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# The Acceptability of Relationship-Centered Communication Partner Training for Couples Impacted by Aphasia: A Mixed Methods Pilot Study

## Kathryn-Anne Pertab

A thesis submitted to the faculty of
Brigham Young University
in the partial fulfillment of the requirements for the degree of

Master of Science

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Department of Communication Disorders

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#### **ABSTRACT**

The Acceptability of Relationship-Centered Communication Partner Training for Couples Impacted by Aphasia: A Mixed Methods Pilot Study

Kathryn-Anne Pertab Department of Communication Disorders, BYU Master of Science

This study explored the acceptability of Relationship-Centered Communication Partner Training (RC-CPT) for couples impacted by aphasia. Three couples participated in the program across two sessions. Surveys were administered to assess outcome measures of their marital relationship and communication confidence before and after participation in RC-CPT. The quantitative findings were analyzed using descriptive statistics. Overall, participants generally maintained or experienced improvements in accessibility, responsiveness, engagement, conflict, conflict resolution, and communication within their marriage after participating in RC-CPT. Additionally, individuals with aphasia demonstrated enhanced communication confidence scores. During the third session, couples completed a semi-structured interview to share their experiences with the program. The interviews were transcribed orthographically and coded using reflexive codebook analysis. Reflexive codebook analysis of the semi-structured interviews revealed four prominent themes: (I) "Impact on Communication," (II) "Impact on Relationship," (III) "Impact on Psychosocial Well-Being," and (IV) "Feedback for Future Development". The convergence of the quantitative and qualitative data revealed that couples indicated positive changes in their communication, relationship, and psychosocial well-being. These findings suggest that RC-CPT has the potential to effectively address both communicative and psychosocial impacts of aphasia on couples. Moreover, this study highlights the promise of RC-CPT as a relationship-centered counseling tool, warranting further exploratory and experimental research.

Keywords: aphasia, counseling, marriage, psychosocial factors and well-being

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## TABLE OF CONTENTS

TITLE PAGE	i
ABSTRACT	ii
ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
DESCRIPTION OF THESIS STRUCTURE AND CONTENT	viii
Introduction	1
Impact of Aphasia on Couples	2
Insufficient Support for Couples Impacted by Aphasia	4
The Counseling Roles of Speech and Language Pathologists	6
Purpose of the Study	7
Method	8
Participants	9
Procedures and Measures	9
Semi-Structured Interview	13
Analysis	14
Results	15
Quantitative Findings	15
Marital Relationship Measures	15
Communication Confidence Rating Scale (CCRSA)	16
Qualitative Findings	17
Impact on Communication	17

Impact on Relationship	20
Impact on Psychosocial Well-Being	23
Feedback for Future Development	24
Discussion	29
Relationship Centered Communication Partner Training is Acceptable to Couples	
Impacted by Aphasia	30
Relationship Centered Communication Partner Training Has the Potential to Improve	
Communication	30
Relationship Centered Communication Partner Training Has the Potential to Address	
Relational and Psychosocial Impacts of Aphasia	32
Limitations and Future Directions	35
Breaking Down Barriers to Counseling	35
Demographic Composition	36
Outcome Measures	37
Study Design	37
Communication Partner Training Versus Relationship Centered Communication	
Partner Training	38
Conclusion	38
References	40
Tables	45
APPENDIX A: Annotated Bibliography	51
APPENDIX B: IRB Approved Consent Form	67
APPENDIX C: Marital Relationship Survey	72

APPENDIX D: Relationship Roles Questionnaire Visual Support for Persons With Aphasia	. 75
APPENDIX E: Relationship Roles Questionnaire Clinician Form	. 86
APPENDIX F: Relationship Roles Questionnaire Spouse Form	. 87
APPENDIX G: Relationship Roles Questionnaire Worksheet.	. 90
APPENDIX H: Relationship-Centered Communication Partner Training Protocol	. 93
APPENDIX I: Community Resources Handout	. 98
APPENDIX J: Semi-Structured Interview Guide	100
APPENDIX K: Final Codebook	102

## LIST OF TABLES

Table 1	Communication Partner Training Versus Relationship Centered Communicati	on
Partner !	Training	45
Table 2	Quick Aphasia Battery Scores for Participants With Aphasia	46
Table 3	Particpant Demographic Information	47
Table 4	Marital Relationship Measures	48
Table 5	Communication Confidence Rating Scale for Aphasia (CCRSA) Results	49
Table 6	Categorization of Results	50

#### DESCRIPTION OF THESIS STRUCTURE AND CONTENT

This thesis, *The Acceptability of Relationship-Centered Communication Partner Training* for Couples Impacted by Aphasia: A Mixed Methods Pilot Study, is written in a format that combines traditional thesis requirements with the format of a journal article. The preliminary pages of this thesis reflect requirements for submission to the university. The remainder of this thesis is structured like a journal article; it conforms to the style requirements for submitting research reports to relevant journals. The annotated bibliography is included in Appendix A. Appendix B contains the research consent form and Appendix C contains the marital relationship survey. Appendices D, E, F, G, H, and I contain materials for RC-CPT, including the Relationship Roles Questionnaire (RRQ) Visual support for people with aphasia (PWA), RRQ clinician form, RRQ Spouse Form, RRQ Worksheet, RC-CPT protocol, and community resources handout. Appendix J contains the semi-structured interview guide and Appendix K contains the final codebook. Two reference lists are included in this thesis format. The first contains citations used in the journal ready-article and the second contains references used in the annotated bibliography.

#### Introduction

More than two million Americans live with aphasia, an acquired neurogenic disorder that impairs language functioning (Simmons-Mackie et al., 2018). Aphasia can impact both receptive and expressive language across all language modalities, which has a significant influence on not only communication but also participation in activities and social life (Nätterlund, 2010). These changes can negatively impact the psychosocial well-being of people with aphasia (PWA) and their family members (Simmons-Mackie et al., 2018). For example, role changes, communication breakdowns, and negative emotions associated with aphasia can cause tension within the marital relationship (Nätterlund, 2010; Croteau et al., 2020; Le Dorze & Brassard, 1995).

While there have been some efforts to address the psychosocial impacts of aphasia for PWA and their spouses, couples still report a lack of emotional and psychological support from healthcare providers (Nätterlund, 2010). As one of the primary providers for PWA, speech-language pathologists (SLPs) have the opportunity and responsibility to counsel couples but miss many of these chances because of self-reported low counseling knowledge, skills, and confidence (Simmons-Mackie & Damico, 2011; Sekhon et al., 2019).

The present study examined the acceptability of what we refer to as Relationship-Centered Communication Partner Training (RC-CPT). This is a communication partner training program that trains communication strategies and techniques within the context of conversations that are important to the relationship of couples impacted by aphasia, such as discussions about changing roles and responsibilities. Acceptability of RC-CPT was determined through feedback on its relevancy and impact from couples who participated in the pilot RC-CPT program. The long-term goal of this project is to take the first steps toward developing an intervention

approach that could be used by speech-language pathologists to simultaneously improve communication and address the psychosocial impact of aphasia on couples.

#### **Impact of Aphasia on Couples**

The onset of aphasia creates a myriad of challenges for PWA and their partners. Significant role changes often result as the person with aphasia adjusts to their altered abilities and a spouse shifts their focus from being a partner to being a caregiver (Nätterlund, 2010). These changes in roles and responsibilities can be a source of frustration for both the person with aphasia and their spouse. On one hand, the spouse is forced to meet new pressures and demands. On the other hand, the person with aphasia suffers a loss of independence and self-esteem (Stead & White, 2019).

After an aphasia diagnosis, the spouse of the person diagnosed is met with new pressures, demands, and responsibilities, which can result in frustration, anxiety, guilt, and loneliness. For example, Nätterlund (2010) interviewed spouses of PWA and found that most expressed feelings of frustration because of disruptions to daily life caused by aphasia, including having to be the one to do the majority of the practical chores. Participants also reported that the burden of providing consistent and copious instrumental information and emotional support to PWA led to feelings of emotional loneliness. Stead and White (2019) also found that spouses reported feeling guilt over the need for personal space, and an inability to openly express personal negative feelings. Dealing with these new emotions and responsibilities can be lonely as their communication with their partner is negatively impacted by aphasia.

For the person with aphasia specifically, a loss of independence and self-esteem may impact their roles and responsibilities. For example, PWA have been shown to have weakened social networks (Code, 2003), increased negative emotions associated with relationships that

they maintain (Fotiadou et al., 2014), and restricted activity participation (Davidson et al., 2003). Weakened social networks may occur through lost employment (Garcia et al., 2000) or lost friendships (Worrall et al., 2010). These changes in social networks may lead to feelings of boredom and isolation (Nätterlund, 2010). Even PWA who retain their relationships with friends and family members experience anger and frustration when they feel less included in conversation, have difficulty contributing in a timely manner, or are unable to follow the conversation (Fotiadou et al., 2014). Changes in family dynamics also contribute to a decline in mood, as PWA face restrictions in family activities, parenting limitations, and reduced parentchild interactions (Le Dorze & Brassard, 1995). A decrease in autonomy and an increase in dependence on a spouse can cause a sense of guilt for the PWA, as they may begin to see themselves as more of a burden than a partner (Le Dorze & Brassard, 1995). Decreased autonomy can also negatively impact self-esteem (Stead & White, 2019). These negative feelings, when not addressed can exacerbate into deeper emotional problems, like depression and anxiety (Fotiadou et al., 2014). These mental health concerns are not the sole burden of PWA but are typically shared by family members, especially the spouse.

At the center of the aforementioned consequences of aphasia for PWA and their spouses is an impact on the couple's marriage. Croteau et al. (2020) found that aphasia may limit conversational topics, limit discussions about personal experiences and emotions, and cause couples to altogether talk to each other less frequently. For example, sexuality is wrapped in silence for many couples impacted by aphasia and support to address this vital part of a marriage is limited (Stead & White, 2019). As communication quality and support decrease, negative coping behaviors may increase. For example, "speaking for" behaviors are common and inhibit the conversational participation of PWA. Consequently, these behaviors restrict the autonomy of

PWA and may increase the resentment of the spouse towards their partner with aphasia (Croteau & Le Dorze, 2007). For these and other reasons, caregivers have reported that their dominant need is to have a more effective means of communicating with their loved one with aphasia.

