilitation programs (Burra, Stergiopoulos, & Rourke, 2009). Service providers frequently perceived deficits in
comprehension as hostility. Thus, individuals with cognitive impairments are deemed non-compliant and may be more likely to be dismissed from services because of failures to comply or disruptive behaviors (Backer & Howard, 2007).

**Speech Language Pathology and PEH**

There is limited research available concerning the impact of speech language intervention on the population of PEH (Caravella et al., 2012). The majority of research related to communication relates to how professionals communicate with their clients, with limited focus on how clients can improve their own communication abilities (Caravella et al., 2012). Though limited in scope, there have been studies focused on the language functioning of individuals experiencing homelessness. Studies involving the use of only standardized language assessments showed no significant differences between the population of housed persons and persons experiencing homelessness (Burra, Stergiopoulos, & Rourke, 2009). Due to concerns about the transience of sheltered PEH, the vast majority of studies involved only one session of assessment for the individuals (O’Neil-Pirozzi, 2003). Additionally, the primary method of language assessment has been solely in the form of standardized assessments, which are typically “...not sufficient to capture the variety of language details that constitute an individual's profile” (“Spoken Language Disorders: Assessment”, 2018, para. 10).

Language delays are significantly more common among children experiencing homelessness than their peers (O’Neil-Pirozzi, 2003). Additionally, academic challenges and school failure are more common among this population (O’Neil-Pirozzi, 2003). In children experiencing homelessness, decreased cognitive functioning and language delays have been noted to co-occur (O’Neil-Pirozzi, 2003). In a study of 25 families consisting of single mothers and their preschool aged children who were experiencing homelessness and living in a family
shelter, the majority of the women and their children presented language deficits and delays. Fifteen of the twenty five mothers (60%) presented with an overall language deficit, and 20 of the 29 (69%) preschool age children presented with a language delay as indicated by standardized assessment measures. None of the 25 mothers and only 1 of the 29 children had ever received speech or language therapy (O’Neil-Pirozzi, 2003). It was recommended that speech pathologists counsel schools about the impact of language functioning on children experiencing homelessness and present regular educational workshops to agencies serving individuals experiencing homelessness (O’Neil-Pirozzi, 2003).

Additionally, preliminary research has shown benefits of communication intervention for PEH (Rosenow et al., 2001; Gilchrist & Morrison, 2005). The use of communication skills training has shown positive impacts on reducing alcohol use and number of alcohol-related problems for those who had undergone treatment (Rohsenow et al., 2001). Following a six-month treatment program, participants who received communication skills training reported fewer numbers of alcohol-related problems following a 12-month check-in.

Current research suggests the benefits of collaboration between PEH, staff members at organizations serving this population, and speech language pathologists (Backer & Howard, 2007). Self-reported communication problems are common among PEH. In a study of persons experiencing homelessness entering a substance abuse treatment program, 45.8% of respondents reported deficits in their communication skills, and 41.7% felt their social skills were under-developed and in need of maintenance (Caravella et al., 2012).

Current research into the health impairments advocate for the increased presence of service providers such as speech pathologists to provide specialized services to the population of individuals experiencing homelessness across the lifespan. Manathorpe (2015) identified a
noticeable lack of specialized early intervention for children experiencing homelessness. In their systematic review of cognitive dysfunction in PEH, Backer and Howard (2007) advocate for cognitive rehabilitation, specifically strategies such as providing visual supports and errorless learning, that fall under the scope of practice of speech language pathologists.

Additionally, the literature points to a number of opportunities for collaboration between speech language pathologists and the staff members of organizations that provide services to PEH. Clinical staff members at organizations that serve individuals experiencing homelessness report a lack of familiarity with cognitive impairments and traumatic brain injury, and speech pathologists can provide clinical expertise at identifying and recognizing symptoms of these and other communication-related conditions among PEH (Backer & Howard, 2007; Hwang et al., 2008). Many services currently provided to PEH across the country, such as supportive housing, have a positive impact on neuropsychological functioning, specifically on executive functioning, and when combined with support services, (of which speech pathology intervention could be included) have resulted in increases in long-term stability among PEH (Bassuk, Volk, & Olivet, 2010).

Overall, the benefits of improving communication among PEH can hardly be overstated; increases in communication skills have been demonstrated to increase “the ability to translate their [PEH’s] experiences outside the context of treatment” and foundational in “building supportive and healthy relationships” (Caravella et al., 2012, pg. 7).

The purpose of the study was to investigate the prevalence of communication disorders among PEH, the characteristics of communication disorders secondary to TBI, dementia, and social communication impairments, and whether or not communication disorders impact the social and occupational functioning of PEH. It was anticipated the prevalence rates of
communication disorders would be higher among the population of PEH than the general population, and that communication disorders would have an impact on the social and occupational functioning of PEH.
Chapter 2

Methods

This study used survey methodology to explore the communication challenges experienced by PEH. Of interest were the conditions that have an impact on social and occupational functioning.

Participants

The research survey was distributed to organizations that provide services to PEH across the United States. The survey was sent to 42 organizations, and the researcher received responses from 10 organizations for a 24% response rate. Surveys were distributed to organizations through a recruitment email. Organizations contacted were determined by either 1) the researcher’s familiarity with the organization or 2) search engine results based on geographic location. The geographic regions used by the researcher included the Northeast, Southeast, North, Midwest, Southwest, and West of the continental United States. Various geographic regions were included in order to account for diversity in service delivery in different regions of the country, as well as overall demographic diversity (e.g. urban and rural populations, racial and ethnic diversity, socio-economic diversity). For each geographic region, the researcher located organizations that serve PEH using a search engine and the name of the city and/or state in that region (e.g. “Washington D.C. homeless shelters” or “Alabama homeless shelters”). The researcher contacted organizations based upon three factors, 1) direct services for PEH, 2) the variety of services offered, and 3) the availability of a contact phone number or email address on their website. A list of the organizations contacted by the researcher is located below in Table 1.

