

Participation-focused Intervention among US Speech Language Pathologists

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Abstract

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Background: In the field of speech-language pathology, there is an increasing focus on participation-focused interventions, or evaluating clients and establishing therapy programs that emphasize helping clients achieve optimal participation in their life activities. *Purpose:* To investigate whether and how speech language pathologists (SLPs) in the United States are addressing participation in their current therapy programs, as well as their attitudes toward this type of intervention, including barriers and facilitators to carrying it out. *Methods:* An online questionnaire for SLPs who work with adults and have worked in an outpatient setting. *Results:* A majority of SLPs address participation in their rationales for choosing therapy goals. However, there is frequently a mismatch between SLPs' stated goals and the activities and outcomes measures they use. While many SLPs believe participation-focused intervention is important, they identify a number of barriers to carrying it out, including time and productivity constraints, the limits of clinical settings, and the challenges of documentation. *Clinical implications:* There is a need to bridge the gap between clinicians stated intents in therapy and actual therapy practices through the development of clinical tools and resources related to participation.

Introduction

The World Health Organization's (WHO) International Classification of Functioning, Disability and Health (ICF) is a biopsychosocial framework for examining health and health-related states (World Health Organization, 2001). The ICF offers the opportunity to conceptualize assessment and intervention by considering disability and functioning at the level of body functions and structures, as well as the activities people undertake to participate at the societal level, and other contextual factors (Power, Anderson, & Togher, 2011; Figure 1). The ICF framework is therefore useful for speech language pathologists (SLPs) for describing the consequences of communication disorders at several levels, including communication in social settings (Eadie et al., 2006). Based on its utility for describing the multiple, complex consequences of communication disorders, many speech language pathology organizations around the world have endorsed the ICF for guiding standards of practice (Ma, Threats, & Worrall, 2008). In the United States (US), the American Speech-Language-Hearing Association (ASHA) adopted the ICF as the framework for assessment and intervention in the 2007 Scope of Practice in Speech-Language Pathology (ASHA, 2007) and in the Preferred Practice Patterns for the Profession of Speech-Language Pathology (ASHA, 2004). The ICF framework, including descriptions of specific barriers to participation, has been used to describe the effects of a variety of communication disorders, including stuttering (Bricker-Katz, Lincoln, & McCabe, 2010), laryngectomy (Eadie, 2007), voice disorders (Ma, 2007), aphasia (Simmons-Mackie & Kagan, 2007), and dysarthria (Dykstra, Hakel, & Adams, 2007).

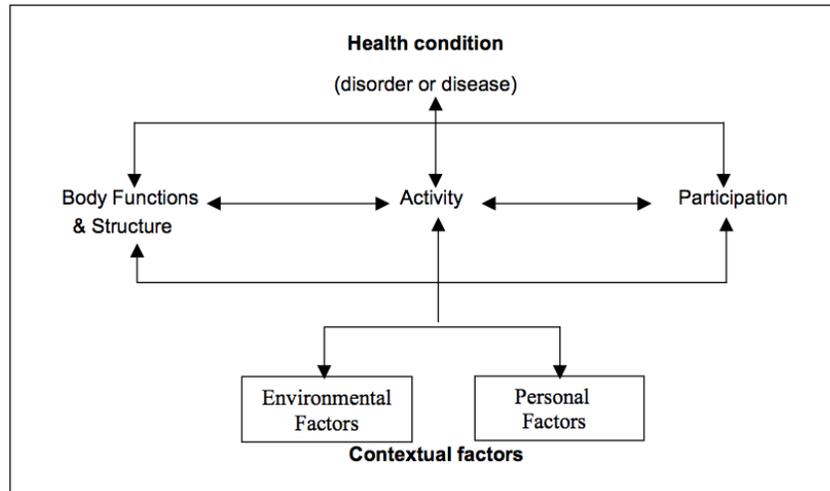


Figure 1. WHO’s International Classification of Functioning, Disability and Health (ICF) framework.

The ICF framework supports a holistic approach to management for people with communication disorders (Ma et al., 2008). In the field of speech language pathology, the need for a holistic management approach has been addressed by an increasing emphasis on “participation-focused” interventions (Threats, 2008). As described in the ICF, “participation” refers to “involvement in a life situation” (World Health Organization, 2001). Communicative participation in particular describes taking part in life situations in which knowledge, information, ideas, or feelings are exchanged (Eadie et al., 2006). This definition describes the involvement of more than one person, as well as the situational context in which the interaction takes place. Thus, communicative participation describes involvement in communication-related activities as part of the fulfillment of life roles in the context in which they occur (O’Halloran, 2008).

Communicative participation is gaining attention as a critical intervention target and outcomes indicator to ensure that speech language pathology interventions make a relevant and meaningful difference in the lives of clients (Baylor et al., 2013). Participation-focused interventions may be regarded as “holistic” in that any element that directly impacts the ability, opportunity, and accessibility for a person to participate in life situations may be targeted. This would include

targeting impairment, performance of activities, and/or contextual variables.

While ASHA has recommended that SLPs align with other healthcare professions in structuring assessment and intervention according to the ICF, not all aspects of the ICF are necessarily addressed in clinical settings. The field of speech language pathology has traditionally been similar to other healthcare fields, with much of the clinical and research emphasis on the impairments and activity limitations components of the framework, and less attention to participation and contextual variables (Threats, 2007). While a body of literature addressing assessment and interventions with a greater focus on participation for people with communication disorders is emerging (Baylor, Yorkston, Bamer, Britton, & Amtmann, 2010), change within the profession as a whole has been somewhat slow, in part due to the challenge of translating some ICF concepts into clinical practice (Ma et al., 2008).

Several studies have examined SLP practice patterns and available clinical tools as they relate to the various domains of the ICF, including participation. This review will first discuss studies related to assessment, followed by intervention. In an examination of the practice patterns of 94 SLPs from the US and Canada who work with people with aphasia, Simmons-Mackie et al. (2005) found that the majority of clinicians reported using outcome measures only at the level of the impairment. Similarly, a survey of SLPs in the United Kingdom (UK) who work with people with Parkinson's disease reported that few use formal outcome measures for participation, despite the fact that psychosocial issues were cited as a main reason for referral (Miller, Deane, Jones, Gibb, & Noble, 2011). The authors of both studies suggest that a major barrier to assessing participation is the scarcity of participation-focused assessments with a focus on communication.

A review of currently available assessment tools indicates that most are inadequate to fully capture communicative participation (Eadie et al., 2006). Often, assessment instruments measuring constructs that may be related to communicative participation are placed under the heading of “functional communication.” Examples include the ASHA Functional Assessment of Communication Skills for Adults (Frattali, Thompson, Holland, Wohl, & Ferketic, 1995), the Communication Activities of Daily Living (Holland, 1980), the Therapy Outcome Measures (Enderby & John, 1997), and the Communication Effectiveness Index (Lomas et al., 1989). There are several reasons, however, why these instruments may not provide an optimal indicator of communicative participation. Much of the content of these instruments involves performance of communication skills which may be more consistent with the ICF component of “activities.” They do not necessarily assess whether the individual is satisfactorily engaged in real-life communication situations. In addition, most of these examples rely on clinician or family/caregiver judgments of the client’s behavior, which are inadequate for measuring some subjective aspects of participation (e.g. satisfaction, importance; Eadie et al., 2006). Self-report measures that identify how meaningful and relevant the life situations are for the person with a communication disorder, and measures that describe the person’s subjective experience communicating in these life situations, are key to understanding communicative participation (O’Halloran & Larkins, 2008).

Recognizing the importance of self-report to assessing participation, Eadie et al. (2006) evaluated six self-report instruments for the relevance of individual items to communicative participation. These included the ASHA Quality of Communication Life Scale (Paul et al., 2004), the Burden of Stroke Scale (Doyle, McNeil, Hula, & Mikolic, 2003), the Voice Activity and Participation Profile (Ma & Yiu, 2001), the Voice Handicap Index (Jacobson et al., 1997), the

Voice-Related Quality of Life Scale (Hogikyan & Sethuraman, 1999), and the Voice Symptom Scale (Deary, Wilson, Carding, & MacKenzie, 2003). While all of the instruments included some items consistent with domains of communicative participation, none of them were wholly adequate for specifically measuring communication participation because they mixed participation items with items asking about other domains such as physical symptoms or emotional coping (Eadie et al., 2006). The need for a client-reported measure of communicative participation has been recognized, however. For instance, the Communicative Participation Item Bank was recently developed as a means to provide SLPs with a unidimensional, self-report outcome measure dedicated to the construct of communicative participation (Baylor et al., 2013).

In addition to the limited number of published assessments, other barriers to participation-focused assessment have been identified. For example, implementing self-report measures with individuals who have communication disorders affecting language expression or comprehension may be particularly challenging, as the instrument may need to be modified to accommodate their abilities (Dalemans, de Witte, Lemmens, van den Heuvel, & Wade, 2008). Also, because participation involves not only the individual but also the person with whom they are communicating and environmental factors, it may be more difficult to distinguish changes in participation that are specifically due to the effects of the communication disorder as opposed to other contextual variables (Dalemans et al., 2008).

Turning attention to intervention, there is similar evidence of a paucity of participation-focused intervention programs (Collis & Bloch, 2012). One challenge may be in defining what counts as a participation-focused intervention. In the literature there is inconsistent and at times interchangeable use of terms capturing constructs related to participation, including functional skills, activities, and quality of life (Eadie et al., 2006). For this review, the following operational

definition was used to identify “participation-focused” interventions:

1. Targets activities in which knowledge, information or ideas are exchanged (Eadie et al., 2006)
2. Treatment specifically targets communication in real-life situations (Eadie et al., 2006)
3. Measurement must include self-report (Baylor et al., 2013; Brown et al., 2004)

Several studies of SLPs in countries outside the US have examined the extent to which participation is identified as a target of assessment and intervention practices. The majority of these studies are specific to the management of aphasia. In a survey of Australian SLPs, the majority of participants reported using a combination of interventions targeting both language impairment and the social consequences of acquired aphasia (Verna, Davidson, & Rose, 2009). However, due to the study design, which asked SLPs to classify their treatment approach as focused on (a) linguistic impairment; (b) communication activity; (c) life participation; or (d) a combination of approaches, the exact degree to which participants who selected “a combination of approaches” use participation-focused as opposed to other types of intervention is not clear. Furthermore, the authors of the study report that a cross-tabulation of the assessment tools and clinical approaches in relation to the domains of the ICF model demonstrated that impairment-based measures were most frequently used by participants who also utilized a combination of clinical approaches (Verna et al., 2009), suggesting that a primary focus of treatment was at the level of impairment. The authors note a discrepancy between the SLPs’ stated clinical philosophies (activity- and participation-based) versus the tools that they most frequently used (impairment-based). They suggest that this disparity may be due to the lack of published assessment tools explicitly addressing the domain of participation.

In a second Australian study, data from in-depth interviews of SLPs regarding goal-setting for people with aphasia suggest that SLPs targeted a range of goals related to language, coping, participation, and education, both for clients and their families (Sherratt et al., 2011). The authors suggest that SLPs' goals for people with aphasia were holistic, addressing the person with aphasia in addition to the aphasia itself. Many SLPs described group and individual therapy goals related to support, confidence, and participation. The authors note, however, that a number of factors encouraged a focus on impairment-level goals. These included workplace orientations (e.g. cognitive neuropsychological), collaborative procedures (e.g. for clinicians who are covering someone else's shift), and potential client prognoses (e.g. optimal impairment-level recovery for a young client) (Sherratt et al., 2011). Thus, aphasia therapy reflected features of both participation and impairment-level approaches.

Most recently, a 2013 survey of Australian SLPs was funded by the Clinical Centre for Research Excellence in Aphasia Rehabilitation, which promotes a biopsychosocial framework for aphasia rehabilitation that includes both the underlying impairment and the functional consequences for social participation (Rose, Ferguson, Power, Togher, & Worrall, 2014). The purpose of the study was to identify and describe current aphasia rehabilitation practices among Australian SLPs, including interventions to improve communication access, community aphasia support services, and challenges to practice. According to the results of the survey, most Australian SLPs were unable to work directly in the community to target communicative access for people with aphasia, and many were frustrated at not being able to do so. SLPs identified several sources for their inability to target communicative access in the community, including inflexible, "medical" service provision models that restrict clinicians from redirecting services to a later phase of recovery, even when immediate service provision was inappropriate for client

medical or personal reasons (Rose et al., 2014). Thus, all three studies suggest that while Australian SLPs were aware of and appreciate a focus on communicative participation, there are significant barriers to carrying out participation-focused intervention.