Although important work has been done on how to better support couples affected by aphasia, research and help in this area remain insufficient (Nätterlund, 2010; Baker et al., 2021).

### **Insufficient Support for Couples Impacted by Aphasia**

There is a significant need for couples impacted by aphasia to receive more psychological support than what is currently available to them. Spouses of PWA have reported a lack of instrumental, informative, and emotional support from healthcare providers (Nätterlund, 2010). There are reported barriers to couples receiving these forms of support, however, the need for PWA and their spouses to have someone to talk to about their new emotions and anxieties is great (Nätterlund, 2010). Some therapies have shown promise in supporting couples' communication, but little research has been done concerning the impact of these therapies on couples' marriages and psychosocial well-being.

Healthcare providers face several barriers to providing psychological care for people with aphasia and their families. Some of these barriers include lack of time, training and education gaps, staffing issues, equipment availability, therapy prioritization, lack of staff funding, time pressures, access to screening methods, the emotionally challenging nature of aphasia practice, and attitudes of senior managers. Stroke health professionals report unfamiliarity with psychological care. They also report a lack of skill in mood screening and providing emotional support as significant barriers. There is a great need in the healthcare setting to normalize referrals to psychology, as well as mood changes and psychological adjustment that can occur post aphasia diagnosis (Baker et al., 2021). Stead and White (2019) found that some topics, such

as intimacy, are avoided by health professionals because they feel uncomfortable addressing them. All these barriers contribute to limited psychosocial support for PWA and their spouses.

There have been some successful efforts to address problems faced by couples impacted by aphasia, including communication partner training and solution focused aphasia therapy. Hopper et al. (2010) conducted a conversational coaching single-subject experiment with two couples. After watching a video of a real-life event, a clinician coached each couple on the use of verbal and nonverbal strategies to improve the quality of their conversation and their ability to communicate main concepts from the video. Clinician coaching supported an increase in the percentage of main concepts successfully communicated, the comprehension of individuals observing conversation between couples and Communication of Daily Living (CADL-3) scores for the PWA. Similarly, Solution Focused Aphasia Therapy (SFAT) addressed communication in natural and relevant contexts, such as conversation with a significant other. In a case study by Boles and Lewis (2003), one couple completed four weeks of biweekly SFAT sessions. The therapy was conversation-based, with a speech-language pathologist observing and providing feedback on how the couple might improve their communication. This treatment resulted in promising improvements in self-rating of communication, increases in facilitated gesture use, and increases in communication independence.

Involving the spouse in therapy has proven to be an effective means of improving the communication abilities of the PWA (Hopper et al., 2010; Boles & Lewis, 2003), however, research is still limited, especially in regard to how communication partner training may impact psychosocial adjustment. While some impacts of aphasia within marriage are sometimes being addressed, such as provision of communication techniques and strategies, there is still a significant need for more counseling and psychological support for couples. These therapies

have been limited to training communication strategies within the context of general conversation. Deeper topics that are relevant to couples impacted by aphasia have not been the focus of these conversation-based therapies. Changing roles and responsibilities has been shown in the research to be a leading cause of relationship difficulty (Nätterlund, 2010), therefore, supporting communication surrounding these challenges may be of greater benefit to couples than training general conversation topics.

#### The Counseling Roles of Speech and Language Pathologists

Speech and language pathologists (SLPs) are typically among the primary service providers for aphasia clients. Due to lack of access to clinical psychology, staffing issues, and time pressure, couples impacted by aphasia may fail to receive the psychosocial support they need from other healthcare professionals (psychologists, marriage and family therapists, social workers, etc.; Baker et al., 2021). SLPs have a responsibility to counsel couples as it relates to the communication disorder (American Speech-Language-Hearing Association, 2016), especially because counseling support from other sources is limited for PWA. Although counseling professionals are critical collaborators, they do not always have the time or experience to address the specific psychosocial concerns that couples with aphasia face (Northcott et al., 2017). It is crucial for counseling professionals to be involved in aphasia care but in many cases, there are certain aspects of psychological support that could be provided by SLPs.

While opportunities to counsel do arise during language therapy, SLPs frequently avoid them. Some strategies used by SLPs to avoid counseling include focusing on facts, engaging in superficial staged conversation, deflecting emotion with humor, and shifting to objective therapy tasks (Simmons-Mackie & Damico, 2011). SLPs may implement these strategies to avoid

awkward social situations and uncomfortable emotional intimacy with clients. Use of these strategies can also be the result of learned professional values and a narrow view of the SLP scope of practice (Simmons-Mackie & Damico, 2011), which can be caused by lack of consensus on the scope of the SLP role, fear of deviating from direct language goals, and limited counseling training (Northcott et al., 2018). Sekhon et al. (2019) found that 80% of clinical fellows reported that they did not complete any counseling coursework. Even SLPs who received generic counseling courses may not feel sufficiently prepared to address the emotional impact of aphasia on individuals and their spouses. Reported barriers to receiving counseling training include limited managerial support and limited resources (Sekhon et al., 2019).

On top of conscious avoidance and lack of training, SLPs experience limited time and support to address the psychosocial well-being of their aphasia clients and their families. It can be emotionally challenging for both the clinicians and clients to engage in conversations about these problems. The complexity of the needs and backgrounds of clients and their families can feel emotionally overwhelming, especially with intense caseload and time pressures. The settings where PWA receive services are typically goal-oriented and outcome-driven, potentially leaving limited space to explore the feelings surrounding their new impairments (Northcott et al., 2018). A lack of ongoing specialist support from mental health and marriage counseling professionals can also contribute to SLP hesitancy in providing psychosocial support to aphasia clients (Northcott et al., 2017). Couples impacted by aphasia need counseling from SLPs, and SLPs need training and support to provide this counseling.

#### **Purpose of the Study**

The purpose of this study is to determine the acceptability of Relationship-Centered Communication Partner Training (RC-CPT). Table 1 provides an overview of distinguishing

features between RC-CPT and more traditional communication partner training (CPT). CPT primarily centers around the effective transmission and reception of information during conversations. Its aim is to coach participants in acquiring specific communicative skills, ultimately leading to successful information exchange (Hopper et al., 2010). On the other hand, RC-CPT places emphasis on fostering a deeper connection within conversations. It assists participants in utilizing their communicative skills to make decisions, collaborate, and establish a stronger emotional and relational bond with their spouse. The ultimate objective of RC-CPT is to enhance emotional relationship connections rather than solely focusing on information exchange. RC-CPT aims to meet this objective through use of a pilot communication and counseling tool: The Relationship Roles Questionnaire (RRQ). This questionnaire and the accompanying worksheet aim to address and support communication surrounding an important aspect of marriage that is significantly impacted by aphasia: marital roles and responsibilities. This program was designed with the intention of providing a natural context for both counseling moments to address psychosocial impacts and utilization of communication strategies to address communicative impacts of aphasia. The primary aim of this study is to explore if discussing roles and responsibilities within the context of communication partner training is important to couples with aphasia and relevant to the changes they desire.

#### Method

This is a mixed methods pilot study to examine the acceptability of Relationship-Centered Communication Partner Training (RC-CPT). Data for this study was derived from semi-structured interviews and questionnaire results.

#### **Participants**

Six people participated in this study (three individuals with aphasia and their spouses). We will use pseudonyms throughout this study to refer to each couple and participant: couple A (Adam and Amy), couple B (Betty and Ben), and couple C (Chris and Claire). Couples were recruited from a list of personal contacts from the community. All participants included in this study met the following qualifications: (a) 18 years or older; (b) English as a primary language; (c) an aphasia diagnosis or spouse with an aphasia diagnosis; (d) spouse without aphasia has no history of stroke, traumatic brain injury or neurologic disease; and (e) married for three years or more. Study procedures were approved by Brigham Young University's Institutional Review Board (IRB).

All three participants with aphasia participated in the Quick Aphasia Battery (QAB) to assess the severity of their language impairment (Wilson et al., 2018). According to the QAB scores, Adam and Betty presented with moderate aphasia and Chris presented with severe aphasia. Overall, all participants with aphasia demonstrated severe sentence comprehension and word retrieval deficits, with more mild to moderate impairments in grammatical construction. Adam and Betty showed moderately impaired reading, whereas reading was severely impaired for Chris. All participants demonstrated some difficulty with repetition, which was least impaired for Adam (see Table 2 for individual total and sub scores). The three spouses reported no neurological damage due to stroke or transient ischemic attack by scoring 0 on the Questionnaire for Verifying Stroke-Free Status (QVSFS; Jones et al., 2001).

#### **Procedures and Measures**

The participants attended three sessions lasting no more than two hours each. Participants were given the choice of participating in the sessions at home or at the Brigham Young

University Speech and Language Clinic. Couple A completed session one at the clinic and sessions two and three in their home, Couple B completed all sessions at the clinic and Couple C completed all sessions in their home. Before participating in the first session, each participant reviewed and signed a consent form with the researcher. The three couples participated in each of the three sessions separately.

The first session consisted of gathering demographic and assessment information, as well as participating in a communication partner training module. All the participants completed a demographic questionnaire and the Geriatric Depression Scale (GDS; Yesavage et al., 1982). Table 3 presents relevant demographic information. All participants were white, between ages 40-52, and married for at least 19 years. Additionally, all the participants completed a survey that measured relationship accessibility, responsiveness, engagement, marital conflict, conflict resolution and marital communication. (Amato et al., 2007; Busby et al., 2010; Busby et al., 2001; Kerig, 1996; Sandberg et al., 2012)

Participants rated their personal accessibility, responsiveness, and engagement by responding to statements like "I am rarely available to my partner" with a rating from 1 (never true) to 5 (always true). They also rated their partner's accessibility, responsiveness, and engagement by responding to statements like, "my partner listens when I share my deepest feelings" with a rating from 1 (never true) to 5 (always true).