Table 1.

<table>
<thead>
<tr>
<th>Organizations Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization Name</td>
</tr>
<tr>
<td>Organization</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Union Rescue Mission</td>
</tr>
<tr>
<td>The Rock at NoonDay</td>
</tr>
<tr>
<td>Porchlight, Inc.</td>
</tr>
<tr>
<td>Twin City Mission</td>
</tr>
<tr>
<td>Dothan Rescue Mission</td>
</tr>
<tr>
<td>Interfaith Wichita</td>
</tr>
<tr>
<td>Holy Family House</td>
</tr>
<tr>
<td>Forest Avenue Family Shelter</td>
</tr>
<tr>
<td>Mary’s Place</td>
</tr>
<tr>
<td>Restart, Inc.</td>
</tr>
<tr>
<td>Simpson Housing</td>
</tr>
<tr>
<td>Union Gospel Mission of Tarrant County</td>
</tr>
<tr>
<td>Albuquerque Rescue Mission</td>
</tr>
<tr>
<td>Central Union Mission</td>
</tr>
<tr>
<td>The Bridge North Texas</td>
</tr>
<tr>
<td>St. Martin’s HopeWorks</td>
</tr>
<tr>
<td>COTS Detroit</td>
</tr>
<tr>
<td>People Serving People</td>
</tr>
<tr>
<td>Compass Housing Alliance</td>
</tr>
<tr>
<td>Providence Ministry</td>
</tr>
<tr>
<td>The Tulsa Day Center</td>
</tr>
<tr>
<td>Firehouse Ministries</td>
</tr>
<tr>
<td>Stewpot Community Services</td>
</tr>
<tr>
<td>Joy Junction</td>
</tr>
<tr>
<td>Union Gospel Mission</td>
</tr>
<tr>
<td>The United Methodist Open Door</td>
</tr>
<tr>
<td>John 3:16 Mission</td>
</tr>
<tr>
<td>Portland Rescue Mission</td>
</tr>
<tr>
<td>Coalition for the Homeless of Central Florida</td>
</tr>
<tr>
<td>Casa Ruby</td>
</tr>
<tr>
<td>City Union Mission</td>
</tr>
<tr>
<td>Upward Bound House</td>
</tr>
<tr>
<td>Community for Creative Non-Violence</td>
</tr>
<tr>
<td>Los Angeles Mission</td>
</tr>
<tr>
<td>Dorothy Day Hospitality House</td>
</tr>
<tr>
<td>Kansas City Rescue Mission</td>
</tr>
<tr>
<td>Community Linc</td>
</tr>
<tr>
<td>Weingart Center</td>
</tr>
<tr>
<td>PATH</td>
</tr>
<tr>
<td>St. Anthony Family Shelter</td>
</tr>
</tbody>
</table>

**Survey**
A copy of the survey provided to participants is included in Appendix A. The survey was constructed by the researcher. The survey was piloted with an organization in the Southwest region, and the survey questions were revised based upon feedback from the pilot survey. The survey consisted of 22 questions in 7 sections. The sections included: 1) Participant Information, 2) Communication Disorders and Nonverbal Clients, 3) TBI, 4) Dementia, 5) Social Impairments, 6) Social and Occupational Functioning, and 7) Collaboration with Speech Language Pathologists. In general, participants were asked to describe their general work experiences with PEH, their impressions of communication disorders among the PEH with whom they worked (i.e., frequency of occurrence and symptoms) and their impressions of the impact of communication disorders on the social and occupational functioning of PEH. Participants were asked specifically about traumatic brain injury, dementia, and social communication impairment. These questions focused on (a) whether the participant served individuals with these health impairments and (b) if the participant had served clients with these impairments, what characteristics of communication disorders were present. A total of 33 participants from the 10 organizations completed the survey. These participants served as staff members at organizations that provide services to individuals experiencing homelessness. The participants reported to work in a variety of capacities (e.g. emergency shelter services, case management, etc.) More information about the study participants can be found in Chapter 3.

Procedure

When contacting the organizations, the researcher provided the survey recruitment information via email to the website’s contact email listed. If no contact email was provided, the researcher emailed the director of the organization. A link to the survey was provided in the recruitment email, and the contact person for the organization was invited to distribute the survey
link and information to all staff members at the organization. The researcher provided her email address in the contact email and answered any questions about the survey via email.

**Analysis**

The researcher analyzed the survey using a quantitative and qualitative (mixed methods) analyses (Agency for Healthcare Research and Quality, 2013). Data collected from the survey provided both quantitative and qualitative descriptions of the communication disorders among PEH.
Chapter 3

Results

Participant Information

A total of 44 individuals responded to the survey, and of those 44 respondents, 33 (73%) participants completed the survey. Results described in this section will reflect the 33 completed responses. The participants varied in their years of experience working with PEH. Twelve (36%) of the participants had worked with the population of PEH for over 10 years, 10 participants (30%) had worked with PEH for 4-10 years, 10 participants (30%) had worked with PEH for 1-3 years, and 1 respondent (3%) had worked with PEH for less than 1 year. Additionally, the participants worked with PEH in a variety of capacities. See Table 2 for a representation of participants’ current job descriptions.