Other surveys regarding SLP intervention for aphasia point to further contradictions between SLPs' stated desire to do participation-focused intervention and their actual practices. One survey of Swedish SLPs focused on the degree to which SLPs involved families in treatment in order to increase clients' abilities to participate in life more fully (Johansson, Carlsson, & Sonnander, 2011). While nearly all SLPs surveyed reported some contact with families, two-thirds of the participants were not satisfied with the extent of their family contact. SLPs reported that despite their desires to educate family members, they were restricted by scheduling constraints and productivity requirements. Further, SLPs expressed insecurity about how to involve families, particularly how to conduct communication partner training. Many participants cited a lack of protocols or methods as a barrier to effectively training families (Johansson et al., 2011).

The degree to which SLPs feel competent to conduct certain aspects of therapy was also addressed in a survey of SLPs in the UK who treat people with Parkinson's disease (Miller et al., 2011). Participants reported feeling most able to change loudness and intelligibility in their clients. One of the areas they felt least able to address pertained to gaining carryover outside of the clinic or after active therapy had ended. Additionally, there was little evidence that psychosocial concerns constituted a prominent focus of therapy (Miller et al., 2011) as reflected in the participants' reports of treatment activities, which were predominantly directed at voice and articulation. These treatments are appropriate to address the main impairment-level changes for people with Parkinson's disease. The authors note, however, a discrepancy between such

treatment and the beliefs expressed by SLPs that a primary reason for early referral included treatment for present and emerging psychosocial impairments (Miller et al., 2011). The reasons for this discrepancy are not illuminated by survey items in this study, though the findings may reflect similar barriers to participation-focused intervention discussed in the literature on intervention in aphasia.

A different survey of 119 UK SLPs who treat progressive dysarthria sheds further light on the complexities surrounding participation-focused intervention (Collis & Bloch, 2012). The authors note that, in accordance with the early dysarthria literature, clinical tools have tended to focus on impairment features of dysarthria rather than activity and participation, resulting in a lack of resources available to support participation-focused intervention in comparison with impairment-level intervention. Respondents reported that they considered all levels of the ICF to be important targets for intervention. Further, while some areas (e.g. oromotor skills, intelligibility) were considered to be less of a priority as severity increased, and others (e.g. “functional skills”) more of a priority, participation was considered to be important at all levels of severity. More than a third of participants, though, explicitly indicated a lack of tools to assess and intervene beyond the level of impairment. This is reflected in participants’ reports of their own treatment, which primarily targeted the impairment level. The authors found that use of impairment-level intervention varied across years of experience as well as across setting (Collis & Bloch, 2012), with more experienced SLPs and SLPs working in community-based clinics as opposed to hospitals more likely to focus on interventions beyond the impairment level. The authors hypothesize that in terms of experience, less experienced SLPs may rely more heavily on published intervention tools, and therefore tend to focus more on the impairment level. In terms of setting, community-based roles may lend themselves to a more pragmatic approach (Collis &

Bloch, 2012). In spite of the tendency for some SLPs more than others to focus beyond the impairment, dissatisfaction with available resources for participation-focused intervention was common across level of experience and settings, suggesting that there is a need to develop tools to enable SLPs to consider the client holistically.

Despite these indications that SLPs in general have difficulty implementing participation focused interventions, there are emerging programs that specifically state that the focus of the intervention is to improve participation. Most of these programs come from the field of aphasia. For example, the Life Participation Approach to Aphasia (LPAA) has its origins in a functional and pragmatic approach that focuses on life participation goals, social relationships, and re-engagement into everyday society (Chapey et al., 2000). Similar values underlie the Living with Aphasia: Framework for Outcome Measurement (A-FROM), which is intended to be a clinically relevant, user-friendly version of the ICF, with emphasis on the importance of outcomes relevant to living with aphasia (Kagan et al., 2008). Preliminary implementation of A-FROM at the Aphasia Institute in Toronto has been described (Kagan, 2011). Initial interviews for clients at the Aphasia Institute include questions intended to assess participation (e.g. “Do you join in conversations at home?” “Are you satisfied with the number of people you see?”). Participation is also targeted through activities such as conversation groups, member-led cooking programs, and exercise programs (Kagan, 2011). While these examples demonstrate concrete ways that a participation approach has been applied therapeutically, the feasibility of implementing the specific interventions outlined in this article outside of the context of an aphasia institute may be limited. The Aphasia Institute and similar aphasia centers offer important role models for meeting the holistic needs of individuals with aphasia, but these resources are not widely available to SLPs who work with clients in more traditional therapy paradigms.

Frameworks for conceptualizing participation-focused intervention in disorders other than aphasia have also been published. For instance, Balandin (2011) describes an application of the previously published Change Laboratory process, an approach for improving participation in individuals with lifelong disability, to speech language pathology. In this process, SLPs, other clinicians, clients, family members, and other potential stakeholders engage in a collaborative process of analyzing and developing an activity, and identifying and managing problems over the course of 9-10 weeks. The Change Laboratory involves six phases, including charting the situation, analyzing needs and the possibilities of development, creating a new model for the activity, concretizing and testing the model, implementing the model, and spreading and consolidating the model. As with other broadly defined conceptual frameworks, though, there are currently no published reports describing the implementation of the Change Laboratory process in speech language pathology (Balandin, 2011).

Several case studies describe specific examples of the implementation of intervention based on the ICF framework. For example, Power (2011) outlines a course of assessment, goal setting, and intervention for an individual with Huntington's disease (HD) based on the ICF. The case study describes how goals were chosen to target highly individualized participation-related concerns for this client, such as leaving legacy materials for family and managing telephone communication. While this case study provides a detailed example of participation-focused intervention for one client with HD, the authors point out that there are no assessments or interventions targeting participation specifically designed for or validated on individuals with HD. They suggest that currently it is the responsibility of the individual clinician to design assessment protocols and develop individualized interventions aimed beyond the level of impairment to life participation. Thus, while many recommendations for participation-focused

intervention are available, most of these are general philosophies or theoretical approaches, or examples of highly individualized exemplars, as opposed to specific evidence-based programs and techniques that can be applied on a more widespread basis (Baylor, Burns, Eadie, Britton, & Yorkston, 2011).

Some programs, though they do not explicitly include the term “participation” in their rationale, would likely come under the umbrella of participation-focused intervention because they target communication in real-life environments. An example of this type of intervention is communication partner training. In a meta-analysis of “social” approaches to intervention, Simmons-Mackie et al. (2010) found evidence that a skilled communication partner is able to facilitate and support the communication of people with aphasia, and communication partner training should be considered a method of providing environmental support and communication access. The authors note, however, that there was a great variety in the outcome measures used in the reviewed studies, and very few used measures of actual participation in life situations such as changes in employment, leisure, daily activities, or community participation. In a non-randomized controlled trial, training communication partners of people with chronic severe traumatic brain injury was also found to be more efficacious than training the person with traumatic brain injury alone (Togher, McDonald, Tate, Power, & Rietdijk, 2013). The primary outcome measure in this study was the Adapted Measure of Participation in Conversation (Togher, 2010), which evaluates participation in conversation in terms of a person’s ability to socially connect and to respond to and/or initiate conversation. These findings suggest that communication partner training may be one example of participation-focused intervention that has been implemented more widely, although evidence as to how satisfied people with communication disorders are with their participation after such training is still somewhat limited.

The above review suggests that there is a mismatch between SLPs' beliefs that participation-focused intervention is important, and their ability to carry out this type of intervention in clinical practice. A similar mismatch is reflected in the perspective of clients. While much speech-language intervention continues to target the impairment and activity levels of the ICF, studies examining the perspectives of clients suggest that communicative participation is a high priority for clients and their families, and support views that communicative participation is a valuable target for intervention. In some cases, clients considered therapy that did not address everyday communication needs to be irrelevant, patronizing, and unachievable (Worrall, 2006). In a second qualitative research study in which fifty individuals with aphasia described their goals for speech language therapy, goals across the spectrum of the ICF were identified as important. The majority of goals, however, were linked to the domains of activity and participation, such as being able to converse with family, read a night-time story to their grandchildren, and feel comfortable in a crowds (Worrall et al., 2011). These findings suggest that it is important for rehabilitation services to target communicative participation in order to address the major life priorities of clients.

Purpose

This review of the literature has summarized the increasing awareness among SLPs of the construct of communicative participation as an important element of clinical assessment and intervention. While most interventions and assessments address the levels of impairment and activity, there are some emerging resources specifically targeting communicative participation. Research involving SLPs in other countries, much of it in the area of aphasia, suggests a landscape in which clinicians demonstrate growing awareness of the emphasis on communicative participation, but are not implementing participation-focused interventions

consistently due to lack of knowledge and/or resources.

Many questions remain about the practices of SLPs in the US, including the extent to which American SLPs use participation-focused approaches to therapy, and when they do, exactly what these approaches entail. Asking this question specifically of SLPs in the US is important because healthcare delivery and payment systems in the US differ from those in other countries, which may lead to different practice patterns than those in the literature reviewed here. In order for the field of speech language pathology to advance in terms of developing consistent, evidence-based therapy programs that help to meet the communication needs of clients in daily life activities, it is important to understand current speech language pathology practices. Questions that remain unanswered include: What participation-focused intervention strategies do US SLPs currently use, if any? What materials or resources do they use in these practices? What additional resources (knowledge, training, therapy materials) do they need to better meet these participation goals?

This study is an investigation of how the construct of communicative participation has been incorporated into current clinical practice for SLPs serving adults in the US. Specifically, it examines the extent to which SLPs directly target participation in their interventions for clients with communication disorders. This study is based on responses to a questionnaire designed to elicit information on the goals, rationales, therapy activities, and outcome measures typically employed by SLPs for a range of communication disorders in adults. This study also explores SLPs' stated attitudes about participation-focused intervention. SLPs' responses to specific questions regarding participation-focused interventions increase our understanding of the barriers to and facilitators for participation-focused interventions, and what additional resources may be helpful to implement this type of intervention. This knowledge can be used in a broader line of

research to develop outcomes measurement tools and intervention resources focused on helping SLPs develop participation-focused approaches to intervention. Also, by identifying the interventions that clinicians are currently using, future research can be directed to investigate their effectiveness, which can be used to support or refute clinical practices.

Research Questions

1. To what extent do US SLPs working with adult clients specifically address communicative participation in therapy goals, rationales, activities, and outcome measures?
2. What are the perspectives of US SLPs regarding the concept of “participation-focused” intervention?

Methods

This study employed an online questionnaire. Ethical approval was granted by the University of Washington Institutional Review Board (IRB #46244, approved 10/31/13).

Participants

The participants were US SLPs. This section describes the inclusion criteria, exclusion criteria, and recruitment strategies.

Inclusion Criteria. Inclusion criteria for participants were as follows: (a) hold Certification of Clinical Competence (CCCs); (b) work with adult clients who have communication disorders; (c) have worked with clients in an outpatient setting; and (d) have access to a computer and internet. Only SLPs who currently held their CCCs were included to

ensure that responses reflect current rather than past practice (for those who have let their CCCs lapse) or predicted future practice (for those still completing internships or fellowships). The inclusion of SLPs who work with adults fits with a line of research focusing on communicative participation in adults with acquired communication disorders. The decision to include SLPs who have worked in an outpatient setting was made because it was deemed likely that this setting is most conducive to considerations of community integration and communicative participation. SLPs who have worked in outpatient settings in the past or work there part-time were included based on the recognition that SLPs may work in multiple settings.

Exclusion criteria. Exclusion criteria were as follows: (a) still completing internship or fellowship; (b) work only with children; and (c) have never worked in an outpatient setting. Speech pathologists who were still completing internships or fellowships were excluded from the study because they might not yet have enough clinical experience to answer the questions in the questionnaire. Speech pathologists who work only with children were not included because this questionnaire pertains to the types of communication disorders and speech therapy goals seen in adult clients.

Recruitment methods. Because this was an online questionnaire, participants were recruited from a broad geographic range across the US. Participants were recruited via the American Speech-Language-Hearing Association (ASHA) and Washington Speech-Language-Hearing Association (WSHA) listservs, and through announcements at the 2013 national ASHA convention.