To measure marital conflict, participants were asked to rate how often they disagree with their spouse, report how many serious quarrels they'd had in the past month and respond to a yes/no question asking if they have disagreements about doing their share of the housework. To measure conflict resolution, participants were asked to rate their level of satisfaction with the strategies they have for resolving conflict in their marriage.

Participants rated their personal marital communication by responding to statements like, "I am able to listen to my partner in an understanding way" with a rating from 1 (never) to 5 (very often). Participants also rated their partner's marital communication by responding to statements like, "my partner sits down with me just to talk things over" with a rating from 1 (never) to 5 (very often).

The participants with aphasia also completed the Communication Confidence Rating Scale for Aphasia (CCRSA) to assess communication confidence (Babbitt et al., 2011). They responded to ten questions like, "how confident are you about your ability to talk with people?" with a rating from 0 to 100.

After completing the assessment and questionnaires, the couples participated in a 1-hour communication partner training module, which was developed by the researchers. After an initial discussion about (a) communication strategies the couple was already using and (b) ongoing communication challenges, the researcher reviewed environmental communication strategies with the couple, such as being in a well-lit room, face to face conversation, and minimizing background noise. The researcher then presented four communication strategy categories: (a) adjusting language used, (b) gestures/body language, (c) writing/graphics, and (d) verifying understanding. After the couple selected an area of interest, the researcher taught strategies within that category, showed video examples, lead discussions, and facilitated practices implementing the strategies. These steps were repeated with an additional category selected by the couple. At the conclusion of the session, the couples established a communication goal to be addressed leading up to the subsequent session. Each couple also received a booklet and access to an electronic file for additional education and practice.

In the second session, each couple participated in Relationship-Centered Communication Partner Training (RC-CPT). This training began by presenting the purpose, objectives, and expectations of the session. Then each participant filled out the Relationship Roles Questionnaire (RRQ) separately. Participants with aphasia were provided with visual and communicative support, as the clinician verbally asked questions and completed the form. Spouses of the PWA filled out the questionnaire independently. The RRQ asks questions related to importance, distress, and change in six marital responsibility areas. Both a neuropsychologist and marriage and family therapist were consulted in the development of this questionnaire. Each couple then came together with the researcher to have a guided conversation about their RRQ results, utilizing the RRQ worksheet as a visual and organizational support. The worksheet provides an opportunity for the couples to select a responsibility area in which they'd like to seek improvement together, discuss what they value about that area, brainstorm possible solutions, create a goal, predict possible barriers to goal completion, and establish a plan for how to navigate and discuss barriers as they come up. During these relationship-centered discussions about marital roles and responsibilities, the researcher commendably acknowledged the participants' employment of communication strategies, while also exhibiting and promoting their utilization as deemed necessary. The protocol for this session also includes a list of counseling micro skills that were reviewed and used by the researcher when counseling opportunities arose (Beck & Kulzer, 2018). Upon the conclusion of the session, each couple was provided with a handout encompassing community resources for relationship and communication support, along with a sincere offer of assistance to facilitate their connection with said resources.

The final session took place for each couple 7-10 days after they participated in their second session. The researcher conducted a semi-structured interview to (a) follow-up on how

the couple addressed their goal during the week and utilized their plan to improve relationship-centered communication and (b) explore each of the couples' experiences with RC-CPT. Prior to the semi-structured interview, all participants again completed the relationship outcomes survey. Participants with aphasia also completed the CCRSA.

#### **Semi-Structured Interview**

The couple, author and a licensed speech-language pathologist were present for each interview. The author interviewed the PWA and their spouse together. Interviews lasted approximately 1 hour and were video recorded.

First, couples were asked about their experience working towards the goals and plans established with the help of the RRQ worksheet during the week between session two and session three. They were asked to tell about the experiences they had as they worked on their goal and to describe how they used their communication plan and strategies. Potential follow-up probes included asking about facilitators and barriers to working on their goal and using their communication plan. Next, couples were asked about their impressions of RC-CPT. They were asked what they liked, what they would change, what impact they perceived participation had on their communication and relationship, and what feedback they had for continued development. Finally, they were asked if they would find it helpful for this program to be part of their rehabilitation experience.

Questions were adapted to the individual needs of each couple and were, therefore, not identical during each interview, which is consistent with semi-structured interview methodology (Britten, 1995). When necessary, the interviewer used communicative strategies to support the communication of participants with aphasia, such as utilizing visual supports (yes/no boxes), simplifying sentences, using gestures, and providing the PWA with pen and paper.

## **Analysis**

Three undergraduate research students transcribed the interview recordings orthographically. A fourth research assistant checked the transcripts again to ensure their accuracy. Both verbal and nonverbal communication from the interviews were included in the transcripts. The transcripts were analyzed through codebook thematic analysis (Gale et al., 2013). First, the author and a research assistant read through all the interview transcripts to familiarize themselves with the data. During this process, the author and research assistant identified and compiled a list of recurring ideas expressed across the three interviews. Second, the author and research assistant developed a codebook, with the supervision of the author's thesis chair, to assign descriptive codes to the important, recurring information from the interviews. Third, the author and research assistant separately used the codebook to assign codes to the qualitative data and make note of ideas or thoughts that were not captured by the initial codes. The author and research assistant then came back together to revise and refine the codebook to better represent the data. This process was repeated two more times to ensure that the final codebook was adequately reliable, well defined, and representative of the dataset. Qualitative data analysis software (ATLAS.ti GmbH, 2022), was used by the author and research assistant to code all the interview transcripts. After completing the coding process, the author and research assistant met together to establish consensus on every coded statement through discussing and consulting codebook definitions. Once consensus between the author and research assistant's coding was established, the codes and subcodes were organized into themes through discussion among the two coders and the author's thesis advisor.

Pre and post questionnaire data was analyzed using descriptive statistics. All the pre and post RC-CPT measures for the relationship outcomes survey for all participants and the CCRSA

for the participants with aphasia will be presented in a table in the results portion of this study. The relationship outcomes survey included questions where higher scores originally indicated both positive and negative outcomes but were uniformly adjusted to ensure that higher ratings consistently reflected favorable results.

#### Results

#### **Quantitative Findings**

Overall, participants generally maintained or improved their ratings of accessibility, responsiveness, engagement, conflict and conflict resolution, and communication in marriage from before to after participating in RC-CPT. For participants with aphasia, overall scores of communication confidence also improved from before to after RC-CPT. For all measures, higher scores and ratings indicate improvement or a positive change.

#### Marital Relationship Measures

Table 4 displays the marital relationship measures. The table presents the pre and post RC-CPT self-reported scores for each of the participants across all marital relationship measures surveyed.

Accessibility, Responsiveness, and Engagement. Total average scores across personal and partner accessibility, responsiveness, and engagement were maintained for Claire and improved for the remaining five participants. Scores for specific items are discussed below.

In relation to personal accessibility, responsiveness, and engagement, all participants maintained or improved their rating, with the exception of Claire, who experienced a slight decrease in ratings of personal accessibility and personal engagement. Half of these ratings improved across the six participants.

In relation to partner accessibility, responsiveness, and engagement, all participants maintained or improved their scores except Betty and Ben who each experienced a decrease in ratings on one domain (partner accessibility for Ben and partner engagement for Betty). The majority of these ratings (11 of 18) were maintained but this was impacted by a ceiling effect as Adam and Chris both reported the highest possible ratings prior to RC-CPT, which were maintained following RC-CPT.

**Marital Conflict.** Four participants provided responses that reflected a decline in marital conflict from before to after RC-CPT participation whereas one participant (Chris) reported the lowest possible degree of marital conflict prior to RC-CPT, which was maintained. Amy reported a slight increase in marital conflict.

Four participants provided responses that indicate increased satisfaction with the strategies they have for resolving marital conflict. Again, Chris reported the highest possible levels of satisfaction, which were maintained, and Adam indicated decreased satisfaction with strategies for resolving conflict in her marriage.

Marital Communication. All participants reported either maintained or improved marital communication from before to after participation in RC-CPT. All six participants reported increased ratings for personal marital communication. Four participants reported increased ratings for partner marital communication and two participants had a maintenance in ratings.

#### Communication Confidence Rating Scale (CCRSA)

Table 5 presents the CCRSA scores pre and post RC-CPT for the three participants with aphasia. The total communication confidence ratings of all three participants with aphasia increased subsequent to their engagement in RC-CPT. Adam provided higher ratings on three

questions, maintained ratings on four questions and lower ratings on three questions. His most significant change in rating was in response to the question, "How confident are you that you can participate in discussions about your finances?" Adam's rating increased from a communication confidence level of 40 to 80. Adam and Amy selected finances as the responsibility area they wanted to target during their RC-CPT session. Betty provided higher ratings on seven questions, maintained ratings on two questions and a lower rating on one question. Between the three participants, Betty experienced the most significant increase in total communication confidence rating, increasing from 370 to 640. Chris provided higher ratings on six questions, maintained ratings on two questions and lower ratings on two questions. Chris and Claire, like Adam and Amy, also selected finances. Chris' rating for the question about finance discussions was maintained. Across all three participants, lower post-RC-CPT ratings were all within 10 points of the pre-RC-CPT ratings. Higher post-RC-CPT ratings ranged from 10 to 60 points more than the pre-RC-CPT ratings.

#### **Qualitative Findings**

Reflexive codebook analysis of the semi-structured interviews revealed four themes: (I) "Impact on Communication," (II) "Impact on Relationship," (III) "Impact on Psychosocial Well-Being," and (IV) "Feedback for Future Development". Table 6 depicts organization of themes and codes.