Table 2

*Job Descriptions of Participants*

<table>
<thead>
<tr>
<th>Job Description</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Management</td>
<td>6</td>
</tr>
<tr>
<td>Housing</td>
<td>1</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>2</td>
</tr>
<tr>
<td>Shelter Services</td>
<td>8</td>
</tr>
<tr>
<td>Therapy</td>
<td>2</td>
</tr>
<tr>
<td>Medical Provider</td>
<td>2</td>
</tr>
<tr>
<td>Administration</td>
<td>4</td>
</tr>
<tr>
<td>Education</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
</tr>
</tbody>
</table>

The Participants who responded “Other” worked in a variety of capacities, including “chaplain” and “nursery room caregiver.”

Communication Disorders
Participants were asked “Approximately what percentage of the individuals you work with regularly do you believe have communication disorders and/or significant communication challenges?” The results are included in Figure 1.

Figure 1

![Bar chart showing percentage of current clients with communication disorders.]

Participants were asked how many PEH they had worked with who would be considered to be nonverbal. Participants were instructed not to include individuals who used manual language, individuals who were nonverbal as a result of anxiety or a psychological condition, or individuals who were nonverbal by choice. The results are included below in Figure 2.

Figure 2
Additionally, Participants were asked if any of the PEH they worked with used augmentative and alternative communication (AAC) as a means of communication. Participants were instructed not to include individuals who used a manual language in their responses. Twenty-seven (82%) reported that none of the PEH they had worked with used AAC, and 6 participants (18%) reported that between 1 and 5 of the PEH they had worked with used AAC.

**Health Issues**

**Traumatic Brain Injury.** Participants were asked how many individuals they had worked with who had experienced one or more traumatic brain injuries. Participants were asked to include any confirmed, self-reported, or observed injuries. A total of 31 participants (94%) reported they had worked with at least one individual with a TBI. Information about the number of PEH with TBI that participants had worked with is included in Figure 3.

Figure 3
The 31 participants who had worked with PEH who had experienced a TBI were asked “In your opinion, how many of these individuals who suffered a traumatic brain injury displayed difficulties in their ability to communicate?” Three participants (9%) reported that none of the individuals displayed difficulties, 15 participants (48%) reported that less than half the individuals displayed difficulties in communication, 12 (39%) participants reported that more than half of the individuals with TBI they worked with displayed difficulties in communication, and 1 participant reported that all or almost of the individuals experienced difficulties in communication.

The participants who indicated that the PEH with TBI they worked with had difficulties in their ability to communicate were asked to select the characteristics that applied to their clientele. Table 3 presents their responses. The responses are listed in order how of many participants identified its presence, from the most frequently identified characteristics to the least.
Table 3

*Characteristics of Communication Disorders in PEH with TBI*

<table>
<thead>
<tr>
<th>Communication Characteristics of TBI</th>
<th>Percentage of Participants who identified characteristic in PEH they serve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty maintaining a topic of conversation</td>
<td>68%</td>
</tr>
<tr>
<td>Difficulty with spelling, reading, and writing</td>
<td>64%</td>
</tr>
<tr>
<td>Difficulty in understanding or producing speech correctly</td>
<td>64%</td>
</tr>
<tr>
<td>Slurred speech</td>
<td>57%</td>
</tr>
<tr>
<td>Difficulty taking turns in conversation</td>
<td>50%</td>
</tr>
<tr>
<td>Little or no awareness of communication difficulties</td>
<td>32%</td>
</tr>
<tr>
<td>Difficulty in programming oral muscles for speech production</td>
<td>29%</td>
</tr>
<tr>
<td>Other difficulties</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Dementia.** Participants were asked how many individuals they had worked with who had experienced dementia. Participants were asked to include any confirmed, self-reported, or observed incidences. Examples of dementia provided included Alzheimer’s disease and alcohol-related brain damage. A total of 27 participants (82%) reported they had worked with an individual who experienced dementia. Information about the number of PEH with dementia that participants had worked with is included in Figure 4.
The 27 participants who had worked with PEH who had experienced dementia were asked “In your opinion, how many of these individuals who experienced dementia displayed difficulties in their ability to communicate?” Eight participants (30%) reported that none of the individuals displayed difficulties in communication, 10 participants (37%) reported that less than half of the individuals displayed difficulties in communication, and 9 participants (33%) reported that more than half of the individuals with dementia they worked with displayed difficulties in communication.

The participants who indicated that the PEH they worked with who experienced dementia had difficulties in their ability to communicate were asked to select the characteristics that applied to their clientele. Table 4 depicts the characteristics identified in order of the highest number of participants who indicated its presence to the least.
Table 4

*Characteristics of Communication Disorders in PEH with TBI*

<table>
<thead>
<tr>
<th>Communication Characteristics of Dementia</th>
<th>Percentage of participants who identified characteristic in PEH with dementia they serve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty recalling names, places, words</td>
<td>95%</td>
</tr>
<tr>
<td>Repetitive language (e.g., asking the same question repeatedly)</td>
<td>80%</td>
</tr>
<tr>
<td>Difficulty following multi-step directions</td>
<td>80%</td>
</tr>
<tr>
<td>Difficulty following or maintaining a conversation</td>
<td>80%</td>
</tr>
<tr>
<td>Difficulty in reading and writing</td>
<td>74%</td>
</tr>
<tr>
<td>Grammatical errors</td>
<td>50%</td>
</tr>
<tr>
<td>Inability to understand facial expressions or social cues</td>
<td>39%</td>
</tr>
<tr>
<td>Regression to primary language (for multilingual individuals)</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Social Communication.** Participants were asked if they had worked with individuals who experienced significant difficulty in social communication. Difficulties in social communication were defined as not understanding social rules for communication and/or not using language to communicate appropriately with others. Twenty-seven participants (82%) reported they had worked with PEH who had significant social communication difficulties, and 6 participants (18%) reported they had not worked with individuals with significant social communication difficulties.