Payment. Participants were emailed a \$20 Amazon.com gift card as a thank you for completing the questionnaire.

Procedures

This section describes the content and administration procedures for the questionnaire, which was designed specifically for this study. The questionnaire was piloted with three practicing SLPs in the Speech and Hearing Sciences Department at the University of Washington, and their feedback was incorporated into the final version.

Questionnaire content. Three different versions of the questionnaire were developed to address three different communication disorders: aphasia, dysarthria due to traumatic brain injury (TBI), and laryngectomy. These three disorders were chosen in order to examine SLP practices across a range of communication disorders affecting adults.

The questionnaire contained three sections. The sections of the questionnaire are described below. Please see Appendix 1 for a full version of the questionnaire. Each version of the questionnaire can also be accessed at the following addresses:

<https://catalyst.uw.edu/webq/survey/jmobrien/212159> (aphasia);

<https://catalyst.uw.edu/webq/survey/jmobrien/212157> (dysarthria); and

<https://catalyst.uw.edu/webq/survey/jmobrien/212146> (laryngectomy).

Section 1: Section 1 was the only section that differed across the three versions of the questionnaire for the three different communication disorders. In section 1, participants were presented with a case scenario representing a typical communication disorder they might see in their practice. Following the case scenario, participants were asked to write 2-4 goals that they might target for this hypothetical client using the format and wording they would use in their actual clinical documentation. For each goal, participants were asked to describe why they chose

that goal (referred to as the “rationale” in this document), to give an example of a typical treatment activity, and to describe how they would measure progress toward that goal, either formally or informally. Free-text boxes were provided for participants to type in their responses.

Descriptions of barriers to communication at each ICF level (impairments, activity limitations, participation restrictions, and contextual factors) were embedded in the case scenarios. However, the ICF framework was not explicitly introduced in this section of the questionnaire in order to avoid biasing participants toward including goals that they would not typically target in clinical practice. Similarly, the use of free-text boxes rather than multiple-choice menus (e.g. a list of potential treatment activities) to elicit responses was intended to increase the likelihood that participants would report on their actual practices rather than select the “best” response from a pre-defined list.

Section 2: In this section, participants were asked to discuss their thoughts on participation-focused intervention in a single open-ended question. Section 2 began with a description of “participation-focused intervention,” defining the term as described by Eadie et al. (2006) and giving broad examples of life situations that could be targeted (personal or household management, work, leisure, community life, relationships, etc.). Participants were then asked to provide their opinions about participation-focused intervention. Embedded in the prompt were potential topics for response (e.g. How easy is it to integrate a focus on participation into your treatment programs? What resources have you found helpful or would be helpful to you? What challenges do you find in participation-focused intervention and/or what helps?). Participants were not asked to respond to each of these questions individually to avoid forcing participants to write on topics they may not have strong opinions about, as well as to avoid participant fatigue.

A single open-ended response format was chosen in order to most authentically capture the elements of participation-focused intervention that participants found most important.

Section 3: In this section, participants were asked to provide demographic information, including work setting (e.g. university clinic, outpatient rehabilitation, home health), number of years of experience, geographical location, and gender. This information was used in the analysis of results to describe the characteristics of the sample.

Questionnaire Administration. The questionnaire was administered using the University of Washington Catalyst WebQ system and was available online between November 11, 2013 and March 21, 2014. At the time of recruitment, participants were given the option to choose one of the three different versions of the questionnaire (aphasia, laryngectomy, or dysarthria). Participants were invited to complete the scenario of their choice, although the researchers recommended that they complete the scenario that represented a diagnosis commonly seen in their caseloads. Participants were directed to different questionnaire URLs based on their choice. SLPs were asked to respond to only one case scenario in order to reduce burden of response and increase the likelihood that participants would volunteer to take part in the questionnaire. However, after completing their responses to Section 1, participants were given the option to respond to the other scenarios if they wished.

Participants were allowed to complete the questionnaire at their own pace, although they were asked to complete the questionnaire in a single sitting because the Catalyst website does not allow participants to leave the questionnaire and return later at the level of anonymity used for this study. Participants were required to complete answers to Section 1 of the questionnaire before moving on to Section 2. Once they did so, they were not allowed to return to Section 1.

This was intended to prevent discussion of participation-focused intervention in Section 2 from biasing responses about goal-setting in Section 1. Data were downloaded from Catalyst into an Excel spreadsheet.

Data Analysis

Results from the questionnaire were analyzed using qualitative content analyses. Content analysis is a term used to describe a diverse collection of methods used to qualitatively and/or quantitatively understand textual and other data (Elo & Kyngäs, 2008). Responses to each question were analyzed separately using two methods of content analysis outlined by Hsieh & Shannon (2005): conventional and directed. Further details are provided in the following sections.

Research Question #1. Research question #1 asks to what extent SLPs specifically address participation in therapy goals, rationales, activities, and outcome measures. This question was investigated using directed content analysis of participants' responses to Section 1 of the questionnaire (the case scenarios). Directed content analysis is used when researchers come to a project with an existing theory or framework that can provide predictions about variables of interest, thus helping to determine the initial coding scheme (Hsieh & Shannon, 2005). In this study, the researchers came to the project with existing knowledge about the ICF components (impairment, activity, participation, contextual factors) as well as expectations about typical therapy goals that SLPs write. These expectations guided initial organization of data, though the researchers remained open to new ideas that emerged from the data.

Section 1 of the questionnaire has four components (the goals as written by the SLPs, the rationale for each goal, examples of therapy activities, and outcomes measures). Data analysis

began with a thorough reading of participant responses. The researchers then collaborated to develop a set of codes that reflected the range of therapy goals, rationales, activities, and outcome measures represented in the data. While these codes do not correspond precisely with the various components of the ICF (i.e. impairment, activity limitations, participation restrictions, contextual factors), they are similarly intended to reflect that SLPs target a wide variety of goals, some of which may directly relate to participation and some of which relate to other areas relevant to communication. Codes were chosen in an iterative process including the lead researcher and two other members of the research team. In this process, the researchers coded samples of the data independently and then compared their codes to come to agreement on codes and definitions. The codes used to analyze responses to summarize Section 1, as well as examples of participant response, are presented in Table 1.

Data for goals, rationales, activities and outcome measures were coded separately using the same set of codes. This allowed for examination of coherence across goals, rationales, activities and measurement. For example, if a goal was stated as addressing participation, did the activities and outcomes measures also address participation? Data about outcome measures were also coded based on who was conducting the measurement and what type of measure it was in order to examine if there was a relationship between what was being targeted in therapy and how it was being measured. Additional codes used to describe outcome measures are outlined in Table 2.

Table 1
Codes used to analyze data from Section 1, with example participant responses

Code	Description	Example
<i>Participation</i>	Targets real-life situations in which knowledge, information or ideas are exchanged.	The patient will participate verbally in 3 community outings (ordering at a restaurant, attending a cultural event etc.) in 1 month time. [L2]
<i>Skills simulation</i>	Role play. Involves work in the clinic room or other “isolated” area but simulates what might happen in a real-life situation.	Patient will produce short sentences in role playing activity related to functional task (bakery, doctor's office, social settings) with 80% accuracy min cues. [A1]
<i>Overall skills (decontextualized)</i>	Addresses overall speech/language adequacy in a decontextualized situation. Intelligibility, speech naturalness and decontextualized “conversation” or “compensatory strategies” are included in this category.	Client will utilize compensatory strategy of over-articulation throughout entirety of paragraph-length utterances to improve intelligibility to >90% in background noise by improving articulatory precision. [D3]
<i>Discrete skills (decontextualized)</i>	Addresses specific speech and language skills (e.g. naming) in the clinic setting.	Patient will produce voiceless consonants in isolation 10/10 times. In consonant-vowel-consonant combinations 10/10 times. [L3]
<i>Education/ counseling of client</i>	Addresses teaching client about disorder, counseling, and coping concerns.	Patient will be educated regarding variety of options for communication post total laryngectomy and exposed to pros and cons of each along with speech samples of those using these options. [L15]
<i>Family/ caregiver skill instruction</i>	Addresses family members/caregivers learning communication techniques to use with client or other goal directed at changing family member behavior.	Caregivers/family/friends will learn and utilize Supported Communication techniques (multimodal approach) to facilitate overall communication to reduce communication breakdowns from 3-4 times to 0-1 in 1 hour. [A6]
<i>Modification of environment</i>	Addresses arrangements to change physical or social environment.	Empower client at work by providing advocacy information regarding laryngectomy and electrolarynx to share with colleagues. [L6]

Table 2
Additional codes used to analyze outcome measures in Section 1

Code	Description	Example
<u>Who measured?</u>		
<i>SLP report</i>	Outcome is judged by the clinician.	Measure # of units recalled per trial and level of cueing required. [A30]
<i>Client report</i>	Outcome is judged by the client.	Patient documenting observations of acceptance/reluctance by coworkers pre/post; patient satisfaction survey (e.g. VHI-30). [L6]
<i>Family/caregiver report</i>	Outcome is judged by the client's family or caregiver.	Interview with family members in terms of carryover at home. [A9]
<u>How measured?</u>		
<i>Published scale</i>	Published tests (standardized or criterion-referenced)	Photo Articulation Test. [D7]
<i>Clinician-designed scale</i>	Systematic quantitative data collection but not through a published or validated instrument.	I would measure word accuracy (i.e. 3 out of 4 words correct would be 75% for that trial). [A2]
<i>Estimated/Anecdotal</i>	Performance based on judgment or anecdotal evidence	Informally, ask her husband how she is doing with conversation, have informal conversation with her, etc. [A16]

The lead researcher coded the full set of data. A second researcher then coded 20% of the data and results were compared. Any discrepancies were resolved via discussion and consultation, with the first researcher then recoding the remaining 80% based on this input.

After the data in Section 1 were coded, they were sorted in order to summarize the nature of the information in each scenario. Data from each scenario (aphasia, laryngectomy, dysarthria) were analyzed separately. The number of goals in each category (participation, discrete skills, etc.) were tallied to examine the distribution of goals across the different areas that might be targeted in therapy. Then, additional descriptive information about the goals and their

corresponding rationales, therapy activities, and outcomes measures was generated according to the methods described in the following sections.

Participation-focused goals. Participation-focused goals were addressed first to examine the proportion of goals written that directly addressed participation and the typical content in those goals. It is worth noting that the researchers did not expect, nor would recommend that participation-focused goals be the sole target of speech-language therapy. Other areas of therapy such as practicing skills and providing education and counseling are imperative as well, although in a participation-focused program these areas could serve more holistic participation goals. Having acknowledged that, the primary concern in this study was to understand the different types of goals represented in SLP programs, and when participation-focused goals are implemented, if they are done so with therapy activities, resources, and outcomes measurement that also support a participation focus. Lack of coherence across these therapy elements may raise concerns about the whether or not a goal can be met and measured. For example, if an SLP writes a participation-focused goal (communicating in daily activities and settings) but then implements activities and outcomes measures targeting a different level, such as discrete skills (e.g. naming objects with 80% accuracy in the therapy room), questions arise as to whether those therapy activities truly lead to improved participation, and if the outcomes measure is a valid representation of participation outcomes. This mismatch may also suggest gaps in available resources, skills or knowledge. From a theoretical perspective, coherence among therapy elements (goals, rationales, activities, and outcomes measures all targeting the same level) may be ideal. Such coherence would ensure that clinicians and clients are working towards intended outcomes, and that the outcomes measured do indeed represent the progress accomplished in the therapy program.

Non-participation-focused goals. After the participation goals were examined and described as above, the remaining goals, which were not classified as addressing participation, were examined. This analysis involved tallying and summarizing the different types of goals represented, and the extent to which participation was addressed in the therapy rationales, activities, and outcomes measures for these goals. The purpose of this step was to capture how participation might be represented in therapy practices even if the overtly stated goals are not participation-focused.

Research Question #2. Research question #2 addresses participants' perspectives regarding the concept of "participation-focused" intervention. To examine this question, the data from Section 2 of the questionnaire, an open-ended question about participation-focused intervention, were analyzed using conventional content analysis. In conventional content analysis, researchers avoid using preconceived codes or frameworks, instead allowing the codes to emerge from the data (inductive category development; Hsieh & Shannon, 2005). To complete this analysis, participants' responses to Section 2 were read multiple times. Terms that summarize concepts in the data were generated, and sections of text were labeled with these codes. The text was then sorted into these coded categories, and these sorted sections were reviewed and summarized into themes. The themes are presented and illustrated with examples in the "Results" section below.