#### Impact on Communication

The "Impact on Communication" theme captures participants' comments about the perceived impact of RC-CPT on their communication. Codes within this theme include (a) Improved Communication, (b) Increased Awareness, (c) Purposeful Communication Strategy Use, and (d) Ripple Effect.

Improved Communication. All participants but one mentioned how their communication generally improved as a result of participating in the RC-CPT program. Claire commented on appreciating, "Specific tools to help us achieve better communication" and learning that, "[Her husband, Chris] seems to understand better when we're face to face." She also shared that, "[RC-CPT] made Chris see that communication is important. Instead of just saying, 'we need to talk more,' having ways to do that and strategies to help him understand what we're talking about." Chris verbally expressed agreement with Claire's statements. Betty mentioned that, "[RC-CPT] has done amazing things for me to communicate better." Adam and Amy shared some examples of how Adam's communication had improved over the course of participating in the program. For example, Adam shared that, "I was putting together some words to talk to people and then, all the sudden, it's happening right away" and "I came home, and I talked multiple times." Amy exclaimed in agreement, "He did!" Overall, each couple described some degree of improvement in their general communication.

Increased Awareness. All three couples reported increased awareness of their communication. They appreciated the opportunity to focus on their communication and have communication strategies at the forefront of their minds. Claire commented that "[RC-CPT] helped us focus on having better communication." Similarly, Amy stated, "I've liked helping us focus especially, like, as I've gone back to work and you just get busy. So, I like bringing my focus back to our communication in our relationship." Two of the couples reported how reminders of communication strategies were beneficial. Amy said that, "The reminder to look in each other's eyes" was helpful and Adam said that the strategies were "Really good to get to know for each other and remember about things." Ben and Betty shared a difficult and deep conversation they had together shortly after the second session. Ben said of this experience, "The

fact that we had been here that day, I think, really helped us to be able to use this stuff and be able to get through that and try to understand the other person's point of view." Betty shared, "You reminded us what we needed to do. It was very good because it was front of my mind, and we could talk about it." Participants identified reminders of strategies and an increased focus on communication as beneficial aspects of the program.

Purposeful Communication Strategy Use. All three spouses of participants with aphasia shared examples of how they had participated in more purposeful communication strategy use since participating in RC-CPT. Claire reported that she has been, "Making a more conscious effort to repeat what [Chris] said." Ben said of a specific conversation, "Bringing [communication strategies] to the forefront, I mean eye contact and posture, we both sat up and were engaged with each other trying to understand what we were feeling." Amy shared, "I've really been working on waiting, like when he said my daughter but meant sister, I just went 'sssss' and he switched to sister." There were two other instances throughout the interview when Amy provided phonemic cueing rather than jumping in to provide the word like she'd done in the past. She also shared the benefit of, "The reminder to look into each other's eye when we're talking instead of just talking as we were passing each other doing something. Like to take some time and actually be a companionship."

Ripple Effect. Four participants expressed a desire to pass on what they had learned. Three participants talked about sharing strategies or experiences with their children. Claire said, "I also talked to my two children about [communication strategies]. Doing things like that to help him." Amy also shared strategies with her kids, "I've passed on to our kids doing it like, give him a minute, let's see." In reference to validating his wife's completion of her part of their meal preparation goal, Ben reported, "I made sure to tell her that so that the kids would hear it and

they acknowledged and did the same." Two participants reported an interest in sharing their knowledge with more people outside of the home. Claire said, "Thinking, like, with his church [service], also talking to the people he works with there too. Also, it'd probably be helpful for them to have some ideas, um, on how to include him more and communicate with him more." Amy shared, "If there's anything we can do to help advertise aphasia—it would definitely be a goal of ours." Comments from all three couples suggested that participation in RC-CPT led to a ripple effect with their learning and experiences touching other people.

#### Impact on Relationship

The "Impact on Relationship" theme includes comments from participants about how RC-CPT impacted their relationship as a married couple. Participants talked about specific examples of how their relationship changed, as well as strategies they've utilized to strengthen their relationships. Codes within this theme include (a) Alignment of Expectations, (b) Emotional Validation, (c) Increased Closeness and Engagement, and (d) Restart.

Alignment of Expectations. Two participants reported an alignment of expectations between themselves and their spouses. Amy shared, "I just find like this week I feel a little more in control. A little more like, okay, we both know what's going on." Ben shared similar sentiments, "I think the fact that we had talked about it and made a plan was huge cause we knew what our expectations were." He also stated that, "We made this plan and Monday was my opportunity to set the standard. Then she followed up and did the same thing the next day and then it gave us the opportunity to both, like, back each other up." These two participants expressed that being on the same page about their goals and expectations was an important and meaningful outcome of participating in RC-CPT.

Emotional Validation. Two participants demonstrated emotional validation throughout the course of the interview. Claire said, "I want you to feel like you're heard because I know how important that is for me and it's important for you too" and Betty said, "I value your thoughts" to Ben. Betty and Ben also reflected on times they demonstrated emotional validation after participating in RC-CPT. Betty shared, "I think it was important for me to validate him and to know what he's thinking and how he feels." Ben also expressed the importance of implementing emotional validation for him, "It's a pretty significant thing for us to be able to have differing views on it but be able to validate each other's feelings on it was pretty big." Emotional validation was an important and meaningful outcome of RC-CPT for Ben and Betty.

Increased Closeness and Engagement. All three couples shared ways that RC-CPT brought them closer together and increased their engagement with one another. Claire commented, "It brought us a little bit closer just being able to sit and talk a little bit more." Talking to Chris directly, Claire also noted, "[You] started a conversation, which hasn't been the typical for you since your stroke." Chris verbally agreed with Claire's assessment of his increase in conversational engagement. Claire reported that this increased engagement "Makes me feel closer to [Chris]" because she felt like he cared about talking to her, which was a significant change from the early days of his aphasia onset. Ben mentioned, "It only strengthens our relationship if we can sit and talk about some of those harder topics of conversation." He said of one experience with Betty the night after the first session, "We had a pretty serious conversation between the two of us and we were able to sit and engage with each other and work through some pretty heavy stuff between the two of us." He said that being able to have that difficult conversation, "Empowers you to have other conversations which just strengthens your relationship down the road." Adam also expressed appreciation for RC-CPT's focus on their

relationship, "I think that just the opportunity to talk with Amy has been really good. And that's the one thing I really like about [RC-CPT], these questions that you're asking us, it's about Amy and me." All participants recognized ways that RC-CPT strengthened their relationship.

Restart. Two couples mentioned how RC-CPT acted as a restart for their relationship. They reestablished a sense of "normalcy" and began redistributing previously shared responsibilities. Couple one and couple three both selected finances as the responsibility area they wanted to work on as part of RC-CPT. At one point, Chris and Claire had a conversation about how their approach to financial management had changed after the stroke to where Chris felt that it was completely her responsibility and then, how RC-CPT had helped them to begin making it collaborative again:

Chris: "Before all this, it was every, ya' know, we'd already do it and now it's kinda not."

Claire: "It's all me doing it." [referring to after the stroke]

Chris: "Yeah, so this is better again."

Claire: agreed, commenting that RC-CPT helped them "[bring] back a part of something that was very important before."

Amy had a similar experience when working on redistributing responsibilities within finances with Adam. She shared, "It's a good restart too because we're at a good time. It's been survival for a long time. I've tried my best, but it's so refreshing to go back to doing something with your spouse that you always did and then you couldn't do—and it's refreshing. It feels like normalcy." Adam nodded in agreement as Amy stated, "It's good to go back to even just the one-on-one time." These two couples shared experiences which demonstrated a restart in the way the negotiate and distribute relationship roles and responsibilities.

#### Impact on Psychosocial Well-Being

The "Impact on Psychosocial Well-Being" theme encompasses commentary from the participants on how RC-CPT impacted their emotional, psychological, social, and collective well-being. Codes within this theme include (a) Increased Confidence and Empowerment, (b) Clinician Support, and (d) Sense of Accomplishment.

Increased Confidence and Empowerment. All three spouses of PWA expressed increased confidence and empowerment after participating in RC-CPT. Claire stated that, "[RC-CPT] has maybe given [Chris] some confidence that it is possible for us to communicate." Ben talked about the empowerment he experienced after having deep conversations elicited by RC-CPT; "I think [RC-CPT] might empower people to be willing to have other conversations that maybe as humans we shy away from [because they] are going to be awkward. I feel like that [conversation] we had was a deep conversation but having that go so smoothly kind of empowers you to think, okay, the next time there's an issue, like I am totally comfortable and confident that I could go talk to her and we can work through this too because we were able to go through this thing too." Amy mentioned that recognizing Adam's progress through RC-CPT boosted her confidence; "I'm seeing that Adam's starting to get it. [RC-CPT] made me stop and take a breath and go 'Adam's improved! Like I can do these things with Adam. I can!""

Clinician Support. Couple A expressed how the researchers offered valuable psychosocial support. Amy reported that, "It's really refreshing to work with people that know what aphasia is. It makes you feel like it's important to more than just yourself." Adam nodded in agreement. Amy also shared that that meeting together to go over things gave her a feeling of "Okay, there are people that understand this. I'm not doing this alone." Adam also expressed that he "Enjoyed talking to [the researchers] and all—it's awesome."

Sense of Accomplishment. When asked if they felt like they had accomplished their RC-CPT goal for the week, all six participants said "yes." Two participants provided specific examples of what contributed to their sense of accomplishment. Ben and Betty's goal, related to the responsibility of meal preparation, was to eat at home more often. Ben shared, "We ate at home three out of the next four or five nights, which is a massive difference for us." Adam and Amy's goal, related to the responsibility of financial management, was to keep track of their finances and discuss them together. Adam shared, "We have a list that we keep track of, and I think it's been good, it's been good for me to do it." Successful completion of the goals set during session 2 appeared to facilitate a sense of accomplishment among all participants.