Participants who reported they had worked with PEH with social communication difficulties were asked to identify the characteristics that were apparent in the individuals they worked with. Participants were asked to only consider characteristics that individuals with PEH did not understand or could not utilize, not characteristics they engaged in a purposeful manner. Below is a table of the characteristics of communication difficulties identified, in order of the highest number of participants who indicated its presence to the least.
Table 5

Characteristics of social communication impairments in PEH

<table>
<thead>
<tr>
<th>Characteristics of Social Communication Impairments</th>
<th>Percentage of participants who identified characteristic in PEH with social communication difficulties they serve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrupts inappropriately</td>
<td>96%</td>
</tr>
<tr>
<td>Does not provide relevant answers to questions</td>
<td>89%</td>
</tr>
<tr>
<td>Does not use appropriate eye contact</td>
<td>81%</td>
</tr>
<tr>
<td>Does not expect polite language</td>
<td>78%</td>
</tr>
<tr>
<td>Does not ask for repetition or clarification</td>
<td>78%</td>
</tr>
<tr>
<td>Does not understand and/or use physical space</td>
<td>74%</td>
</tr>
<tr>
<td>boundaries</td>
<td></td>
</tr>
<tr>
<td>Does not give sufficient information for listener</td>
<td>70%</td>
</tr>
<tr>
<td>information</td>
<td></td>
</tr>
<tr>
<td>Cannot begin a conversation, keep a conversation</td>
<td>70%</td>
</tr>
<tr>
<td>going, stay on topic during a conversation, or end a</td>
<td></td>
</tr>
<tr>
<td>conversation appropriately</td>
<td></td>
</tr>
<tr>
<td>Does not appropriately ask for help</td>
<td>67%</td>
</tr>
<tr>
<td>Does not understand other’s use of body language</td>
<td>63%</td>
</tr>
<tr>
<td>Does not use appropriate body language</td>
<td>56%</td>
</tr>
<tr>
<td>Does not give effective directions to others</td>
<td>56%</td>
</tr>
<tr>
<td>Does not revise messages when listener misunderstands</td>
<td>48%</td>
</tr>
<tr>
<td>Does not identify or use compliments appropriately</td>
<td>48%</td>
</tr>
<tr>
<td>Does not understand changes in tone of voice</td>
<td>48%</td>
</tr>
<tr>
<td>Does not understand or use humor appropriately</td>
<td>48%</td>
</tr>
<tr>
<td>Does not greet or say goodbye</td>
<td>41%</td>
</tr>
<tr>
<td>Does not understand changes in facial expression</td>
<td>41%</td>
</tr>
<tr>
<td>Does not demonstrate affection appropriately</td>
<td>41%</td>
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**Social Functioning**

Participants were asked to rate the impact of communication difficulties on the social relationships of the PEH they worked with. The results are included in Figure 5.

Figure 5
Participants were asked in an open-ended question to describe the impact of communication disorders on social relationships. The responses from the participants were varied, but a few themes can be identified from the responses. The themes among the responses included inability to form social relationships, destruction of social relationships, inability to access services, and the relationship between substance abuse and communication difficulties. An in-depth discussion of these themes can be found in Chapter 4.

**Occupational Functioning**

In addition to reporting on the impact of communication difficulties on social relationships, participants were also asked about the impact of communication difficulties on the occupational functioning of PEH. The results are included in Figure 6.
Participants were asked to provide descriptions of the impact of communication difficulties on the ability of PEH they worked with to acquire and maintain employment. Similar to the impact on social functioning, participants provided a variety of descriptions. The descriptions provided fell into four major themes: impact on the interview and application process, negative emotional outlook on employment, adverse job performance, and exacerbation of adverse conditions on employment. A more detailed thematic analysis can be found in Chapter 4.

**Speech Pathology**

In the final section of the survey, participants were asked about speech pathology services for their clients. When asked how many of their clients, to their knowledge, received services from a speech language pathologist, 24 participants (73%) reported that none of their clients had received speech pathology services. Two participants (6%) reported that less than 10% of their
clients had received speech pathology services, and 7 participants did not provide a response to this question.

Participants were also asked if they had ever collaborated with a speech language pathologist on behalf of their clients. Two participants (6%) reported they had worked with a speech pathologist, and thirty-one participants (94%) reported they had not ever worked with a speech language pathologist.
Chapter 4

Discussion

This research study investigated the prevalence of communication disorders among PEH, the characteristics of communication disorders secondary to TBI, dementia, and social communication impairments, and whether or not communication disorders impacted the social and occupational functioning of PEH.

Communication Disorders

A review of the literature indicated that PEH would likely be at greater risk for communication disorders, as well as the adverse impacts on social functioning and occupational functioning often result from communication disorders. Broadly, the results of the current research study support this hypothesis. Results from this survey indicate that large percentages of PEH experience communication disorders, and thematic analyses from the respondents’ descriptions of the social and occupational functioning of these individuals indicate adverse impacts on the relationships and employment experiences for PEH with communication disorders.

According to available US census data, between 5 and 10% of the people in the United States have one or more communication disorders (Ruben, 2000). Considering the increased prevalence of health issues that result in communication disorders among PEH, as well as the link between communication disorders and economic insecurity, it was anticipated that PEH would experience higher prevalence rates of communication disorders compared to the general population. The data from this research study supports this assertion. Participants were asked about how many of their clients experience significant communication challenges. No further description of communication disorders or challenges was provided; the question was meant to
gauge how many of the PEH the participants felt were impacted by impaired communication abilities, rather than how many individuals met the clinical criteria for communication disorders.