Trustworthiness of the data was addressed in a manner similar to that described in research question #1. The lead researcher and one additional member of the research team participated in an iterative process of reading the text multiple times, coding sections of the text independently, and then comparing their codes and interpretations until the final code dictionary

was generated. The lead researcher then coded the full data set, with a second researcher reviewing the full coded data set and offering alternative interpretations. Any discrepancies were discussed and resolved. Emerging themes in the analysis were also discussed among the research team, allowing other team members to challenge the lead researcher and thus increasing the likelihood that the final themes authentically represented participant responses.

Results

The first section of the results summarizes the participant demographic information. This is followed by the results for the two research questions.

Characteristics of Participants

A total of 67 SLPs completed the questionnaire. One Canadian participant was removed from the analysis, for a final total of 66 participants.¹ Fifty-six (85%) of the participants responded to only one scenario in Section 1. Nine (14%) of the participants responded to two scenarios, and one participant (1%) provided answers for all three. In total, 41 SLPs completed the aphasia scenario, 13 completed the dysarthria scenario, and 23 completed the laryngectomy scenario. Sixty (91%) of the participants were female and six (9%) of the participants were male. The distribution of participants by geographic region is depicted in Figure 2.

¹ The original questionnaire was open to both American and Canadian SLPs. It was expected that American and Canadian SLPs may have divergent responses based on differing facilitators and barriers to participation-focused intervention (e.g. different insurance systems). However, a sample of only one Canadian SLP was not deemed large enough to make any valid comparison, so this participant was removed from the study.

² Throughout this manuscript, examples of participant responses will be provided in italics. For Section 1, responses are reported in full for that item on the questionnaire, with the only

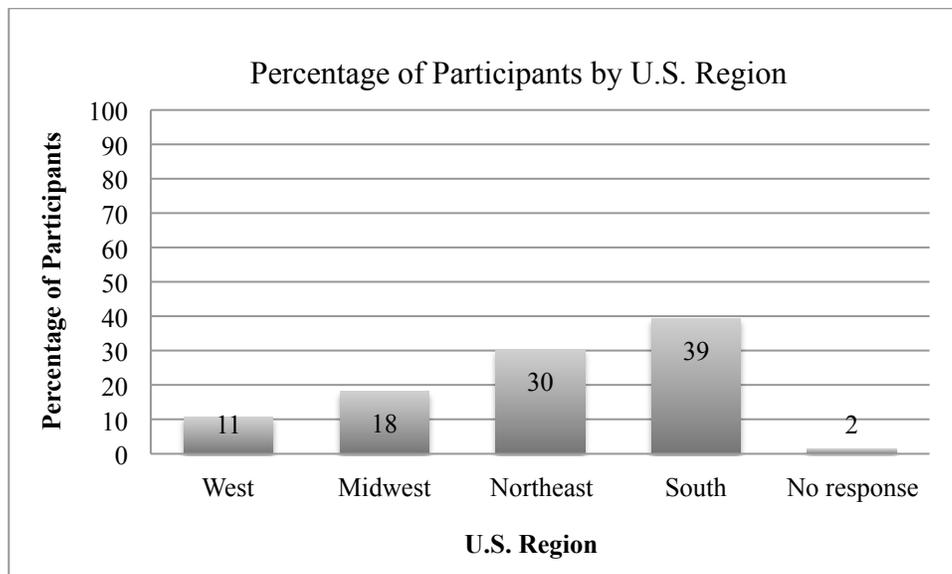


Figure 2. Percentage of Participants by Region

Participants worked in a variety of settings (Table 3). The most frequently reported work settings were outpatient rehabilitation (43.3%), acute care (38.9%), and inpatient rehabilitation (27.2%). Of the 66 participants, 30 (45%) reported working in two or more work settings. Participants also represented a wide range of years of experience working as an SLP. Participants had worked as SLPs for a mean of 13.4 years (standard deviation = 8.9; range = 1-33; see Table 4).

Table 3

Distribution of work settings reported by participants^a

Work setting	Number of participants	Percentage of participants
Outpatient Rehab	29	43.3
Acute Care	26	38.9
Inpatient Rehab	18	27.2
University Clinic	13	19.4
Skilled Nursing Facility/Sub-acute Rehab	11	16.4
Home Health	7	10.4
Private Clinic	3	4.5
Other	4	6.0

^a Participants are represented more than once if they work in multiple settings

Table 4
Years of experience working as an SLP reported by participants

Years	Number of participants	Percentage of participants
0-4	11	16.7
5-9	16	24.2
10-14	13	19.7
15-19	8	12.1
20-24	9	13.6
25-29	4	6.1
>30	5	7.6

Research Question #1

Research question #1, which asks to what extent SLPs' therapy goals, rationales, activities, and outcome measures relate to participation, was addressed using data from Section 1 of the questionnaire. The following results examine each diagnostic scenario separately. For each scenario, the goals were sorted into the categories by which they were coded per analysis procedures. The participation-focused goals will be described in detail. This will be followed with a summary of other ways in which participation was evident in SLPs' responses even if not in their goals. The distribution of goal types for each disorder is summarized in Figure 3. For all three scenarios, participants wrote goals related to discrete skills most often, followed by goals addressing overall skills.

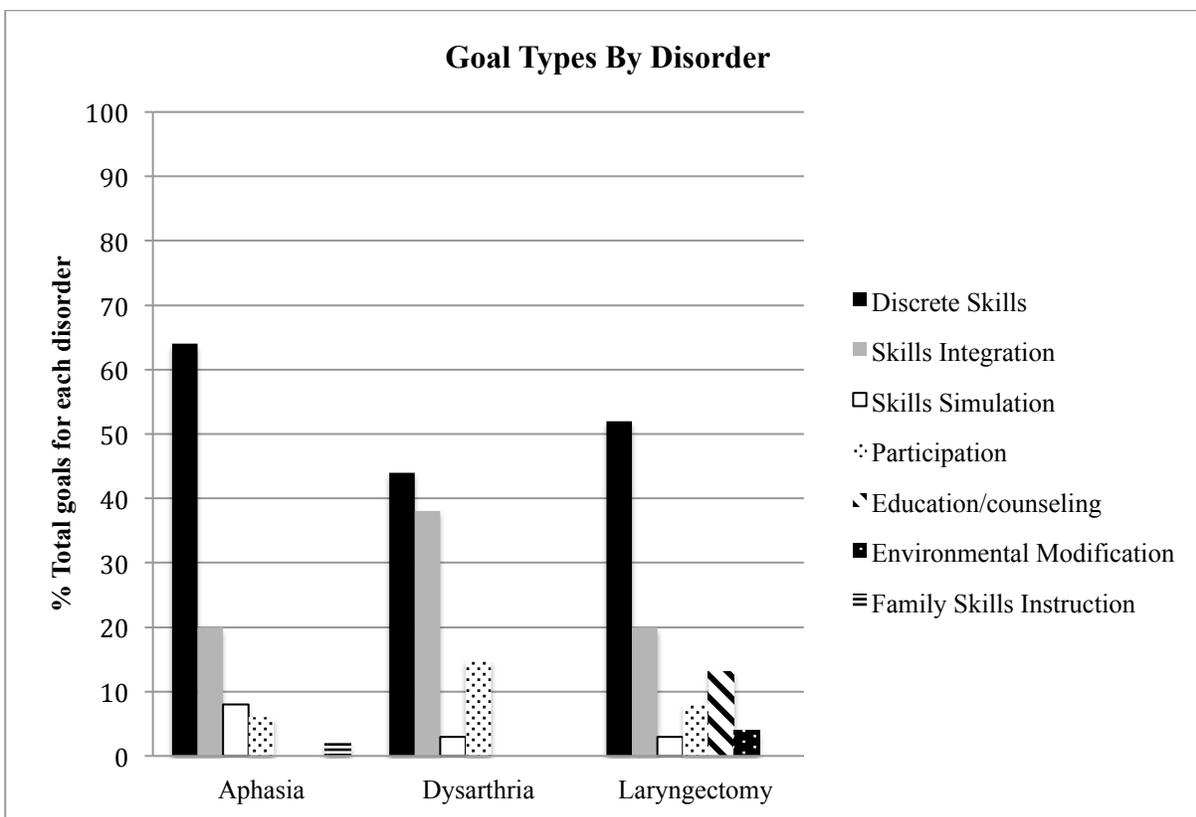


Figure 3: Goal types by disorder

Aphasia scenario. Overall, the 41 participants who responded to the aphasia scenario wrote a total of 137 goals. Of these, 88 (64%) were classified as related to discrete skills, 27 (20%) as overall skills, 11 (8%) as skills simulation, 8 (6%) as participation, and 3 (2%) as family skills instruction. No goals were classified as related to education/counseling of the client or to environmental modifications.

Participation-focused goals. Goals for the aphasia scenario classified as participation-focused were examined first.

Summary of participation-focused goals. Four of the participation-focused goals for aphasia related to the use of trained scripts in everyday settings (e.g. “*RL will utilize sentences from written scripts during communication interactions outside of therapy with approximately*

90% accuracy per her and her family's report" [A3]).² The remaining four goals described either generally improved verbal expression or auditory comprehension in home or community contexts. These goals described increased participation both as a function of improvement in language skills (e.g. *"RL will increase expressive language for communicating basic wants/needs in community settings with minimum assistance from caregiver as needed"* [A40]) as well as a function of emerging coping skills (e.g. *"Patient will decrease fear of speaking by initiating conversation in 4/4 communicative events"* [A20]).

Rationales, activities, and outcome measures related to participation-focused goals. For the eight goals that were identified as participation-focused, the associated rationales, activities, and outcome measures were examined. The particular question was whether participants who described participation-focused goals also addressed participation in their treatment activities and the way they measured progress. All of the participation-focused goals were accompanied by rationales coded as related to participation (e.g. *"I chose this goal because the patient reported that she really wants to be able to communicate independently in public settings, at the bakery and at the elementary school"* [A40]). In terms of therapy activities, 6/8 (75%) of the goals were classified as skills simulation (role play) in the therapy room, with two of these participants stating that in addition to role play they would attempt to move outside of the clinic environment (e.g. *"setting up environment to mock go out to eat, go to MD - possibly do a day outing to a restaurant"*[A10]). Outcome measures for all six of these skills simulation activities were

² Throughout this manuscript, examples of participant responses will be provided in italics. For Section 1, responses are reported in full for that item on the questionnaire, with the only alterations being to expand abbreviations and correct spelling errors. For Section 2, responses have been excerpted. The participant identifier code is provided in parentheses after each example with A=aphasia, D=dysarthria, and L=laryngectomy. In some cases participants responded to more than one scenario, so their identifier code may not match the scenario under discussion.

described in terms of the client's success in the role play (e.g. "*general statements about how much assistance she needed (Mod, Max, Min)*" [A10]), with the clinician estimating the level of client success. One participant also included an estimated level of communicative participation at work as reported by the client and her husband. ("*I would measure her ability to ability to read the sentences using a minimum data set system. Then informally I'd ask her and her husband about the quality and frequency of her communication attempts at the bakery*" [A3]). Thus, while these participants described goals and rationales targeting participation at home and in the community, they typically described activities and outcome measures based on simulated situations in the clinic.

The remaining two participation-focused goals (both written by the same participant) were accompanied by participation-focused outcome measures, though not necessarily therapy activities. For one goal, this participant described therapy activities at the level of overall skills (identifying auditory comprehension strategies while watching videos in the clinic); for the second goal, no activities were described (no response). Both goals were accompanied by the same outcome measure, at the level of participation ("*Have her family put her in real life situations post treatment practice*" [A36]). As with the participation-focused measure described above, this outcome measure relied on estimated/anecdotal information reported by the client and her family.

Non-participation-focused goals. Goals for the aphasia scenario not classified as related to participation were analyzed next.

Summary of non-participation-focused goals. Of the total 137 goals described by participants for the aphasia scenario, 129 (94%) were not coded as related to participation. The

majority (64%) of the total goals for the aphasia scenario related to discrete skills. Frequently targeted discrete skills included naming, verbal expression at the sentence and phrase level, following multi-step instructions, and comprehension of written paragraphs. Goals classified as overall skills (20%) most commonly targeted use of multi-modal communication and other compensatory strategies in the domains of verbal expression and auditory comprehension. Such goals were identified as overall skills and not participation if they targeted communication skills in decontextualized situations such as a practice conversation in the therapy room. Goals classified as skills simulation (8%) most frequently described increasing verbal expression and using compensatory strategies in role-play scenarios with the clinician using scripts. Finally, three goals (2%) described educating the client's family or caregivers on supported communication strategies to improve the success of communicative interactions (e.g. *"Caregivers/family/friends will learn and utilize Supported Communication techniques (multimodal approach) to facilitate overall communication to reduce communication breakdowns from 3-4 times to 0-1 in 1 hour."* [A6]).