#### Feedback for Future Development

The "Feedback for Future Development" theme includes suggestions and considerations for ongoing development of RC-CPT that were shared by the participants, including barriers and facilitators that contributed to their participation in RC-CPT. Codes within this theme include (a) General Positive Reactions, (b) Suggestions for Improvement, (c) Barriers, and (c) Facilitators. The (2) Suggestions for Improvement code includes the following subcodes: (a) Frequency and Consistency, (b) Outcome Measures, and (c) Other Suggestions. The (4) Facilitators code includes the following subcodes: (a) Specific Goals, (b) Accountability, and (c) Support Person.

General Positive Reactions. When asked, "If this program, with continued follow up and support, were a part of your rehabilitation experience, would you find it helpful?," all six participants responded, "yes." All the couples had non-specific positive reactions to RC-CPT. When asked if he was glad he had participated in the program and if he found it helpful, Chris responded, "yes" to both questions. Claire expressed, "[RC-CPT] gave hope that he's gonna continue to progress and get better." Betty mentioned, "[RC-CPT] made me feel so happy" and

Ben mentioned, "It's been successful for us." Adam commented, "I think it's good for my brain to go through it all, seriously." Amy stated that she felt the RC-CPT program "was well-done." Overall, every participant had a generally positive experience participating in RC-CPT.

Suggestions for Improvement. When asked to share ideas about how to improve RC-CPT, all six participants provided suggestions. Their experiences with participating in the program gave them valuable insight into ways the program could be further developed. Some of these ideas fit under the codes: frequency and consistency or outcome measures. Other suggestions did not fit into these two categories and were grouped together under one general code (Other Suggestions).

Frequency and Consistency. Two participants commented on how a change in frequency and consistency may be beneficial to couples participating in RC-CPT. Claire stated that, "If there was somebody we could meet with twice a month or once a month again with like tools and goal setting and things like that, I think that would be really helpful." Ben also mentioned the importance of consistency. He said, "Because I've been in therapy and different things like going weekly you have that constant reminder week after week that like these are things that you're working on. So, if it was a weekly thing that you were reminded of, I think that would be huge." Both participants expressed how frequent and consistent follow-up would be beneficial to couples.

Outcome Measures. Two participants with aphasia expressed difficulty with comprehending and completing the marital measures survey. The researcher noted that some of the questions were difficult to answer based on the provided rating scale. For example, participants were asked to rate themselves on a scale of 1-5 (1 = never true to 5 = always true) for items like "I am rarely available to my partner." Two participants with aphasia responded to

this item initially with "5 – always true" but then changed their response to a 1 or 2 once they comprehended the question with moderate support from the clinician. In reference to the marital measures survey, Betty said, "I think [it] needs to be more understandable." A revised aphasia-friendly version of the marital relationship outcome measures may be a valuable improvement in future research studies.

Other Suggestions. Four participants shared other suggestions related to improving RC-CPT during future development. They shared insights on how timing of intervention, responsibility area selection, and addressing more than one area over time are all factors that should be considered by researchers.

When referring to earlier in his aphasia journey, Chris said that may have been a better time to participate in RC-CPT. Claire agreed and said, "I just see this as being helpful to a spouse like as they're bringing their spouse home who's had a stoke 'cause you're kinda left not knowing like you also don't realize the severity that aphasia can be and what you're really gonna be dealing with when you're back to being at home." However, after further reflection, Chris reminded Claire that he wasn't talking very much soon after he returned from the hospital. Claire responded, "That is true, I didn't think about that 'cause he started speaking maybe a week before he came home and so I don't know just maybe some early intervention but now that you say that, that's a good point, I don't know when exactly but early would be helpful." While communication may have been limited toward the beginning, Claire still expressed that it may have been helpful to receive this intervention earlier in the rehabilitation process.

Ben reported wishing that he had a more comprehensive idea of the session before selecting the area they chose to work on; "I feel like looking back now on that list of things there might be other things that may have been, knowing what we were going to do next, I might've

steered the ship in a different direction." He also commented that "compared to some other things that could've been the topic or that other people may be talking about like, okay, meal prep, big freaking deal." However, after further reflection, he felt that what he perceived as a more surface level topic (i.e., meal preparation) actually was a good place to start. He said, "If it was a lengthened program where you were going to work on multiple things, it might be better to start with something that is more surface level to kinda get a hang of it and then hit the deeper topic down the road but, um, so maybe that's not right, maybe this is the way to do it cause then you get an idea of what's going to happen and then you can do some of those harder hitting things down the road." Amy expressed a desire to continue working on other areas; "There were more things on there that you know like even if you weren't going to check up on it you could use a little bit of your third time to set another goal 'cause we both circled two."

Barriers. All three couples mentioned barriers that prevented them from working on their goals as consistently as they would've liked. Claire talked about her son and daughter-in-law coming over to help her and Chris go over finances; "We were having like three different conversations going on." Chris commented on this experience, "That's a problem right there." The complexity and chaos of the conversation inhibited Chris's ability to fully participate. Claire also shared that, "He was overly tired, which I think tiredness affects communication big time." Lack of sleep may be another barrier to completing RC-CPT goals. When asked what barriers prevented them from completing their goal every day, Ben and Betty exclaimed, "Kids!" Ben provided a specific example; "Wednesday she had a party with her friends, I had a work dinner, so the kids were left to fend for themselves and, of course, they wanted to go get something to eat and I caved and gave them money to go do that." The busyness of life also affected Amy and Adam's goal completion. Amy stated, "It was really busy the first couple days, so we didn't do

it." While it is not possible to account for all factors that distract couples from working on their goals, these barriers may be important to consider in future development of RC-CPT

**Facilitators.** All three couples shared specific factors that helped them progress in the program. These facilitators will be important to consider when developing future steps of RC-CPT. The participants identified specific goals, accountability, and support people as significant facilitators.

Specific Goals. Four participants mentioned that having specific goals supported their progress in RC-CPT. Claire appreciated the specific goals and plan for tackling finances with Chris; "Instead of just going, 'we need to work on the budget,' having a goal to actually do it and how to get it done was helpful." Claire found that specific goals were not only helpful for the relationship responsibilities piece of RC-CPT but also their communication: "Assignments to make our communication better has been helpful." Ben also noticed a change in his and Betty's distribution of responsibilities within meal planning; "The whole idea of putting together a plan, having goals, like it obviously totally made a change for us." Having a set time to work on the goal was helpful for Amy; "We came back to, 'Oh, we need to do that,' because we had set a time to do it after work and your speech and stuff." Specific plans were facilitators for goal completion for all three couples.

Accountability. One couple expressed how accountability to the researcher was a facilitator for their participation in RC-CPT goals and plans. When asked what factors helped Betty and Ben meet their goals, Betty replied, "Honestly a lot of it was I was have to report back to you." Ben agreed and said, "I think the accountability is huge too like she and I have talked about this I don't even know how many times prior to last week, but it's just that the ease of being able to grab something and not have to worry about it was too easy. But having someone

that you're going to be accountable to and you're gonna come back and meet in the week and you have to talk about your progress is huge." Ben and Betty found that their accountability to the researcher motivated them to work on their goals throughout the week.

Support Person. All three couples mentioned that having an external person to support them in their goals was a significant facilitator. Claire shared, "Our son was able to come over and help us" with their budget plans. Ben commented that he and Betty "reminded each other" when it was their day to prepare dinner. When reflecting on the program, Adam shared, "That's the other thing I've learned from what you guys have said; it's good to have multiple people reach out to help you." Having support from each other and other people facilitated goal completion for all three couples.

#### Discussion

The purpose of this study was to determine the acceptability of Relationship-Centered Communication Partner Training for couples impacted by aphasia. Exploration of the acceptability of this pilot program was prompted by three issues delineated in existing research:

(a) Aphasia can have a negative impact on the psychosocial well-being of PWA and their spouses (Simmons-Mackie & Damico, 2011); (b) Couples impacted by aphasia report a lack of emotional and psychological support from healthcare providers (Nätterlund, 2010); and (c) despite adjustment counseling for aphasia being within a speech language pathologist's scope of practice, many counseling opportunities are missed due to self-reported low counseling knowledge, skills, and confidence (Sekhon et al., 2019; Simmons-Mackie & Damico, 2011). These issues prompted the development of RC-CPT and this study explored if discussing roles and responsibilities within the context of communication partner training is important to couples impacted by aphasia and relevant to the changes they desire.

This exploration resulted in preliminary findings, which suggest that (a) RC-CPT is acceptable to couples impacted by aphasia, (b) RC-CPT has the potential to improve communication, and (c) RC-CPT has the potential to address relational and psychosocial impacts of aphasia. Triangulation of the quantitative and qualitative data revealed that couples indicated positive changes in their communication, relationship, and psychosocial well-being. This suggests that RC-CPT has the potential to effectively address both communicative and psychosocial impacts of aphasia on couples. Findings also indicate that RC-CPT holds promise for future exploratory and experimental research, especially related to its use as a relationship-centered counseling tool.

# Relationship Centered Communication Partner Training is Acceptable to Couples Impacted by Aphasia

The three couples involved in this study universally regarded RC-CPT as an acceptable intervention approach. Unanimously, all six participants expressed their consensus on the potential benefit of RC-CPT in their rehabilitation journey, particularly when accompanied by sustained follow-up and support. Analysis of qualitative data unveiled an overwhelmingly positive response to the program across all participants, including expressions of increased hope and happiness. The couples reported meaningful changes in their communication, relationship, and psychosocial well-being as a direct outcome of their participation in RC-CPT.

### Relationship Centered Communication Partner Training Has the Potential to Improve Communication

Previously, communication partner training has focused on the communicative impacts of aphasia by teaching communication strategies to PWA and their spouses to support successful transaction of information and improve self-perceptions of communicative abilities (Hopper et

al., 2010; Boles & Lewis, 2003). These studies have measured outcomes such as percentage of main concepts successfully communicated, self-ratings of communication and perceptual ratings from naïve observers. Measure of Participation in Conversation (MPC) and Measure of Skill in Supported Conversation (MSC) are two additional perceptual measures of communication that were developed with the intention of capturing conversational interaction in aphasia (Kagan et al., 2004). These studies have revealed the significant positive influence of communication partner training on these metrics. Similarly, RC-CPT demonstrates potential in improving self-ratings and perceptions of communication.