While 39% of the respondents indicated the clientele they serve experience significant communication challenges at roughly the same rate as the general population (<10%), the remaining 61% of respondents reported that rates of communication challenges at prevalence rates higher than that of the general population. Additionally, of the 61% who indicated higher rates of communication disorders among the population they work with, 65% of those respondents (39% of the total respondents) reported prevalence rates of communication disorders among the PEH they serve that are more than double the rates of communication disorders among the general population (>25%). The higher rates of communication disorders among individuals experiencing homelessness may be a result of higher rates of health issues that typically result in communication disorders and a lack of access to health care services, including speech language pathology. Additionally, PEH may lack the social support network commonly associated with positive outcomes in communication development and intervention success.

Though this study had a very limited sample size, these results provide preliminary evidence that PEH experience communication disorders at higher rates than the general population.

In addition to challenges in communication, a surprisingly large number of respondents indicated they had worked with individuals who they considered to be nonverbal, or not capable of using verbal communication for functional communication. Nearly half of the respondents (48%) indicated they had worked with individuals who were nonverbal. However, only 18% of respondents indicated they had worked with individuals who used any form of AAC. Based upon these results, it can be inferred that many PEH with complex communication needs do not currently have communication support in the form of AAC. Gaining access to appropriate AAC
systems can be a challenging and time-consuming process for all individuals with complex communication needs, and this process may only be made more difficult considering the lack of resources (financial, transportation, etc.) among PEH. Additionally, the high cost of certain AAC systems may be a limiting factor for PEH. Considering the benefits of AAC for individuals with both developmental and acquired communication disorders, increasing access to AAC may be a notable goal for both professionals working with this population, despite the obvious challenges. (Beukelman et al, 2007, Millar et al 2006).

**Traumatic brain injury (TBI).** For medical conditions that impact PEH at greater rates than the general population, the results of this study support the findings of increased prevalence rates. Almost all of the respondents (94%) had worked with at least one individual with a traumatic brain injury, and 19% of respondents had worked with large numbers of PEH (>20) who had experienced TBI. The results of this study are in accordance with the increased prevalence rates Hwang et al. in 2008 and Depp et al. in 2015 reported. Furthermore, this study indicated that not only do a substantial number of PEH experience TBI, but a large number of those individuals have communication disorders as well. The vast majority of respondents (90%) indicated at least a portion of the PEH who had experienced TBI had communication difficulties, and 42% of the participants indicated that more than half of the individuals they worked with who experienced TBI had communication disorders. Previous research into TBI among the population of PEH focused on the prevalence and relevant health characteristics of PEH with TBI, but the researcher was unable to locate research regarding the communication characteristics of these individuals prior to this study.

Results from the current study also provide a description of the characteristics of the communication disorders of PEH who have experienced a TBI. The most common difficulties
identified by respondents were “difficulty maintaining a topic of conversation,” “difficulty with spelling, reading, and writing,” and “difficulty in understanding or producing speech correctly.” While these characteristics are broad, it can be inferred that these communication difficulties can have an impact on the lives of PEH. Previous research into PEH with TBI has focused almost exclusively on the impairments of these individuals, and minimally on the impact of TBI on PEH’s activity and participation in daily life. Difficulty with topic maintenance could be detrimental in building relationships with others through conversations, and deficits in literacy and speech production can negatively impact accessing essential services such as employment, or health care. Additionally, communication difficulties in persons with TBI are frequently misunderstood or misjudged, and have been linked with decreased family integration and vocational pursuits (Ylvisaker et al., 2005). These difficulties may only be exacerbated in PEH, who typically experience greater difficulties in familial relationships and vocational outcomes. A foundational component of successful intervention for individuals with TBI is “the facilitation of knowledge, understanding, and communication competence in everyday communication partners” (Ylvisaker et al. p. 264, 2005). With the information gained from this research study about the most commonly identified communication difficulties of PEH with TBI, speech language pathologists can provide education and training to staff members and other communication partners of PEH with TBI. Considering the previously reported lack of familiarity with TBI indicated by clinical staff members at organizations that serve PEH, speech language pathologists could provide a crucial role in education about the communication difficulties experienced by PEH with TBI (Hwang et al., 2008).

**Dementia.** The results of the study are also in accordance with the research regarding PEH and dementia. A large percentage of the respondents (82%) reported working with
individuals with dementia, and a minority of those respondents (19%) reported working with many more than 20 PEH with dementia. These results indicate a high prevalence of dementia among PEH, especially considering the previously cited mis-diagnosis and under identification of dementia in PEH. A total of 70% of the respondents who worked with PEH with dementia reported that the individuals they worked with displayed significant communication difficulties, and 47% of those respondents indicated that more than half of the individuals with dementia they worked with had significant communication difficulties. Considering the early communication impairment present in dementia, speech language pathologists can provide information and training to may help staff members in organizations serving PEH identify signs and symptoms of dementia in PEH they serve.

Almost all (95%) of respondents reported the individuals with dementia with communication disorders had word-finding difficulties. Other commonly reported difficulties (80% of respondents) include repetitive language, difficulty following multi-step directions, and difficulty following or maintaining a conversation. These difficulties present an opportunity for intervention for speech language pathologists. For example, speech language intervention has proved to be effective in addressing various deficits, including word-finding deficits and cognitive dysfunction, in individuals with dementia (Hopper et al, 2005, Bourgeois & Hickey, 2009, Aguirre et al., 2013). Many communication partners report high levels of frustration when interacting with individuals experiencing dementia due to lack of understanding of communication problems and lack of knowledge to repair communication breakdowns and maintain participation (Bourgeois & Hickey, 2009). With information about how to identify dementia and strategies for effective communication for individuals with dementia, speech
language pathologists may be able to provide important training, support, and education to staff members regarding communication disorders secondary to dementia among PEH.