Rationales, activities, and outcome measures related to non-participation-focused goals.

Of the 129 goals identified as not related to participation, 71 (55%) had associated rationales that were related to participation (e.g. Goal: *"Patient will follow 3 step commands with 90% accuracy given min [minimum] cues,"* Rationale: *"To improve functional communication, particularly at the bakery where she will have to follow 'commands' given by her customers"* [A24]). The majority of these "non-participation" goals with participation-focused rationales had accompanying activities and outcome measures related to discrete skills or overall skills, with the outcome measures based on data collected by the clinician (Example 1, Table 5). This suggests that while many participants might implement therapy goals, activities, and measures that do not

explicitly target participation, they are choosing these therapy elements with an eye towards an ultimate outcome of improved communicative participation.

Seven of the goals that were not classified as participation-focused but did cite participation as a rationale for therapy, also described both participation-focused activities and self-reported outcome measures of communicative participation (Example 2, Table 5). In these cases, there appeared to be a mismatch between the participants' stated goals (not participation focused) and the other therapy elements that were participation-focused.

Table 5

Example responses by participants writing goals not related to participation (aphasia). Example 1 shows how participation was often a rationale for therapy even if the goals, activities, and outcomes measures did not reflect participation. Example 2 shows how some participants did include participation-related rationales, activities and outcomes measures when the stated goal was not participation-focused. Both examples in this table illustrate lack of coherence across goals, rationales, treatment activities, and outcomes measures.

	<u>Example 1</u>	<u>Example 2</u>
<i>Goal</i>	RL will improve auditory comprehension, to be able to follow paragraph length information and 3-4 step verbal directions, with 90% accuracy, given min assist.	Patient will verbally produce phrases/short sentences in role play situations for typical daily activities in 80% of trials independently.
<i>Rationale</i>	Auditory comprehension needs to be targeted because it is causing RL significant anxiety in the community, at medical appointments, and preventing her from feeling successful at work.	Patient is frustrated with lack of ability to communicate in public and at work.
<i>Activity</i>	Verbal direction following tasks, reading aloud and asking RL questions related to short paragraphs.	Produce short scripts to practice for bank, bakery, restaurant interactions; role play interactions; go to actual site and practice interaction; produce a card for patient to present stating that she has aphasia and please be patient and give short simple instructions, etc.; practice saying that and presenting card in public interactions.
<i>Outcome measure</i>	Track percentage data of the aforementioned tasks. [A29]	Percentage of successfully verbalized phrases; successful interaction with public measured by completion of transaction, understanding of customer/employee. [A11]

For 12 of the non-participation goals (9%), participants described activities related to discrete skills, overall skills, or skills simulation, but additionally included activities related to communicative participation (e.g. “*Script generation and rehearsal. Once the patient is reliable with the script, going into these familiar situations and using the scripts*” [A2]). In terms of outcome measures, for 16 of the non-participation goals (12%), participants described a situation in which they targeted and took formal or informal measures of discrete skills, overall skills or skills simulation, but also tracked communicative participation based on client/family estimate (e.g. “*data collection in session, interview with family members in terms of carryover at home*” [A9]). In these cases, participants were not directly targeting participation, but did state that they would want to track the impact therapy was having at home. Tracking participation was typically based only on estimates or anecdotal report as opposed to any published instruments or other systematic data collection.

The three goals related to family education in communication strategies were all accompanied by rationales, activities, and outcome measures related to participation. In addition to estimated/anecdotal client reports of changes in communicative participation, one participant used a measure coded as an informal measure (“*The client would track number of communication breakdowns outside of therapy on a tracking sheet (situation, topic, number of breakdowns)*” [A6]). These participants described activities in which the client, caregiver, and clinician collaborated to identify successful strategies, with success measured based on client and caregiver report on carryover to everyday life. That is, participants targeting supported communication strategies consistently addressed communicative participation in their rationales, activities, and outcome measure.

Laryngectomy scenario. Overall, the 23 participants who responded to the laryngectomy scenario wrote a total of 71 goals. Of these, 37 (52%) were classified as related to discrete skills, 14 (20%) as overall skills, 9 (13%) as client education, 6 (8%) as participation, 3 (4%) as environmental modification, and 2 (3%) as skills simulation (see Figure 3).

Participation-focused goals. Goals for the laryngectomy scenario classified as participation-focused were examined first.

Summary of participation-focused goals. Five of the participation-focused goals involved using the electrolarynx to communicate in home and community settings (e.g. *“The patient will participate verbally in 3 community outings (ordering at a restaurant, attending a cultural event etc.) in 1 month time”* [L2]). The remaining goal targeted self-advertising techniques to improve the client’s feelings about communication in general (*“Patient will improve self-advertising about her speech to reduce negative affective associations with communication as determined by 1-2 self-advertisements in novel settings per week”* [A5]).

Rationales, activities, and outcome measures related to participation-focused goals. All six of the participation-focused goals were associated with participation-focused rationales. Specifically, five of the six goals were associated with rationales addressing the emotional component of engaging in communicative interactions for individuals with laryngectomy, and targeted interactions in the community as a vehicle to address those emotions (e.g. *“Patient appears to be have the greatest trepidation about returning fully to her work and social situations”* [L15]; *“Patient will be able to build confidence in ability and be encouraged to communicate at work, church, family, and other communication environments”* [L11]). The remaining rationale cited the need to generalize skills practiced in therapy to real-world

environments.

Additionally, all six goals were associated with activities and outcome measures related to participation. Three of the goals were associated with participation-focused activities directly (e.g. *“Community involvement - go to store and have them interact with the employees”* [L2]). The remaining three first described skills simulation activities in the clinic followed by interactions at home or in the community (e.g. *“Develop social scripts and practice in a variety of settings around the clinic and in community settings within reach of the clinic, cafeteria, grocery store, speaking to strangers in waiting room, etc.”* [L15]). In terms of outcomes measures, all six participants described client-reported outcome measures to track progress at the level of participation (e.g. *“Patient would track and report number of instances where she initiated conversation and the conversation setting”* [L11]). Two goals were additionally associated with measures based on clinician judgment to track progress on role-playing activities in the clinic room.

Non-participation-focused goals. Goals for the laryngectomy scenario not classified as related to participation were analyzed next.

Summary of non-participation-focused goals. Of the total 71 goals described by participants for the laryngectomy scenario, 65 (92%) were not coded as related to participation. Frequently occurring targets for therapy at the level of discrete skills included accurate on/off timing of the electrolarynx at phrase/sentence boundaries, and reduction of stoma noise. Goals classified as overall skills most typically targeted increased speech intelligibility when using the electrolarynx. Two types of therapy targets were represented in the category of client education. The first was discussion of other options for speech post-laryngectomy speech such as a

tracheoesophageal puncture or esophageal speech. The second was referrals to laryngectomy or cancer support groups. Therapy targets coded as environmental modification included modification of the physical environment (e.g. *“Patient to learn to manage her environment to improve her intelligibility- especially at work. Patient to make at least 3 changes”* [L10]) as well as the social environment (e.g. *“Client providing brief statement re: electrolarynx use at the beginning of conversations with unfamiliar or less-familiar listeners (i.e. church members) to educate them on sound differences”* [A32]).

Rationales, activities, and outcome measures related to non-participation-focused goals.

Among those goals not coded as participation-focused, 21 (32%) had rationales related to participation. These 21 goals represented a variety of goal types (i.e. goals coded as discrete skills, overall skills, counseling/education, and environmental modification). For examples of goals at each of these levels and their associated participation-focused rationales, see Table 6.

Among those goals not related to participation, four related outcome measures did address the construct of participation. In each of these cases, informal or estimated measures of success with treatment tasks in the clinic were made by the clinician, with the addition of estimated measures of participation by the client (e.g. *“Have the naive listener noted above rate intelligibility. My perceptual evaluation. Patient report of success in the workplace and at church”* [L4]). In addition, one participant described use of a formal measure (the *Voice Handicap Index*) in addition to estimated/anecdotal measures by the client to track changes in the client’s social environment and the success of communicative interactions.

Table 6

Examples of how participants often provide a participation-focused rationale for a non-participation goal. (Laryngectomy)

<u>Goal type</u>	<u>Goal</u>	<u>Rationale</u>
<i>Discrete skills (decontextualized)</i>	Patient will improve mastery in use of electrolarynx, with improved use of on/off control and sentence and grammatical phrasing in structured tasks to paragraph level at 80% and reduction in stoma noise by 80%	This is a structured goal that is concrete and will give TW guaranteed success. She will perceive the improvement and this will aid in confidence building to approach further goals of reintegration into work and community settings. [L15]
<i>Overall skills (decontextualized)</i>	Patient will maintain 90% intelligibility at the sentence level in an environment with background noise.	Patient is 90% intelligible at the sentence level in a quiet environment, however, people at work can't understand her in a natural/noisier environment. [L8]
<i>Counseling/education</i>	Provide patient with information on support groups for people that have had total laryngectomy, head and neck cancer, and the American Cancer Society.	She seems to be having difficulties adjusting to her changed life and integrating her old activities. Meeting with others may provide added support. Plus, introducing her to the American Cancer Society may provide another outlet for charitable work as this was a big part of her life before and the cancer society might be more relatable for her. [L12]
<i>Environmental modification</i>	Client providing brief statement re: electrolarynx use at the beginning of conversations with unfamiliar or less-familiar listeners (i.e. church members) to educate them on sound differences.	Client's apprehension and challenges in conversations with others, which are negatively impacting interactions. [A32]

Dysarthria scenario. Overall, the 13 participants who responded to the dysarthria scenario wrote a total of 34 goals. Of these, 15 (44%) were classified as related to discrete skills, 13 (38%) to overall skills, 5 (15%) to participation, and 1 (3%) to skills simulation. No goals were classified as related to family skills instruction, education/counseling of the client, or to environmental modifications.

Participation-focused goals. Goals for the dysarthria scenario classified as participation focused were examined first.

Summary of participation-focused goals. Two of the participation-focused goals described the use of a personal amplification system to improve communication in home and community settings (e.g. “*Consider portable amplifier for specific settings; i.e. work or loud places*” [L12]). Two participation-focused goals targeted increased speech intelligibility in everyday settings to improve communicative effectiveness (e.g. “*MM will learn and utilize speech intelligibility strategies independently to increase functional communication in home, work and social environments*” [D1]). The final participation-focused goal targeted speech loudness to increase communicative effectiveness. Of note, three of the five participation-focused goals described skills that would have been coded as “overall skills” targeted in the context of the clinic (i.e. intelligibility and loudness in conversation); however, these skills were framed as serving the larger goal of increased participation in social or work settings (e.g. “*Mr. M will demonstrate use of 1-2 word utterances at increased vocal loudness in order to be heard from next room 4 out of 5 opportunities, for increased communicative effectiveness in home environment*” [D2]).

Rationales, activities, and outcome measures related to participation-focused goals. For each of the five participation-focused goals for the dysarthria scenario, the associated rationale was also related to participation (e.g. “*As a way to improve intelligibility in the environments where others have most difficulty understanding him. This is a compensatory strategy*” [D1]). The activities and outcome measures associated with the participation-focused goals for this scenario were all coded as related to either discrete skills or overall skills. In each case, if a participant’s goal identified use of a particular strategy for increasing communicative

participation in the community, activities and measurement were related to use of that strategy in structured tasks in the clinic. An example is provided in Table 7.

Table 7

Example in which a participation-focused goal is accompanied by therapy activities and outcomes measurements that are not participation-focused. This is an example of lack of coherence between goals, activities, and outcomes measures.

Goal	Activity	Measurement
<i>Mr. M will increase speech intelligibility in background noise from 85% to 90+%, in order to increase functional communication skills for social/vocational needs.</i>	<i>Expiratory muscle strength training, compensatory strategy training (overarticulation, increased loudness), progressing from more structured (word, sentence) to less structured conversational tasks</i>	<i>Speech sample - calculate speech intelligibility via same means used at baseline [D2]</i>

Non-participation-focused goals. Goals for the dysarthria scenario not classified as related to participation were analyzed next.