RC-CPT addressed communicative impacts of aphasia by utilizing a session to teach and train communication strategies, with an additional session to practice those strategies within the context of conversations about relationship roles and responsibilities. All participants with aphasia reported a higher total communication confidence rating on the CCRSA from before to after their participation in RC-CPT. Qualitative data confirmed that all participants with aphasia and their spouses perceived a general improvement in communication, an increased awareness of communication, and purposeful communication strategy use. Because the present study was not experimental, future work is needed to determine whether these changes were the result of the RC-CPT program.

Like previous CPT programs, this study revealed that RC-CPT has the potential to improve perceptions of communication for PWA. For example, in the Boles and Lewis (2003) case study, the participant with aphasia made measurable gains in his communication, including increases in self-rating on scaled questions. Our participants had similar increases in self-rating on the CCRSA. This suggests that the relationship-centered focus on roles and responsibilities in marriage likely did not detract from the intervention's capacity to enhance communication.

However, unlike previous studies, this study also explored how the addition of relationshipcentered elements to CPT can impact the relationship and psychosocial well-being of couples navigating life with aphasia.

### Relationship Centered Communication Partner Training Has the Potential to Address Relational and Psychosocial Impacts of Aphasia

RC-CPT adds relationship-centered elements to CPT by focusing on discussing and navigating changes in relationship roles and responsibilities. Previous research indicates that the adjustment to altered abilities for the person with aphasia and the shift from partner to caregiver for the spouse can be a considerable source of frustration in their relationship (Nätterlund, 2010). These shifts in roles and responsibilities can cause the person with aphasia to lose autonomy, while the spouse takes on new pressures and demands (Stead & White, 2019). Two couples mentioned how being able to discuss these changes and make plans for improvement helped them reestablish a sense of normalcy by redistributing their relationship roles. For example, Amy felt empowered to begin sharing the burden of managing finances with Adam again. All six participants reported a sense of accomplishment after participating in RC-CPT. For example, Ben and Betty expressed excitement about their accomplishment of taking turns cooking dinner to meet their goal of eating at home more often. RC-CPT also supported an alignment of expectations for two of the participants, which helped address some of their frustrations surrounding roles and responsibilities. For example, Amy felt more in control because she and Adam were able to make a plan for redistributing financial responsibilities. Relatedly, it is worth noting that Adam's rating of his confidence in his ability to participate in discussions about finances increased from a score of 40 (pre-RC-CPT) to 80 (post-RC-CPT). The focus of RC-CPT, therefore, has the potential to improve discussion and navigation of marital roles and

responsibilities, a common source of frustration for couples impacted by aphasia. Again, given the non-experimental nature of the present study, future investigations are necessary to establish if these changes can be attributed to the RC-CPT program.

The focus of RC-CPT was on discussion of roles and responsibilities, but findings indicate that the psychosocial impacts of this program might not be limited to that area of participants' marriages. For example, couples in the present pilot study also reported improvements in their marital communication and emotional validation. Previous research indicates that aphasia can limit couples' discussions about personal experiences and emotions (Croteau et al., 2020). After participating in RC-CPT, all six participants reported increased ratings for personal marital communication and four participants reported increased ratings for partner marital communication. Ben and Betty expressed that practicing emotional validation throughout their RC-CPT experience was meaningful to them and their relationship. Triangulation of this quantitative and qualitative data indicates that RC-CPT may provide opportunities for couples to discuss their emotions and improve their relationship-centered communication as a couple. Successful discussions about difficult emotions could be especially meaningful for this population because aphasia can be a source of anxiety, depression, and loneliness (Fotiadou et al., 2014; Stead & White, 2019). An additional explanation could be that simply working together on goals and plans that pertain to both partners improved their emotional connection, even if they did not talk about emotions explicitly.

The psychosocial impacts of RC-CPT also extended to improving couples' closeness and engagement in their relationship. The aforementioned changes in relationship responsibilities and communication can lead to feelings of emotional loneliness and distance between spouses (Nätterlund, 2010). All three couples reported that talking about their relationship brought them

closer together and increased their engagement with one another. The quantitative data revealed similar findings: five participants maintained or improved their ratings in personal accessibility, responsiveness and engagement and all six participants experienced an improvement or maintenance of scores on at least two out of the three domains when rating their partner's accessibility, responsiveness, and engagement. The preliminary findings from this study suggest that RC-CPT is a promising intervention for helping couples impacted by aphasia come together and strengthen their relationship, which warrants further investigation.

It is important to acknowledge that this study is not entirely unprecedented in its utilization of CPT principles to improve psychosocial outcomes for couples affected by aphasia. For example, Boles and Lewis (2003) have conducted multiple studies exploring what they called solution focused aphasia therapy (SFAT), a conversation-based therapy focused on social and personal consequences of aphasia. One study explored SFAT co-therapy, between a SLP and social worker, for a couple with aphasia (Boles, 2000). The therapists worked in a collaborative manner to address a mutual goal of improving communication in a relationship. Our study, in a similar vein, explored the influence of CPT principles on relational communication. However, it extended this focus to encompass discussions about changing roles and responsibilities in marriage, addressing some of the psychosocial and relational impacts of aphasia and potentially eliminating the need for involvement of a mental health professional alongside the speechlanguage pathologist. While the Boles (2000) study does indicate that there could be benefit to cotreatment, other studies suggest that counseling professionals generally do not have the time or experience to work with PWA (Northcott et al., 2017). RC-CPT was developed to address clinical barriers such as these, and therefore, could potentially be more clinically feasible than

interventions from previous studies exploring the relationship between CPT and psychosocial outcomes.

#### **Limitations and Future Directions**

This section discusses the limitations and future directions of RC-CPT in addressing the psychosocial and relational impacts of aphasia by breaking down barriers to counseling for couples affected by aphasia. Existing research has identified time constraints, inadequate ongoing specialist support and limited training in counseling techniques as significant obstacles. RC-CPT offers potential solutions by providing a client-centered approach, involving experts in its development, and incorporating brief follow-up sessions. However, further research is needed to explore its effectiveness, adapt outcome measures, and employ longitudinal study designs. Comparative studies comparing RC-CPT with traditional CPT would be valuable in advancing intervention strategies for couples impacted by aphasia.

#### Breaking Down Barriers to Counseling

Existing research has identified several barriers that impede speech and language pathologists from effectively counseling couples affected by aphasia. Notable barriers encompass (a) time constraints, (b) inadequate ongoing specialist support, and (c) limited training in counseling techniques (Northcott et al., 2018; Sekhon et al., 2019). However, the introduction of RC-CPT holds promise in overcoming these challenges.

Firstly, the RC-CPT pilot intervention, comprising of two sessions spanning approximately two hours in total for each of the three participating couples, presents a potentially viable treatment duration within the outpatient context. Although qualitative findings suggest that exploration of additional follow-up and support subsequent to the initial sessions would be

advantageous, these ongoing check-ins could potentially be brief and integrated into other aphasia treatments.

Secondly, the development of RC-CPT involved substantial input from experts, including a neuropsychologist and marriage and family therapist. They were integral in the creation of the Relationship Roles Questionnaire and worksheet and provided substantial feedback on session protocols. In cases where direct and frequent specialist support may be lacking, RC-CPT emerges as an approach developed with specialists to provide appropriate adjustment counseling to couples impacted by aphasia.

Lastly, RC-CPT's design fosters a client-centered approach, prompting the SLP to pose questions, actively listen and guide couples towards self-generated solutions. While prioritizing client autonomy, this program has the potential to still facilitate natural opportunities for SLPs to provide valuable adjustment counseling. Additionally, the RC-CPT protocol could aid SLPs with varying backgrounds in counseling by offering a list of comprehensive counseling micro-skills for review and implementation throughout the intervention. These attributes of RC-CPT position it as a promising and valuable tool for future research, encouraging further exploration and evaluation of its effectiveness in supporting SLPs in their provision of counseling services to couples affected by aphasia.

#### Demographic Composition

The demographic makeup of our participant sample is important to consider when interpreting results. For example, all six participants were of white ethnicity and fell within the age range of 40 and 52. It is essential to acknowledge that aphasia affects individuals of various races and across a broader spectrum of age groups. Additionally, all three participants with aphasia were within two years post-onset and all three couples had been married for a minimum

of 19 years. Consequently, our study did not encompass individuals in more chronic stages of aphasia or couples in earlier stages of marriage. Future research should recruit a more demographically diverse sample representative of the broader population of PWA.

#### **Outcome Measures**

Self-report measures, while commonly used in research studies, can pose certain limitations that must be acknowledged. One limitation stems from the reliance on participants' subjective interpretations, which may introduce inaccuracies in reporting. Given the sensitive and potentially stigmatized nature of certain topics surveyed, participants may have been predisposed to respond in a manner that they perceived as socially acceptable, rather than providing their genuine response.

The interpretation of certain measures is challenging as some participants reported a decline in scores. Further research is warranted to ascertain whether these decreases stem from reporting inaccuracies or genuine adverse effects on measured variables. Additionally, participants with aphasia reported that relationship survey measures were difficult to comprehend. Limited comprehension of survey questions may introduce additional inaccuracies in the quantitative data. Future research studies should ensure that self-report measures are more aphasia friendly, for example, rewording relationship measure questions to be more straightforward.

#### Study Design

The utilization of a pilot study, while beneficial in its initial stages, may present limitations that should be considered. This pilot study was of a limited duration, hindering the exploration of long-term effects or changes over time. Additionally, two participants reported that participating in RC-CPT with additional follow-up sessions over a longer period of time

would be valuable to their rehabilitation process. Future experimental research that is more longitudinal in nature holds significant promise for overcoming limitations of the present pilot study and exploring the more long-term impacts of RC-CPT. Additional studies could explore how multiple follow-up sessions, after the initial two sessions of RC-CPT, may impact communicative and psychosocial impacts of aphasia over time.