**Social communication.** While a minimal body of research exists on social communication impairments among PEH, results from this survey support the notion that PEH experience increased rates of social communication impairments. Causes of these impairments were not investigated by the researcher, but could be investigated in further research. For example, considering the increasing prevalence of ASD in the United States and results of this study indicated high rates of social communication impairments among PEH, a research study into the prevalence of ASD among PEH may be warranted. The large number of respondents (82%) who indicated they had worked with PEH with social communication impairments identified a wide variety of commonly occurring characteristics in the individuals they worked with (see Table 5). Treatment for social communication disorders falls within the scope of practice for speech language pathologists. Group intervention has shown positive results for adults with social communication impairments. Consider the demonstrated benefits of communication skills training in a group setting in a substance abuse rehabilitation program described in Chapter 1, speech language pathologists should consider the potential benefits of creating a communication social skills group focused on social and occupational functioning.

**Social Functioning**

Results from this study indicate communication disorders among PEH have an impact on their social relationships. Ninety four percent of respondents indicated that it was either “Definitely true” or “Probably true” that for PEH with communication disorders, communications difficulties impacted their social relationships. Participants gave a variety of responses when asked to describe the impact of communication disorders on social relationships,
and these responses pointed to inability to form social relationships, destruction of relationships, inability to access services, and substance abuse and communication difficulties.

**Inability to form social relationships.** Many respondents spoke to the general isolation experienced by PEH. One respondent wrote that PEH with communication disorders “live in [a] world all alone” and are frequently “misunderstood, used, and ignored.” As a result, PEH with communication disorders can “use anger to communicate” and “end up frustrated” and may become “generally self-centered” and distrusting of others. Some respondents indicated some specific ways in which PEH with communication are isolated from their community. Respondents reported that PEH with communication disorders may become “the target of a bully in the homeless community because they act different and make people uncomfortable” and that their isolation from others may attract “aggressive gang behavior toward them.”

**Destruction of relationships.** In terms of the already existing social relationships, respondents indicated a number of challenges for PEH with communication disorders. Respondents indicated that PEH with communication disorders “struggle to understand and be understood by others” which results in “fragmented and strained relationships.” Communication impairments frequently lead to “confusion” between PEH with communication disorders and others, which “lead[s] to anger by one or both parties, limiting or dissolving the relationship.” Multiple respondents indicated the PEH struggle to maintaining “lasting relationships” with family or friends.

**Inability to access services.** Respondents also indicated that PEH with communication disorders with difficulties forming social relationships also struggle to access the social services they require. PEH with communication disorders “might not be able to communicate what they need” and have trouble “navigating the necessary resources.” As one respondent wrote, “If you
can’t express what is happening to you, you can’t access the appropriate services.” Another respondent reported that PEH with communication disorders may “misunderstand directions [and] not go through the proper steps” which often in these individuals “becoming frustrated and giving up.”

Substance abuse and communication difficulties. Respondents indicated that for some PEH with communication, substance abuse may exacerbate existing communication difficulties. Another respondent indicated that PEH with communication disorders may only be able to form relationships with other individuals who actively abuse drugs and “no positive relationships are formed with anyone else.” Responses from participants indicate the negative impact of communication disorders on PEH, as well as the scope of the problem. As one respondent reported, “this is a pervasive problem.”

Occupational Functioning

Similar to the results regarding social relationships, results from this study indicate the communication difficulties of PEH have a substantial impact on occupational functioning. Ninety one percent of respondents indicated it was “Definitely true” or “Probably true” that the communication difficulties of PEH with communication disorders have impacted their abilities to acquire or maintain employment. Respondents described various aspects of the employment process impacted by communication disorders, and the responses can be grouped into four major themes - 1) application and interview process, 2) negative outlook toward employment, 3) negative employer perspectives, and 4) job performance.

Application and interview process. Obtaining employment can be a challenging process for PEH with communication disorders. One respondent reported that some PEH with communication disorders are “unable to appropriately complete an application” and many
require assistance from others in the application process. Multiple respondents indicated the importance of the interview process, and the challenges their clients with communication disorders face. PEH with communication may “not interview well” and many are “not able to sell his[her] abilities verbally and [are] not given the chance to show what he[/she] can do.” One respondent indicated that some PEH “do not set realistic expectations” when searching for employment, such as limiting themselves to searching for full-time work when part-time employment may be a more appropriate starting point.

**Negative outlook towards employment.** Respondents indicated the challenges of the employment process can negatively impact PEH’s views and outlooks towards employment. One respondent reported that PEH with communication disorders “often self-sabotage” during employment as a result of “their feelings of low self-worth” and “their inability to trust others.” It may be that previously described impact on social functioning and subsequent isolation could impact PEH’s overall self-worth and employment outlook. In addition to the challenges PEH experience in obtaining employment, having a communication disorder may serve as critical deterrent for obtaining employment.

**Negative employer perspectives.** Multiple respondents indicated the employers’ attitudes were as much of a barrier to gainful employment as the attitude of the PEH who they worked with. As one respondent reported, “Employers aren’t anxious to work with people who can’t communicate.” Employers require “a heightened understanding and patience” in order to work PEH with communication disorders, and communication difficulties lead to misunderstandings in which “the employer becomes frustrated.” Due to the negative societal stigma against PEH, employment can often be an uphill battle. Therefore, any additional
challenges to the employment process, such as a communication disorder, may dissuade employers from offering job opportunities to PEH.

**Job performance.** PEH with communication challenges may struggle with the requirements in the workplace. Respondents indicate their clients “misunderstand what the job requirements are” and are “unable to understand expectations or relate to employee expectations.” Some respondents indicated specific workplace difficulties, such as “difficulty completing simple or complex directions.” “Inappropriate language” and “inappropriate responses to bosses [and] customers” were also cited as challenges for PEH with communication disorders. Unfortunately, many respondents indicated that these circumstances, coupled with their clients “struggle to verbalize their misunderstandings or confusion” often lead to termination. When considering the aforementioned negative self-worth, frequent termination could lead to disastrous consequences for PEH. Notably, termination from employment can likely increase economic insecurity for PEH, thus extending or exacerbating their experience of homelessness.