Summary of non-participation-focused goals. Of the total 34 goals described by participants for the dysarthria scenario, 29 (85%) were not coded as related to participation. Frequent targets for therapy coded as discrete skills included improved breath support through diaphragmatic breathing and improved articulatory precision. All but two of the goals coded as overall skills targeted increased speech intelligibility. The remaining two goals coded as overall skills targeted use of a multi-modal communication system and the use of an AAC system in the clinic setting.

Rationales, activities, and outcome measures related to non-participation-focused goals. Among those 29 goals not coded as participation-focused, 9 (31%) had rationales related to participation (e.g. *“It is a progression from the previous goal and what he wants to achieve in his real life settings”* [A5]). One goal was associated with a treatment activity related to

participation (referring to a list of practiced words and phrases: “*Targeting of these words/phrases in multiple contexts (i.e. role plays; mock phone calls; community assignments completed outside therapy)*” [D10]). In terms of outcome measures, all non-participation goals were associated with at least one non-participation outcome measure based on either formal or informal measures made by the clinician. In addition, seven (24%) of the 29 non-participation goals were also associated with outcome measures related to participation, typically in the form of estimated/anecdotal reports by the client and his family of changes to communicative participation (e.g. “*self-reported need for repetition in ADLs*” [D6]). Two clinicians described use of outcome measures based on a client or family reported rating scales (e.g. “*Self-report scale by patient & wife (exertion with conversation, how much does breathing limit conversation)*” [D3]).

Summary of results for research question #1. The following summarizes results for research question #1 in terms of the extent to which participation is reflected in the therapy elements provided by participants. Across all three diagnostic scenarios, participation goals represented 8% of the therapy goals written. The more common goals were related to discrete skills (e.g. naming, following commands, electrolarynx on/off control) and overall skills in the therapy room (e.g. speech intelligibility). For the participation-focused goals, there was often lack of coherence across the goals, activities, and outcomes measures in that the therapy activities did not directly address participation and the outcomes measures did not directly measure participation. For participation goals across all three scenarios, only 42% had accompanying therapy activities and only 47% had accompanying outcome measures that addressed increased participation as stated in the goal. In general, when participation was measured it was done so through anecdotal or estimated reports by the client or family.

Although formally stated participation-focused goals were not common, the concept of participation was highly prevalent in the rationale for therapy across all types of goals, with 50% of all goals containing improved participation as part of the rationale. Some possible goal areas were missing from some scenarios. For example, no aphasia goals addressed client counseling or environmental modification, no laryngectomy goals addressed family skills instruction, and no dysarthria goals addressed education/counseling, environmental modification, or family skills instruction.

Research Question #2

Research question #2, which asks about the perspectives of US SLPs regarding the concept of “participation-focused” intervention, was addressed using data from Section 2 of the questionnaire. Responses to Section 2 from all participants were analyzed together, regardless of scenario completed. The results below are organized into themes and illustrated with examples drawn from participants’ responses. Themes drawn from responses to Section 2 of the questionnaire are summarized in Table 8.

Table 8: Themes from Section 2 of the questionnaire

- **Theme 1.** “We should always be focusing on participation” [A43]...though participation can mean different things.
 - **Theme 2.** “When family takes an active role” [A7] and other facilitators of participation-focused intervention.
 - **Theme 3.** “Our clinical settings make it difficult” [D7] and other barriers to participation-focused intervention.
 - **Theme 4.** “I would love resources.” [D2]
-

Theme 1: “We should always be focusing on participation” [A43]...though participation can mean different things. Most participants stated that they believed a participation-focused approach is an important element to therapy. (*“Participation-focused intervention is a great thing to incorporate into therapy.”* [L5] *“Participation-focused intervention makes a lot of sense.”* [L8] *“I have a strong belief in this method of treatment...I have found it has moved to encompass all of the work that I do with almost every disorder.”* [L15]) Participants stated that therapy with a focus on life participation was not only beneficial to clients’ recovery but also more meaningful and relevant to clients and their families. (*“I know the intervention works because of how absolutely excited my clients/families are.”* [A6]) In addition, participant’s stated that targeting communicative participation in therapy led to better outcomes, as clients were more motivated to take part in therapy activities. (*“It is practical to work with participation-focused approach as the patient is more motivated in achieving the goals and thus there is increased interest.”* [A23] *“I find that patients are more motivated by interests and hobbies that promote a new normalcy.”* [A27] *“This absolutely helps keep the client engaged in the therapy tasks and I think would promote better long term neuroplastic changes.”* [A40]) Several participants emphasized that it was important to address participation across stages of recovery, rather than simply as the end-point of therapy once other, impairment-based goals had been met.

“I still address language, but try to utilize vocabulary or processes that are necessary for them to return to those activities that are important to them, and that will get them participating again, rather than allowing them to ‘wait until they get better.’” [A17]

Only one participant explicitly stated that she did not actively address participation in her therapy activities. (*"I pretty much stick to traditional structured table-top activities that address deficits apparent in the assessment as well as specific patient and family goals."* [A4]).

While in general participants recognized the importance of targeting communicative interactions in everyday activities (in this study called "participation-focused intervention," based on terminology from the ICF), they used a variety of terms to refer to these types of goals. For instance, many participants described targeting "functional" goals in therapy. (*"Our goals should always focus on functional communication needs of our patients."* [L9] *"I usually ask the patient/family for a list of things that they are no longer able to do at home since their injury/stroke...I then try to incorporate those issues into the functional outcome portion of my goals..."* [A26]) In some cases, the term "functional" was directly equated with the concept of participation. (*"I find that it is relatively easy to incorporate functional (life-participation) activities..."* [A2] *"I think it is very important to incorporate functional, participation-focused tasks in treatment."* [A33]) Other participants used the term "quality of life" (QOL) to describe therapy targeting communication in everyday situations. (*"QOL is a critical outcome following any intervention...the initial evaluation focuses on the patient's lifestyle and activities of importance to them that might be impacted by their particular communication challenge."* [L12]) Finally, many participants described a focus on participation in their practice through measurement or observation of "carryover" to home or work of skills learned in the clinic setting. (*"Support from family also allows for increased carryover outside of the brief 45-60 minute sessions during the week."* [A21] *"With homebound patients that live alone, it is quite difficult to work on any kind of carryover."* [D8])

Participants described a wide range of therapy activities under the umbrella of “participation-focused intervention.” Several participants described intervention taking place outside of the clinic room, including community outings (“...we frequently entered the community to practice real life skills - this included ordering in restaurants, planning for and shopping for meals at stores, budgeting, etc.” [A29]), community education (“I meet with managers, talk with teachers, and give presentations at companies/ schools” [L10]), and education of friends and family members (“It’s helpful to visit the patient’s home, work, or community place. Training those that the patient will interact with is...beneficial.” [A3]). Many participants, however, described therapy taking place within the clinic, but using materials relevant to the client’s daily life. (“When I’m working on structured tasks, such as sentence elaboration, I am using personally relevant information. For example, using a patient’s husband’s name or creating a sentence about a favorite hobby.” [A10]) Other therapy activities identified by participants as targeting participation included training of compensatory strategies applicable across settings, and referrals to support groups.

Theme 2: “When family takes an active role” [A7] and other facilitators of participation-focused intervention. The most common facilitator for the implementation of participation-focused intervention identified by participants was the involvement of the client’s family members, often to help increase generalization of therapy activities to home environments. (“It is very helpful if you have a spouse, family member or other caregiver who can help the patient implement ideas away from the therapy session.” [A3]) Participants also described involving family members in education and counseling about the nature of the client’s communication disorder, and strategies for increasing communicative participation. Participants reported teaching family members how to support communication in addition to facilitating

opportunities for participation. (*“First, I always try to have family members participate in therapy sessions so they can understand the nature of aphasia and understand how to facilitate language at home or in the community.”* [A7] *“Family involvement allows for SLP to discuss and provide guidance to family to allow for the patient to have more participation in real life tasks.”* [A34]) Finally, participants described teaching strategies directly to family members to improve the quality of communication with the client. (*“I’ve shown family members how to use supported communication to enhance conversations.”* [A3])

Participants also identified a number of other facilitators for implementing participation-focused intervention. Clients’ attitudes toward therapy was one important factor, both in terms of their willingness to talk more deeply about their own difficulties with communication in daily life (*“With some patients this is very easy and with others it is difficult--it depends to a large extent on the willingness of the patient to discuss personal matters openly with me”* [L4]), as well as in terms of their willingness to use strategies practiced or discussed in the clinic room in their daily lives (*“While the therapist helps facilitate this, patient must have motivation and skill enough to transfer the strategies”* [L11]). Other facilitating factors included the ability to work with the client directly in the community, access to community resources such as support groups or aphasia centers, and workplace resources such as “mock apartments” for simulating everyday environments. Additionally, several participants identified past exposure to resources and training for SLPs related to participation-focused intervention as helpful, specifically for aphasia. This included training in supported communication (Kagan, 1998), as well as use of clinical assessment/intervention tools such as the Communicative Effectiveness Index (Lomas et al., 1989) and “Life Interests and Values Cards” (LIV cards; Haley, Womack, Helm-Estabrooks, Lovette, & Goff, 2013).

Theme 3: “Our clinical settings make it difficult” [D7] and other barriers to communication-focused intervention. The vast majority of participants suggested that there are significant barriers to implementing participation-focused intervention. Many of the participants cited the clinical setting itself as a barrier to participation-focused intervention, in that therapy most typically involves isolated interactions with the therapist in the clinic room. (*“It is difficult to implement a focus on life participation within the clinical setting.”* [L1] *“We should always be focusing on participation. However, it is often hard when we work in 1:1 quiet controlled settings.”* [D9]) Participants across a range of clinical settings, including acute care, inpatient rehabilitation, and outpatient rehabilitation, identified their particular setting as particularly difficult when it comes to this type of intervention. Participants who work in acute care settings, for example, suggested that the addressing clients’ acute medical condition often takes precedence over issues of communicative participation.

(*“While the patient remains in the hospital, very little resources are available to implement these goals and they often do not take priority”* [L14]). Participants who work in inpatient rehabilitation cited lack of resources for simulating “real life” and limited ability to observe generalization to home environments as significant barriers. (*“My focus on ‘participation’ generally is measured by participation (by speaking) in stroke support group, initiating personal care needs, engaging in discharge planning with case management, but is really challenging because the ‘life participation’ in a hospital setting is limited overall.”* [D3] *“I find it hard in this very structured environment to generate a live model of a real home environment.”* [A19]) Similar concerns over the inability to accurately simulate real-life environments and address barriers to communication were cited by participants working in an outpatient setting. (*“In general, outpatient therapy is hard because it is a simulation of things vs. being in their home or*

work setting and addressing the actual needs vs. reported needs.” [A5]) While some participants cited settings in which work in the community and a focus on participation was facilitated (e.g. home health), the majority suggested that clinical settings were a barrier.

Several participants suggested that planning activities targeting communicative participation is more difficult and time consuming than other types of therapy. This might reflect that participants do not feel prepared with the skills and resources to plan participation-focused interventions; or that their schedules do not allow sufficient time. (*“A challenge is that treatment feels like slower going in the beginning, as it can take a few sessions to get a good idea of specific problems.”* [D2] *“I believe it takes time and effort and discussion and relationship building to use this approach.”* [L15]) Many participants stated that they were required to put in a great deal of effort to develop novel therapy activities related to the client’s participation-focused goals. (*“Creativity is important in setting up naturalistic environments for the patient to use their newly learned skill.”* [D9] *“I have to spend a little more time thinking of fun, creative or functional activities for each client.”* [A40] *“One difficulty with life participation is that it can make drill work slightly more difficult to organize.”* [A13]).