# Communication Partner Training Versus Relationship Centered Communication Partner Training

Prior research has not sufficiently explored the potential impact of CPT on couples' marital relationships and overall psychosocial well-being. The findings derived from this study offer valuable insights into the acceptability of RC-CPT as an approach to address the psychosocial consequences experienced by couples affected by aphasia. The triangulation of quantitative and qualitative data underscores the promising potential of RC-CPT for future experimental endeavors. Therefore, a comparative study investigating the psychosocial effects of CPT vs RC-CPT would serve as a crucial next step in advancing our understanding of effective intervention strategies.

#### **Conclusion**

This study aimed to determine the acceptability of RC-CPT for couples affected by aphasia, addressing issues identified in existing research. The findings support the acceptability of RC-CPT and its potential to improve communication and address relational and psychosocial impacts of aphasia. Participants reported positive and meaningful changes in their communication, relationship, and psychosocial well-being. This study also identified limitations and proposed future directions. A comparative study between CPT and RC-CPT would provide valuable insights into their differential psychosocial effects. Additionally, barriers to aphasia

adjustment counseling for couples, such as time constraints, limited specialist support and inadequate training, could be overcome with the use of RC-CPT. RC-CPT shows promise as a relationship-centered intervention approach and holds potential for enhancing the provision of counseling services to couples impacted by aphasia.

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### **Tables**

**Table 1**Communication Partner Training Versus Relationship Centered Communication Partner

Training

CPT	RC-CPT
Focused on transmitting and receiving information in conversation	Focused on connection in conversation
Attempts to coach participants in specific communicative skills	Attempts to help participants use communicative skills to make decisions, collaborate and connect with their spouse
End goal is successful exchange of information	End goal is improved emotional and relationship connection

 Table 2

 Quick Aphasia Battery Scores for Participants With Aphasia

Ppt ID	Word Comp.	Sent. Comp.	Word Find.	Gramm.	MS	Repetition	Reading	Overall
Adam	8.76	0.00	2.00	8.76	10.00	8.33	6.26	6.04
Betty	10.00	2.50	6.00	7.33	6.00	6.25	6.67	6.36
Chris	4.58	0.00	1.88	7.88	10.00	6.88	0.88	4.12

*Note.* Ppt = participant; Word Comp. = Word Comprehension; Sent. Comp. = Sentence Comprehension; Word Find. = Word Finding; Gramm. = Grammatical Construction; and MS = Speech Motor Programming. The QAB overall score and all sub scores range from 0 to 10.

 Table 3

 Participant Demographic Information

PptID	Age	ТРО	Sex	Race	Occupational Status	Marriage Duration	Depression Dx	Anxiety Dx	Stress
Adam	52	1;00	M	W	Not working	30	No	No	Sometimes
Amy	51	N/A	F	W	Part time	30	Yes	Yes	Often
Betty	40	1;03	F	W	Homemaker	19	Yes	I'm not sure	Often
Ben	42	N/A	M	W	Full time	19	Yes	Yes	Often
Chris	49	0;06	M	W	Not working	26	I'm not sure	No	Sometimes
Claire	46	N/A	F	W	Homemaker	26	Yes	Yes	Chronic

*Note.* PptID = participant pseudonym, Couple A = A names, Couple B = B names, Couple C = C names; Age = Age in years; TPO = time post onset of aphasia (y;mm); W = white; Marriage Duration = duration of marriage in years; Stress = current levels of stress from none to chronic

**Table 4** *Marital Relationship Measures* 

Participant ID	Ad	am	Aı	ny	Be	etty	В	en	Ch	ris	Cla	aire
Pre/Post RC-CPT	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Accessibility, Responsive	eness &	k Enga	gemen	t								
Personal Accessibility	4.5	5	3.5	4	4	4.5	4	4	4.5	5	5	4
Personal												
Responsiveness	5	5	4.5	4.5	5	5	4	4	4	4.5	4	4.5
Personal Engagement	4.5	5	3.5	4	4.5	4.5	3	3	4.5	5	3.5	3
Partner Accessibility	5	5	4.5	4.5	3.5	4	3.5	3	5	5	3	3
Partner Responsiveness	5	5	4	4	4	4	3.5	3.5	5	5	3	3.5
Partner Engagement	5	5	3.5	4.5	4	3.5	3	4	5	5	3	3.5
Total Average:	4.83	5	3.92	4.25	4.17	4.25	3.5	3.58	4.67	4.92	3.58	3.58
Marital Conflict & Confl	ict Res	olution	1									
Marital Conflict	4.67	5	4.67	4.33	4.33	4.67	2.67	4.33	5	5	2.67	3.67
Conflict Resolution	5	4	4	5	4	5	3	5	5	5	3	4
Marital Communication												
Personal												
Communication	3.8	4.2	4	4.4	3.4	4.2	3.4	4.4	4.2	4.6	4	4.6
Partner Communication	4.4	4.4	3.2	4.2	3.6	4.4	2.2	3	4.8	4.8	2.6	3.4

Table 5

Communication Confidence Rating Scale for Aphasia (CCRSA) Results

	Ad	lam	Ве	etty	Cł	nris
Question	Pre	Post	Pre	Post	Pre	Post
How confident are you about your ability to talk with people?	90	80	40	70	30	90
How confident are you about your ability to stay in touch with family and friends?	90	90	20	80	90	80
How confident are you about your ability to follow news and sports on TV?	90	90	50	90	80	80
How confident are you about your ability to follow movies on TV or in a theater?	90	80	50	100	90	70
How confident are you about your ability to speak on the telephone?	80	70	20	20	40	90
How confident are you that people understand you when you talk?	70	80	30	30	90	100
How confident are you that people include you in conversations?	80	80	30	60	50	90
How confident are you about your ability to speak for yourself?	90	90	40	90	90	100
How confident are you that you can make your own decisions?	70	90	70	90	90	100
How confident are you that you can participate in discussions about your finances?	40	80	20	10	70	70
Total:	790	830	370	640	720	870

*Note.* Pre = responses prior to participating in RC-CPT; Post = responses after participating in RC-CPT

**Table 6**Categorization of Results

Theme	Code	Subcode
I. Impact on Communication	1. Improved Communication	
	2. Increased Awareness	
	3. Purposeful Communication Strategy Use	
	4. Ripple Effect	
II. Impact on Relationship	1. Alignment of Expectations	
ii. impact on relationship	ge.v or zaspeetanous	
	2. Emotional Validation	
	3. Increased Closeness and Engagement	
	4. Restart	
III. Impact on Psychosocial Well-Being	1. Increased Confidence and Empowerment	
	2. Clinician Support	
	3. Sense of Accomplishment	
IV. Feedback for Future Development	1. General Positive Reactions	
r		
	2. Suggestions for Improvement	<ul><li>a. Frequency and Consistency</li></ul>
		b. Outcome Measures
		c. Other Suggestions
	3. Barriers	
	4. Facilitators	a. Specific Goals
		b. Accountability
		c. Support person

#### APPENDIX A

#### **Annotated Bibliography**

Baker, C., Rose, M., Ryan, B., & Worrall, L. (2021). Barriers and facilitators to implementing stepped psychological care for people with aphasia: Perspectives of stroke health professionals. *Topics in Stroke Rehabilitation*, 28(8), 591-593.

https://doi.org/10.1080/10749357.2020.1849952

*Objective:* The purpose of this study was to identify barriers and facilitators to implementing stepped psychological care for people with aphasia and depression from the perspective of stroke health professionals.

*Methods:* The study included 5 focus groups of stroke health professionals.

Interpretive description was used to analyze the verbatim transcripts from these focus groups.

Results: The three core themes for barriers and facilitators were knowledge, skills, and attitudes. Some of the greatest barriers included lack of experience, limited understanding, and lack of resources and psychologists. Some facilitators included training, enhanced physical spaces, leadership, funding, communication tools and specialized staff.

Conclusions: Increased awareness of the barriers and facilitators of implementing stepped psychological care for people with aphasia can drive change among stroke health professionals to improve implementation.

Relevance to current work: My study will also collect data on barriers and facilitators, but to use of relationship-centered communication partner training rather than stepped psychological care. This study provides a great example of how to analyze and

present barriers and facilitators. Our study is also hoping to address some of the barriers in psychological support experienced by PWA.

Boles, L. (1997). Conversation analysis as a dependent measure in communication therapy with four individuals with aphasia. *Asia Pacific Journal of Speech, Language, and Hearing,* 2(1), 43-61. https://doi.org/10.1179/136132897805577468

*Objective:* This study aims to determine the effectiveness of conversation analysis as a dependent measure in Conversation Partners Therapy. Conversation analysis addresses both conversational partners and looks at indication of difficulty to convey a message, focus of attention on conversational partner, and use of conversational repairs.

*Methods*: Four individuals with aphasia participated in a seven-week course of Conversation Partners Therapy, with a family member as a conversation partner and a speech-language pathologist as a coach. The conversations that took place during the course were analyzed for several measures of verbal output, including frequency of words, utterances in T-units and instances of conversation repair.

*Results*: The results varied between the four dyads. Two dyads saw improvements in communication readiness, and one of these dyads also experienced gains in their WAB score, functional communication score, and psychosocial well-being. The other two dyads experienced minimal or no changes in communication or psychosocial well-being.

Conclusions: Conversation analysis reveals useful information that may be less available in other methods of analysis. However, CA is limited in its ability to ascribe therapeutic change to the Conversation Partners Therapy and immediacy of its information. Persons with aphasia who already have effective communication are likely not good candidates for CPT.

Relevance to current work: My study will also include components of CPT. This study provides insight into how to complete conversational analysis, which will be helpful in helping couples evaluate how their communication has been impacted by relationship-centered CPT.