**Speech Language Pathology and PEH**

In general, participants in this survey indicated both they, and their clients, had minimal interaction with speech language pathologists. Only two respondents (8%) indicated that PEH they serve had received services from a speech language pathologist, and only two respondents reported that they had ever collaborated with a speech language pathologist on behalf of their clients. Considering the lack of access to health care and skilled providers for PEH, it is not unlikely that many service providers had limited contact with speech language pathologists. Additionally, the employment locations and time constraints of speech language pathologists typically do not allow for extensive outreach to underserved populations.
Results from the study, although limited in scope, indicate an area of need for speech language intervention. Considering both the high prevalence of communication disorders among the PEH and significant impacts of communication disorders on social relationships and occupational functioning, speech language pathologists could provide essential intervention, as well as educational support to staff members, to better serve this population.

However, it is crucial to understand the barriers and challenges to providing speech language intervention services to this population. Results from this study indicate limited existing relationships between organizations that serve PEH and speech language pathologists. Furthermore, a lack of access to health care and a lack of financial resources may limit the access of PEH to speech language intervention. Additionally, the lack of stable housing for PEH can lead to disruptions in quality service provision (O’Neil-Pirozzi, 2003).

Therefore, speech language pathologists may consider additional methods of providing service to PEH. As advocated by Backer and Howard in 2007, speech language pathologists can form partnerships with staff members at organizations that serve PEH (survey participants) to provide communication partner training for staff members. Though funding for such trainings may be difficult to obtain, both organizations serving PEH and speech language pathologists could inquire into government or community organizations willing to provide possible grant funding. Results from this study regarding the characteristics of communication disorders among PEH can provide a helpful (though not comprehensive) guide for areas of education and communication partner training.

Additionally, speech language pathologists may consider a group treatment approach for PEH, as is common in many organizations serving PEH. SLPs could possibly integrate communication intervention into already existing group treatment at these organizations or
develop group treatment in partnership with the staff members related to social and occupational functioning. The results of this study clearly demonstrated a link between communication impairments and negative impacts on social and occupational functioning, and, through collaboration with organizations that serve PEH, speech language pathologists could provide a necessary and important service to improve the daily lives of PEH.

Increased involvement may take the form of providing referral information for speech pathology services in organizations that serve PEH and/or providing education, training, and support for staff members of organizations that serve PEH in the areas of communication disorders. Speech language pathologists may consider collaborating with staff members at these organizations to provide intervention, either in an individual or group format, to address the significant barriers to social and occupational functioning caused by communication disorders.

Limitations

Organizational response rates as well as overall participant response rates in the study were limited. Results from this study may not be generalizable to other organizations and participants. Additionally, there are general challenges in research into the population of PEH. Research into sheltered PEH (individuals who receive services from organizations, such as the ones described in this study) is typically more stable in methodology and results than research into unsheltered populations, and results from studies that exclusively focus on sheltered populations may not be reflective on the entire population of PEH (“The State of Homelessness”, 2016). Results from this study are derived from the perspectives of staff members of organizations, who in some circumstances may not have full knowledge of communication disorders and/or the health impairments of the individuals they work with. The limited number of
respondents did not allow for meaningful analysis into response correlations related to participant characteristics.

Speech language pathologists interested in providing services to PEH must consider the variety of resources needed in order for successful implementation. A lack of mandated services for adults with communication disorders, and a lack of financial resources among PEH are two barriers that may prevent implementation of speech language pathology services. Although this research did not address the logistics of service implementation, speech language pathologists serving in locations impacted by the experiences (e.g. in-patient hospitals, school with large numbers of children experiencing homelessness) may petition their employers for increased resources for serving the unique needs of this population.

Future Research

More research into communication disorders among PEH is needed. Future research might involve survey research with a larger sample size. Additionally, direct evaluation of communication disorders in PEH, similar to the work O’Neil-Pirozzi in 2003, should be explored. Considering the high prevalence rates, more research into communication disorders secondary to TBI, dementia, and social communication impairments is needed. Future research should consider not only the prevalence of communication disorders among this population, but also functional impacts of communication impairments. Additionally, further research into communication disorders among PEH may provide useful for SLPs and organizations that serve PEH interested applying for funding to provide services.

Although research in communication disorders among PEH is still in the beginning stages, results from this study indicate a need for increased involvement with the population of PEH by speech language pathologists. It should not be considered insignificant that 100% of participants
in this study reported working with at least 1 PEH with significant communication challenges.

There is no lack of opportunity for speech language pathologist to provide meaningful service to PEH with communication disorders.
References


Retrieved November 28, 2017, from


Appendix A

Survey

The Department of Speech-Language-Hearing at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand communication disorders among individuals experiencing homelessness. This will entail your completion of a survey. Your participation is expected to take approximately 15 minutes to complete the survey. The content of the survey should cause no more discomfort than you would experience in your everyday life.

Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of communication disorders among adult individuals experiencing homelessness. Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. Your identifiable information will not be shared unless (a) it is required by law or university policy, or (b) you give written permission*. Participants' identifying information will be replaced with codes, and access to data will be limited to principal investigator and faculty supervisor.

*It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.

Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Please indicate your consent or non-consent below.

Sincerely,
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I consent to participate in this study

☐ I do not consent to participate in this study.
Q1 How long have you worked with adult individuals experiencing homelessness?