Closely related to the challenge of participation-focused intervention being regarded as time-consuming are other barriers identified by participants that might be linked to US healthcare delivery and funding models. One major issue is related to scheduling and productivity requirements. (*“Productivity requirements make it difficult to take our patients out into the real world and really see how they are participating in their day to day activities.”* [A10] *“Challenges are short amount of treatment time available and large amount of other requirements to complete (paperwork, meetings, etc.).”* [A21])

“For the patient who is more independent or does not have family support, we discuss and try to simulate scenarios that arise and how to deal with them. While ideally we would be able to implement these in real life situations, scheduling does not allow for it.” [A7]

Participants also cited insurance requirements as a barrier to targeting participation in therapy. Insurance requirements may limit the types of goals that SLPs are able to write. For instance, Medicare may only cover goals that are “medically necessary,” or focused on improvement only in certain settings. (*“It is difficult to be highly specific in goal writing because some insurance providers (e.g. Medicare) only pay for home/community focused goals. So the goal for the woman to go back to work in her bakery required careful wording not to say ‘work’ in any of them.” [A5]*) In other cases, insurance regulations may restrict the settings in which SLPs can be reimbursed for their services. (*“I have gone to senior day care centers to work with patients but this is very difficult to account for most insurances.” [D8]*)

Another significant challenge appears to be how to document changes to communicative participation as a result of therapy. Reasons for this include the less quantitative, more subjective nature of participation. (*“Measuring was less specific which I find may be hard and out of the comfort zone for an SLP to not have very specific data to report.” [A41]* *“In my experience, ‘participation’ is generally a self-reported measure (e.g., ‘I ordered dinner when I went out to eat last night’), but never measured quantitatively.” [D3]* *“This does seem difficult to quantify, which is why data gathering is still on the structured tasks” [L11]*). In addition, documentation of goals related to

participation requires SLPs to track barriers to communication and changes as a result of therapy that are occurring outside of the clinic setting. (*“Sometimes I find dysarthria is hard to measure progress because I don't always see it. It takes family and community members to say, “Hey, that pt. sounds awesome! I know what they're saying now!” [D10]*)

“The major challenge is that intervention is dependent on patients being able to accurately relay difficulties they have had and why those difficulties arose so that treatment strategies can be tailored...Unfortunately it is more difficult to objectively measure success with this type of therapy as the encounters are by definition outside of the therapy environment.” [L16]

Many participants stated that they have difficulty finding useful assessments and outcome measures to document change in this area. While participants may use client report or rating scales, these tools may be difficult for clients to fill out due to their communication disorder, especially for clients with aphasia. (*“Patient/caregiver report is the primary way to determine patient progress towards such goals.” [L16]* *“Surveys can be used, but sometimes it's hard for clients themselves to fill them out.” [D3]*) Participants also identified a lack of standardized tools for assessing communicative participation and documenting change. (*“I have tried normed scales but often find these are too long and unwieldy and are measuring so many other factors beyond the impact of our intervention.” [L15]*)

Theme 4: “I would love resources” [D2]. Many participants noted that there are few existing assessments or treatment protocols for participation-focused intervention. (*“There is very little as far as formal tests or treatment activities that are available for this approach.” [A1]*). Rather, participants’ descriptions of their approaches to participation-focused intervention

in therapy suggest a landscape in which most assessments, therapy activities, and outcome measures are based on the creativity of the clinician in developing and implementing personalized interventions. In terms of assessments, a large number of participants suggested that the best tool is a thorough interview delving into the details of the individual's difficulties with communication. (*"I think it is important to spend a lot of time at the beginning of your evaluation session getting to know the patient and getting to know what is important and of value to each individual patient."* [D9] *"I identify treatment goals not just based on results of testing, but on semi-structured interviews with patients."* [A33] *"I have no resources on this topic. I feel as though the patient is the resource."* [L8]) While most participants identified interviewing as the most useful method for gathering information prior to establishing a plan of care, not all participants felt that it was wholly sufficient for the purpose of writing meaningful goals. (*"I generally try to elicit key challenges from the patient/client perspective, then incorporate them into therapy tasks, but they often feel 'generic' or forced."* [A32])

A large number of participants suggested that they would welcome the development of treatment resources targeting participation to increase the ease of implementing this kind of therapy (*"I would love resources on specific protocols for doing this (that is, home programming and the process of taking their feedback and tweaking treatment approach)!"* [D2]). Participants also suggested that it would be useful to expand the research base for such interventions in order to better ensure that interventions are effective at targeting communicative participation. (*"I wish there were more evidenced based practices for dysarthria..."* [D10] *"We definitely need more qualitative studies or QOL specifically for communication for laryngectomees."* [L7])

Discussion

The purpose of this study was to explore the extent to which participation is reflected in the current therapy practices of US SLPs working with adult clients, and to explore the attitudes and opinions of SLPs regarding participation-focused intervention. To address the question of whether and how SLPs are addressing communicative participation in their current therapy practices, participants in this study were asked to read a hypothetical case scenario and to describe goals, rationales, therapy activities, and outcome measures for a hypothetical client (Section 1 of the questionnaire). The majority of goals described were related to discrete skills and overall skills in the therapy room. To a lesser extent SLPs also targeted skills simulation, participation, family skills instruction, education/counseling, and environmental modification. Through the lens of the ICF, SLPs most often addressed impairments and activity limitations, and to a far lesser extent addressed participation restrictions and contextual factors when writing goals. Responses to Section 1 suggest a lack of coherence between some stated therapy goals and the activities and outcome measures used to track progress toward that goal. In many cases, goals that were coded as related to participation were associated with activities related to developing discrete skills or overall skills, with outcome measures based on performance of those skills in the clinic as judged by the clinician. A focus on participation was evident, however, in many of the rationales provided for therapy goals, suggesting that participants do have participation in mind when designing plans for intervention.

To explore SLPs' attitudes and opinions regarding participation-focused intervention, participants responded to an open-ended question asking them to describe how they address participation in therapy, as well as facilitators, barriers, and resources for this type of intervention (Section 2 of the questionnaire). Many participants stated that addressing participation was important in order for therapy to be beneficial and meaningful for clients and

their families. A variety of terms was used to describe therapy addressing communication in real-life situations, including “functional,” “quality of life,” and “carryover.” Participants identified a number of facilitators for targeting participation including the family involvement, client attitude, and the ability to work directly in the community. Major barriers to implementing participation-focused therapy included lack of formal tools or protocols, the additional time required to develop a meaningful therapeutic relationship and create personalized interventions and outcome measures, and the constraints of current healthcare settings. Overall, while many participants stated the importance of implementing participation-focused intervention, participants from a range of professional settings stated that they found it difficult to do so.

Findings from Sections 1 and 2 of the questionnaire both suggest that while participants believe participation-focused intervention is important, a number of barriers prevent participation from being incorporated into therapy goals, activities, and outcome measures. In Section 1, only a small percentage of goals, activities, and outcome measures addressed participation. This may reflect barriers identified in Section 2, such as insurance requirements that make it difficult to write participation-focused goals, time constraints that make it difficult to implement such therapy, and challenges to documenting change occurring outside of therapy, as well as the lack of formal tools to measure outcomes. In both sections, a pattern emerged in which participants relied on self-designed activities and outcome measures rather than published tools and protocols. In Section 1, this was reflected in the fact that almost all outcome measures addressing participation were estimated or anecdotal. In Section 2, this was reflected in participants’ statements regarding the time and effort required to develop treatment activities, and descriptions of using informal client self-report measures to document change.

The results of this study support prior research that suggests a focus on participation is recognized by many in the field of speech language pathology as critical to ensure that interventions make a relevant and meaningful impact on clients' lives (Ma et al., 2008). This study also supports findings that it has been a challenge to translate this interest into clinical practice (Ma et al. 2008), as evidenced by the apparent discrepancy between many participants' stated belief in the importance of participation, and actual therapy goals and activities focused primarily on discrete skills and overall skills. These findings are similar to those of surveys of SLPs in Australia, the UK, and Sweden, which find discrepancies between the approaches that SLPs claim to use versus the tools they most frequently employ (Verna et al., 2009; Miller et al., 2011; Collis & Bloch, 2012) , as well as barriers to addressing participation through work in the community (Rose et al., 2014), and work with families (Johansson et al., 2011) despite a stated desire to do so.

As in the present study, barriers to participation-focused intervention identified in other surveys of SLPs include time constraints (Verna et al., 2009), productivity requirements, and lack of established protocols (Johansson et al. 2011). Results of this survey suggest that SLPs typically use outcome measures related to discrete skills or skills intervention, even when goals were written in terms of changes to participation, and that when they do measure participation it is typically using anecdotal/estimated reports from clients or clients' families. These findings, in combination with participants' statements regarding their desires for more formalized protocols and measurement tools related to participation, further bolster the suggestions of several authors that there is a need to develop tools to enable SLPs to consider the client holistically (Collis & Bloch, 2012; Simmons-Mackie et al., 2005). While the findings of the present study do not differ substantially from surveys of SLPs in Australia, the UK, and Sweden, they do extend these

findings to the US, suggesting that these issues are common across countries, despite differences in service delivery models and payment structures. In addition, while most surveys of SLPs have focused on aphasia, results of the present study extend these findings to other disorders, and suggest that barriers to participation-focused intervention are common across SLPs who treat adults with a variety of communication disorders.

There may be several clinical implications from this study. The purpose of this study was to explore the extent to which SLPs who work with adults are incorporating the concept of participation into clinical practices. This study is not intended to suggest that all goals must be written to focus solely on participation. For example, often clients need to work on specific, discrete skills in the relative “safety” of the clinic room in order to develop the communication abilities to participate in daily activities. Some clients or their family members may need to work towards educational or counseling goals that will equip them to navigate the challenges of a client's communication disorder. Each of the different goal types coded in this study can make a meaningful contribution to how individuals with communication disorders communicate in their daily life activities. However, focusing on a list of specific goals such as learning discrete skills or role-playing in the clinic may or may not lead to improved communicative participation. Without goals that specifically target and measure participation outcomes, there is no assurance that other therapy activities will lead to outcomes that are meaningful and relevant to the life of each client. Furthermore, without participation-focused goals and measures, it is very difficult for clinicians to document for stakeholders the value of SLP services in the lives of clients. According to this and prior studies, a primary issue appears to be a gap between the rationale for therapy and clinical practices. As documented in this study, a large proportion of clinicians are thinking of participation-related benefits when designing intervention programs. Yet, many

clinicians find it difficult to follow through with the therapy activities and outcomes measures to ensure that those rationales are achieved.

In considering ways in which to bridge the gap between clinicians' stated intents for therapy to impact communicative participation and their actual therapy practices, several issues may be addressed. The first relates to the terminology used to discuss these types of goals. In the literature the construct of participation is frequently referred to interchangeably by a variety of terms, including "functional skills," "activities," and "quality of life" (Eadie et al., 2006). Responses to the present study suggest that this variety also exists in clinical practice in terms of how SLPs write and justify their goals for therapy. Defining the precise meaning of these terms is critical. One reason is that different SLPs may use the same term to describe very different types of goals. In the present study, for instance, participants used the term "functional" to describe therapy activities ranging from word-finding in drill to communicative interactions during community outings. While each SLP may be able to justify their use of the term "functional" in their individual practice, such heterogeneity makes such terms less useful when attempting to define a particular focus of intervention. A question that needs to be addressed is whether or not these terms should be used interchangeably. A second reason it is important to define the vocabulary used to discuss constructs related to participation is that without doing so there is the risk that the way terms are used will change over time, and terms may eventually lose their original meaning. For instance, Elman and Bernstein-Ellis (1995) propose that the definition of the prevalent term "functional" has moved away from considering communicative "actions" or "tasks" to considering a set of "basic skills." They argue that while in the past functional assessment and treatment was emphasized in an effort to make therapy more meaningful and successful, the term has become distorted and is being used against clients'

best interests to justify no more than “basic treatment” (Elman & Bernstein-Ellis, 1995).

Proposing specific operational definitions for the terms used to describe therapy approaches not only makes these approaches more transparent, but may also assist in preventing the dilution of their meaning.

It is also worth considering how clinicians might restructure the way goals are written to ensure a holistic yet flexible approach toward the ultimate aim of improving participation. For instance, it may be beneficial to move toward a framework in which goal-writing starts with one or several overarching participation-focused goals with associated participation-focused outcomes measures. Under the participation goal might follow sub-goals that address the specific areas needed for that client to achieve better participation. Some clients may need to drill discrete skills whereas others may need more work with environmental modification or counseling. The sub-goals could ensure that the individual “tools” that each client needs to develop are addressed to meet an overarching goal of participation which, if directly targeted and measured, has a better chance of being met and documented. Results from this study and others, however, suggest that there are significant barriers to this approach. Taking a more systematic, holistic approach requires that we “fill in the gaps” in terms of missing resources, skills, and materials to help us meet those goals. For example, if a holistic approach to meeting an overarching participation goal requires more counseling and education, are we uniformly training SLPs in counseling techniques appropriate to our roles? Are we developing the therapy materials that can guide clinicians in developing a participation-focused approach? Do we have systematic ways of measuring participation outcomes to document the benefits of intervention? Further, even if these tools were in place, it is important to consider whether current productivity requirements, work environments, and billing requirements for insurance would support this type of goal-

setting. The results of this study suggest that clinicians strongly desire to target participation in their clinical practices, but more resources and potentially changes to current service delivery models are required to support this motivation.

Finally, it is important to address the issue of at what point in the continuum of care communicative participation should be considered. Based on the results of the present study, some clinicians feel that it is difficult to target participation based on their setting and the types of clients they see. For instance, clinicians who work in the acute care setting reported that it is difficult to target participation while clients are in the hospital, as their medical status is often the priority, and changes to the client's communicative participation abilities once their hospital stay has ended are yet to be determined. Clinicians' goals may also be influenced by the client's phase in the course of his or her disorder (be it stable, recovering, or degenerative) and their prognosis for impairment-level recovery. For instance, Sherratt (2011) reports that clinicians were more likely to target clients' impairments when the impairment-level prognosis was good. The authors of this paper would argue that participation should always be a focus of intervention, across clinical settings. In the case of clinicians working in the acute care setting, this may mean an emphasis on providing clients with the opportunity to participate in the "life event" of a hospital stay (e.g. contributing to clinical decision making, communicating with nurses, etc.) to the greatest extent possible. One participant framed this in terms of addressing clients' participation now, "*rather than allowing them to 'wait until they get better'*" [A17].

Limitations and future directions. One limitation of this study was the sample size, specifically the unequal distribution of responses across the three disorders. The effect of this distribution was partially mitigated in analysis of Section 1, as responses to each scenario were analyzed separately. However, given the predominance of responses to the aphasia scenario,

greater detail about the practice patterns of participants treating this population was acquired. The unequal distribution may have particularly skewed the findings in Section 2 of the questionnaire, in which responses to all three versions of the questionnaire were analyzed together; although similar patterns were observed across the scenarios in the qualitative analysis.

The limitations of thematic analysis of responses to a questionnaire rather than in-depth, semi-structured interviews with SLPs was evident in the lack of elaboration on some participants' responses to items in the questionnaire. In cases where responses were quite brief or did not provide adequate information for accurate interpretation, the inability to ask follow-up questions resulted in the meaning behind the participants' response being lost. A study design pairing responses to a structured questionnaire such as that in Section 1 of the current study with an interview with the SLP would allow researchers to delve deeper into participants' reasons for choosing certain goals and would have resulted in richer and more detailed data. In addition, it is possible that what participants reported doing in therapy on this questionnaire does not accurately reflect their actual treatment practices. A study in which SLPs' actual goals were reviewed and coded, or in which SLPs were observed actually carrying out therapy would allow for current practices to be more accurately captured.

A major implication of this study is that there is a need to develop more formalized protocols or tools for carrying out participation-focused intervention. Such tools could help bridge the gap between SLPs' stated beliefs in the importance of participation-focused intervention and the difficulty of translating those beliefs into clinical practice. There may be some question as to whether it would ever be possible to develop a "tool" for supporting participation-focused intervention, as the inherent variability within each individual, their communication partners, and other contextual factors might preclude anything more than a

broadly conceptualized approach. However, perhaps we should not be discouraged too easily. The development of such a tool would help make a holistic program of intervention more feasible for clinicians despite constraints of time and resources, and ultimately allow therapists to provide treatment that is both more meaningful and more beneficial to clients for improving communicative participation in their daily lives.

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309–322.

Appendix 1: Online Questionnaire for SLPs

Page 1

Thank you for participating in this study. On the next page you will see a researcher statement, which is the equivalent of a consent form. Please read through this. If you agree to participate, please then proceed to the questionnaire.

Please note: This website does not allow you to save your answers and return later. There is no time limit to complete this questionnaire, but please be sure to leave the page open if you plan to take a break and return later. If you close your browser before you submit your answers, your answers cannot be retrieved.

[Next page]

Page 2

[Researcher Statement]

[Next page]

Page 3

On the following page you will be presented with a case scenario representing a client. Imagine that you are seeing this client in an outpatient setting. Given the information in this scenario, you will be asked to write 2-4 goals you would want to target assuming that you will work with this client for 10-12 sessions over the next three months. Please write the goals in the format you would use for your clinical documentation. You will be asked to describe your reasons for choosing those goals and treatment activities for each goal. When answering these questions, we want you to describe what you would typically do if this was a client on your caseload.

[Next page]

Page 4

Case Scenario (version A):

RL is a 71-year-old woman status post L MCA stroke 7 months ago. She received inpatient therapy, but at the time of discharge from the hospital she was not given explicit instructions as to how to follow-up with outpatient speech language therapy. She is now pursuing outpatient therapy after referral from her primary care physician. Prior to her stroke, she ran a bakery with her husband. She also volunteered as an art docent at a local elementary school.

RL presents with moderate nonfluent aphasia. During your initial evaluation, scores on the Revised Token Test suggested moderate auditory comprehension deficits, with comprehension breaking down at the level of 3-step instructions. Verbal expression was characterized by utterances typically of 2-4 words in length and often agrammatical, with frequent semantic paraphasias. Content is generally appropriate but incomplete. Expression is slow and effortful, though there is no evidence of motor speech impairment. She is able to recite days of the week and months of the year. RL demonstrates mild reading deficits, with reading comprehension breaking down at the paragraph level. She is able to write her name and address, and copy the sentence "The brown fox jumped." When asked to write the days of

the week, she is able to produce only the first 1-2 letters of each word. Writing is slow and slightly unsteady due to a mild right hand weakness.

RL reports a great deal of anxiety during interactions outside of home. At the doctor's office, she reports being frustrated because she cannot understand what he is saying. She is also anxious about going to the bank, interacting with waiters in restaurants and speaking to store clerks because of her difficulty speaking and understanding conversation. RL's husband indicated that communication is not an issue when they are in public together because he can understand her facial expressions and interpret for her, but she struggles with communicating on her own. At the bakery, she has tried going back to work but has had a hard time working at the front counter, as she does not feel comfortable speaking to customers and feels they frequently become impatient. She perceives that it is having a negative impact on customer relations. She also reports that since the stroke she does not speak on the phone as frequently with her grandchildren because of her difficulty keeping up with the conversation. RL has not returned to volunteer at the elementary school, though she stated she misses interacting with the students there.

Case Scenario (version B):

MM is a 38-year-old man who sustained a brainstem injury one year ago as a result of surgical trauma during a tumor removal. MM had inpatient and outpatient speech therapy but was discharged 9 months after onset due to financial concerns and insurance limits. It is now a new calendar year and he has an additional 12 sessions of therapy covered by his insurance, and he would like to return to therapy.

During the initial evaluation, cognitive-communication skills were determined to be within normal limits. Speech characteristics were consistent with flaccid dysarthria, including imprecise consonants, hypernasality, audible nasal emission and slow rate. Based on *The Sentence Intelligibility Test*, MM's speech was judged to be 92% intelligible in a quiet testing environment and 85% intelligible in background noise. MM complains of always running out of air when he talks. MM is able to walk unassisted although fatigues easily and occasionally uses a cane in the community. He has difficulty with fine motor tasks with his hands.

MM is currently employed as a clerk at a bookstore where he was working prior to the accident. His employer and co-workers have been supportive. The employer has modified his job tasks to minimize physical exertion and strength demands, and to focus more on 'office work' as opposed to customer service.

MM is married and has a strong social network built around hobbies as a wine-connoisseur and amateur bowler. He still attends bowling functions regularly for the social aspect although he is not really able to bowl comfortably. MM reports that friends, family, and co-workers continue to have difficulty understanding his speech in conversation. During the intake interview, MM and his wife reported that he is understandable in one-on-one conversations at home, though his wife reported frequently becoming frustrated when trying to talk in the car or when communicating between rooms. MM reports a great deal of difficulty being understood when socializing with friends at wine bars and the bowling alley. He reported particular frustration during weekend games because of the high volume of people, loud music, and use of strobe lights.

Case Scenario (version C):

TW is a 58-year-old manager at a bank. She received radiation and total laryngectomy 4 months ago as a result of laryngeal cancer. TW speaks using an electrolarynx. Intelligibility of sentences is 90% with the clinician in quiet clinic room, though TW reports that people at work often have difficulty understanding her. Taking into account rate, intelligibility and overall speech quality, the clinician rated

TW's speech acceptability at 65/100. TW has some stoma noise with speech that reduces her intelligibility and she does not always coordinate electrolarynx on/off with grammatical phrase or sentence boundaries.

TW took a leave of absence from work during her surgery and early recovery, but has since returned on a part-time basis and is hoping to resume full-time duties. She is worried about her ability to be a successful manager, however, based on the perception that her use of the electrolarynx makes her colleagues uncomfortable. She also fears that people at the bank look down on her and are less willing to make accommodations based on their belief that laryngeal cancer was "her fault" due to her history as a smoker. Prior to her diagnosis, TW also volunteered at fundraisers and did outreach for her church, but has stopped doing so because she no longer feels comfortable reaching out to strangers. She reports that on several occasions fellow church members have hung up on her, thinking they were talking to a machine.

Please write 2-4 goals you would target for this client over the next three months and answer the related questions. Please write the goals in the format you would use for your clinical documentation. Once you have completed the questions for the goals you wish to target, please scroll to the bottom of this page to either choose another scenario (optional) or proceed to the final questions in this survey. If you are targeting fewer than 4 goals, please leave the remaining answer boxes empty.

Goal 1

What is Goal 1?

Why did you choose this goal?

What is an example of a typical treatment activity you would use to help the client achieve this goal?

How would you measure progress toward this goal (formally or informally)?

Goal 2

What is Goal 2?

Why did you choose this goal?

What is an example of a typical treatment activity you would use to help the client achieve this goal?

How would you measure progress toward this goal (formally or informally)?

Goal 3

What is Goal 3?

Why did you choose this goal?

What is an example of a typical treatment activity you would use to help the client achieve this goal?

How would you measure progress toward this goal (formally or informally)?

Goal 4

What is Goal 4?

Why did you choose this goal?

What is an example of a typical treatment activity you would use to help the client achieve this goal?

How would you measure progress toward this goal (formally or informally)?

Part 2 of this survey will take an additional 5-10 minutes to complete. Before proceeding to the next part of the survey, would you like to answer questions about a second case (optional)? Please note that once you click "Next," you will not be able to return to this page to edit your responses.

- Yes, I'd like to read a second case
 No, I'd like to proceed to the next part of the survey

[Next page]

Page 5

Over the past few years speech language pathologists have been increasingly encouraged to focus on life participation in our intervention programs (for example, addressing the impact of communication disorders on areas such as personal or household management, work, leisure, relationships, and community life). However, there is very little evidence-based research available regarding specific therapy techniques that focus on life participation. Little is known about the extent to which speech pathologists use participation-focused approaches to therapy. We are interested in your comments about participation-focused intervention. For example, how easy is it to integrate a focus on participation into your treatment programs? What resources have you found helpful or would be helpful to you? How do you know if your intervention works? What challenges do you find in participation-focused intervention and/or what helps? In the space below, we invite you to share any comments or opinions you may have on how this topic relates to how you work with your clients.

[Next page]

Page 6

Demographic Information

Current work setting:

Select one or more answers.

- Acute care
 Inpatient Rehab
 Outpatient Rehab
 Skilled Nursing Facility/Sub-acute rehab
 Private Clinic
 Home Health
 University Clinic
 Other: _____

Years of experience working as an SLP: _____

Country:

- US
 Canada

Other: _____

State/province: _____

Gender:

- Male
 Female

[Next page]

Page 7

Thank you for participating in this study! We would like to send you a \$20 Amazon.com gift card as a thank you for completing this questionnaire. We will need your email address to send you the gift card electronically. When we download the questionnaire data, we will remove your email address from your data set and store it in a separate file away from your questionnaire data. The files will be stored on secure servers at the University of Washington. Only the researchers have access to these files. Once we have sent you your gift card, we will delete your email address from our files. You do not have to give us your email address if you do not want to, but we will not be able to send you a gift card without it. We will not use your email for any other purpose or share it with anyone.

Email address: _____

[Submit responses]

Page 8

Your responses have been submitted.

Again, thank you for your help with this study.