- < 1 year
- 1 - 3 years
- 4 - 10 years
- > 10 years

Q2 In what capacity do you currently serve adult individuals experiencing homelessness?

- Case Management
- Employment
- Housing
- Substance Abuse Rehabilitation
- Shelter Services (Food, Clothing, Housing, etc.)
- Other (Please Describe) ________________________________

Q11 Approximately how many adult individuals experiencing homelessness do you currently work with on a weekly basis and/or are on your caseload?

- 1 - 10
- 11 - 25
- 26 - 50
- 50 - 100
- > 100
Q28
Approximately what percentage of the individuals you work with regularly do you believe have communication disorders and/or significant communication challenges?

- Zero
- 11-25%
- 25-50%
- 51-75%
- > 75%

Q3 How many individuals have you worked that you would consider nonverbal (i.e., not capable of using verbal speech for functional communication)?

Note: Please do NOT include individuals who you believe are nonverbal by choice or are nonverbal as a result of anxiety or a psychological condition (e.g., selective mutism).

- Zero
- 1-5
- 6-10
- 11-20
- > 20

Q4 How many individuals have you worked that used communication systems other than verbal communication to communicate, such as alternative and augmentative communication (e.g., picture boards, speech generating devices)?
Q5 How many individuals have you worked with that have suffered one or multiple traumatic brain injuries (TBI)*?

This can be confirmed, self-reported, or observed.
Q6 In your opinion, how many of these individuals who suffered a traumatic brain injury displayed difficulties in their ability to communicate?

- None of the individuals
- Less than half of individuals
- More than half of the individuals
- All or almost all of the individuals

Q7 Of the individuals who displayed communication difficulties, which of the following characteristics were apparent? Please check as many as apply.

- Difficulty in understanding or producing speech correctly
- Slurred speech
- Difficulty in programming oral muscles for speech production
- Difficulty with spelling, reading, and writing
- Difficulty taking turns in conversation
- Difficulty maintaining a topic of conversation
- Little or no awareness of communication difficulties
- Other difficulties (please describe) _________________________________

Q8 How many individuals have you worked with who experienced dementia (e.g. Alzheimer’s disease, alcohol-related brain damage)?
This can be confirmed, self-reported, or observed.

- Zero
- 1 - 5
- 6 - 10
- 11 - 20
- > 20

Q13 In your opinion, how many of these individuals who experienced dementia displayed difficulties in their ability to communicate?

- None of these individuals
- Less than half of the individuals
- More than half of the individuals
- All or almost all of the individuals
Q14 Of the individuals who have displayed communication difficulties, which of the following characteristics were apparent? Please check as many as apply.

- Repetitive language (e.g., asking the same question repeatedly)
- Difficulty recalling names, places, words
- Grammatical errors
- Difficulty following multi-step directions
- Difficulty in reading and writing
- Difficulty following or maintaining a conversation
- Regression to primary language (for multilingual individuals)
- Inability to understand facial expressions or social cues
- Other difficulties (please describe) ________________________________________________

Q15 Have you worked with individuals who had significant difficulty with social communication (i.e. individuals who do not understand social rules for communication and/or do not use language to communicate appropriately with others)?

- Yes
- No

Q16 Of the individuals who have experienced significant difficulty with social communication, which of the following characteristics were apparent? Please check as many as apply.

Please check items that represent what you believe the individuals you work with do not understand or cannot use, not items or behavior they engage in purposeful settings. (e.g., If an individual interrupts inappropriately only when he is mad or frustrated but does not interrupt in other situations, this item would not be selected.)
(Adapted from Cobb County School System in Marietta, GA)

☐ Does not use appropriate eye contact

☐ Does not understand other's use of body language

☐ Does not use appropriate body language

☐ Does not understand and/or use physical space boundaries

☐ Does not understand changes in tone of voice

☐ Does not understand changes in facial expressions

☐ Interrupts inappropriately

☐ Does not give effective directions to others

☐ Does not give sufficient information for listener information

☐ Does not revise messages when listener misunderstands

☐ Does not ask for repetition or clarification appropriately

☐ Does not provide relevant answers to questions

☐ Cannot begin a conversation, keep a conversation going, stay on topic during a conversation, or end a conversation appropriately

☐ Does not greet or say goodbye

☐ Does not uses expected polite language (please, thank you, excuse me, etc.)

☐ Does not appropriately ask for help

☐ Does not identify or use compliments appropriately

☐ Does not understand or use humor appropriately

☐ Does not demonstrate affection appropriately
Q22 Please provide a description of any additional speech, language and/or communication difficulties these individual(s) experience and/or provide any more detail into the items checked in the previous question.

________________________________________________________________

Q17 Please rate the following statement: For the individuals I have worked with experiencing homelessness who have significant communication difficulties, their communication difficulties have impacted their ability to form and maintain social relationships

☐ Definitely true
☐ Probably true
☐ Neither true nor false
☐ Probably false
☐ Definitely false

________________________________________________________________

Q23 Please describe how you believe communication difficulties have impacted the individuals’ experiencing homelessness ability to form and maintain social relationships.

________________________________________________________________
Q18 Please rate the following statement: For the individuals I have worked with experiencing homelessness who have significant communication difficulties, their communication difficulties have impacted their ability to acquire and maintain employment.

- Definitely true
- Probably true
- Neither true nor false
- Probably false
- Definitely false

Q24 Please describe how you believe communication difficulties have impacted the individuals' experiencing homelessness ability to acquire and maintain employment.

________________________________________________________________

Q29 How many individuals that you work with receive services from speech language pathologist?

- None
- 11-25%
- 26-50%
- 51-75%
- >75%
- I don’t know
Q30 Have you ever collaborated with a speech-language pathologist on behalf of a person you work with?

☐ Yes

☐ No

End of Block: N