Boles, L. (2000). Aphasia therapy in bilingual speaker: Treatment in language one, with spousal support in language two. *Journal of Speech, Language, and Hearing, 5*(2), 137-142. https://doi.org/10.1179/136132800805577013

Objective: This case study examines the effectiveness of 'Conducting Conversation' (CC) aphasia therapy for a bilingual couple. The husband, who has aphasia, and his wife speak English and Ilicano.

*Methods*: The bilingual couple participated in 8 weeks of conducting conversation therapy. The therapy is conversation based and facilitated by a speech language pathologist who offers suggestions and techniques for improving communication.

Therapy effectiveness was measured by Western Aphasia Battery scores, discourse analysis, and communication independence scores.

Results: The standardized aphasia test results displayed improvements in the aphasia severity of the client. The conversation analysis revealed an increase in question asking and total utterances and a decrease in incoherent utterances and overall conversation repair.

*Conclusions*: Conducing Conversation Aphasia Therapy holds promise for improving communication and aphasia severity for bilingual individuals.

Relevance to current work: My study will include some elements of conversation therapy and this study provides insight into how to measure therapy effectiveness. This

study also shows an effective way to present data from measures of therapy effectiveness, which I will also be presenting in my study.

Boles, L., & Lewis, M. (2003). Working with couples: Solution focused aphasia therapy. *Asia Pacific Journal of Speech, Language and Hearing*, 8(3), 153-159.

https://doi.org/10.1179/136132803805576110

Objective: The purpose of this paper is to describe solution focused aphasia therapy (SFAT). Exception-finding and scaled questions are the two SFAT strategies discussed in detail.

*Methods:* This was a case study with a single couple; one of the spouses has aphasia. Therapy was conversation-based, bi-weekly and lasted 4 weeks. The study used scaled questions as a benchmark for improvement. The clinician encouraged use of gestures, writing and drawing. The couple also practiced these skills at home.

*Results:* The couple increased their use of communicative gestures. They also experienced significant gains in their self-rated communication.

Conclusions: SFAT is a promising therapy technique to address conversation impairment in a functional context. SFAT has the potential to improve communication for PWA and their communication partners.

Relevance to current work: Like this study, my study is aiming to make therapy, specifically communication partner training, as functional and natural as possible. This study offers valuable insight into how to make therapy more relevant to couples' lives and challenges.

Cunningham, R., & Ward, C. (2011). Evaluation of a training programme to facilitate conversation between people with aphasia and their partners. *Aphasiology*, *17*(8), 687-707. https://doi.org/10.1080/02687030344000184

*Objective:* The objective of this study was to assess the impact of communication partner training on the communication effectiveness and wellbeing of persons with aphasia and their communicative partners.

*Methods:* Four persons, with both severe comprehension and expression impairment due to aphasia, and their primary communicative partners participated in a 5-week communication partner training. The program included education, video feedback, and role-play. Video recordings and questionnaires (Visual Assessment for Self-Esteem Scale and Hospital Anxiety and Depression Scale) were analyzed to determine results.

*Results:* Although differences between preintervention and postintervention were not statistically significant, positive trends were found. Most of the dyads increased their use of gestures and successful repair sequences postintervention.

*Conclusions:* Couple intervention can be beneficial for persons with aphasia and their partners.

Relevance to current work: My study will also implement aspects of CPT. This study provides insight into some different elements of CPT including education, video feedback and role-play, some of which will be part of the CPT portion of the pilot program in my study.

Croteau, C., & Le Dorze, G. (2007). Overprotection, "speaking for", and conversational participation: A study of couples with aphasia. *Aphasiology*, 20(2/3/4), 327-336. https://doi.org/10.1080/02687030500475051

Objective: The purpose of this study was to explain the coping strategies that some partners use when their spouse has aphasia, such as overprotection, "speaking for", and conversational participation.

*Methods:* 18 couples participated in this study. The Overprotection Scale for Adults and the Questionnaire on Resources and Stress for Families with Chronically III or Handicapped members were used to measure the perceptions of overprotection by the participants in this study. Their participation in an interview was also evaluated by a researcher and measured by observing the number of turns taking by each spouse.

*Results:* The results revealed that overprotection and speaking for behaviors were positively associated. Speaking for behaviors were also positively related to minor participation by the PWA in conversation. More severe aphasias were also associated with less participation.

Conclusions: Those involved in the rehabilitation of PWA should be aware of "speaking for" behaviors and encourage the PWA to participate in conversations.

Professionals should also work with the spouse to help them support the communication of the PWA.

Relevance to current work: This study supports the need for communication partner training so that PWA can participate more fully in conversations. My study will aim to diminish speaking for behaviors and increase PWA participation by teaching both members of the couple to use communication strategies and work together to participate in conversations about their relationship, roles and responsibilities.

Croteau, C., McMahon-Morin, P., Le Dorze, G., & Baril, G. (2020). Impact of aphasia on communication in Couples. *International Journal of Language & Communication Disorders*, 55(4), 547–557. https://doi.org/10.1111/1460-6984.12537

Objective: This study aims to gain knowledge about couples' perceptions of the impact of aphasia on their communication.

*Methods:* 9 persons with aphasias and their spouses participated in individual interviews. The interview questions were designed to gather information about how the individual perceived communication with their spouse.

Results: The analysis of the interview revealed three main themes: conversation limitations, changed speaking and listening roles, and new emotions related to communication. Couples reported shorter and more infrequent conversations, restrained topics, the person with aphasia becoming a less active participant, struggling to cope with emotions related to communication and increased frustration during communication.

*Conclusions:* Because aphasia has a significant impact on the emotional quality of communication between spouses, these couples would benefit from CPT.

Relevance to current work: My study will also explore how communication between spouses is impacted by aphasia. This study also supports the implementation of CPT, which will be a part of the pilot program in my study. This study also provides insight into how to collect and present qualitative data.

Fotiadou, D., Northcott, S., Chatzidaki, A., & Hilari, K. (2014). Aphasia blog talk: How does stroke and aphasia affect a person's social relationships? *Aphasiology*, *28*(11), 1281-1300. https://doi.org/10.1080/02687038.2014.928664

Objective: The aim of this study was to explore how aphasia and stroke impact relationships with friends, family, and others through the blogs of people with aphasia.

*Methods:* Researchers used blog search engines to find blogs that met the following criteria: written by someone with post-stroke aphasia and includes social network reflection. Framework analysis was used to analyze the qualitative data.

*Results:* The researchers found ten blogs that met their criteria. These blogs reported increased difficulty in participation in family activities, increased dependence on family members, and decreased contact with friends. However, they also reported support they'd received from family and friends and how important it was to them.

Conclusions: Social relationships are extremely important to individuals with post-stroke aphasia. Clinicians should find ways to incorporate social approaches in treatment to support patient's social network.

Relevance to current work: This study supports the notion that clinicians should make an effort to create therapy that is focused on supporting social communication. My study aims to do this by involving the spouse in treatment.

Hopper, T., Holland, A. & Rewega, M. (2010). Conversational coaching: Treatment outcomes and future directions. *Aphasiology*, *16*(7), 745-761.

https://doi.org/10.1080/02687030244000059

Objective: The objectives of this study were to explore the effectiveness of conversational coaching and determine how this treatment may be better implemented in the future.

*Methods:* This was a single-subject experimental design across subjects. Two couples participated, one spouse in each couple had aphasia. The PWA were asked to

retell a story from a video they watched. During the story retell, a clinician coached the couple on verbal and nonverbal communication strategies.

*Results:* For both couples, the number of amin concepts successfully communicated during conversations increased post treatment. Individuals who observed the couples' conversations were able to understand more content post treatment.

Conclusions: The results from this study support the use of conversation coaching with couples in order to improve successful communication of main concepts.

Relevance to current work: My study will also include aspects of conversational coaching. This study contributes to the evidence-base for communication partner training, which my study will expand upon.

Le Dorze, G., & Brassard, C., (1995). A description of the consequences of aphasia on aphasic persons and their relatives and friends, based on the WHO model of chronic diseases.

\*Aphasiology, 9(3), 239-255. https://doi.org/10.1080/02687039508248198

\*Objective: This study aims to describe the impact of aphasia on PWA, their relatives, and friends.

*Methods:* 18 participants were interviewed about the consequences of aphasia. Their interviews were transcribed and then the qualitative data was analyzed.

*Results:* The interviewees indicated that the language impairments were the most dominant cause of handicaps. There were also reports of various coping strategies and behaviors used by both the PWA and their family members. Most of these behaviors were adopted in an effort to improve social communication and maintain relationships.

Conclusions: This study may increase understanding of the impact that aphasia has on PWA, their friends and family members. This knowledge should lead to improving therapy to address all aspects of the WHO model of chronic diseases.

Relevance to current work: My study will also collect qualitative data from PWA and their family members (spouses). This study provides a good example of how to organize and present qualitative data. It also describes some of the impacts of aphasia that I am trying to address in my project, such as strain on interpersonal relationships and loss of autonomy.

Nätterlund, B. (2010). Being a close relative of a person with aphasia. *Scandinavian Journal of Occupational Therapy*, *17*(1), 18–28. https://doi.org/10.3109/11038120902833218 *Objective:* This is a descriptive and qualitative study aiming to understand and describe the impact of aphasia on non-aphasic relatives. This study addresses how aphasia influences various aspects of daily life for persons with aphasia and their families.

*Methods:* 14 participants with a close aphasic relative were interviewed. The two opening questions of the interview were: "Please tell me about your perceptions of your aphasic relative's everyday activities and support in daily life," and "Please tell me about your own experiences of the everyday situation and support after the onset of aphasia in the family."

Results: Analysis of the interviews revealed reoccurring themes, including: the influence of aphasia in the family, everyday life, and the meaning of support. Families with a person with aphasia experienced challenges with role changes, anxiety, various emotions in daily life and acute awareness of their aphasic relative's feelings. Their everyday life consisted of managing daily routines, encouraging involvement in new

activities, navigating changes in employment, focusing on training, and learning how to improve communication. Among the interviewees, there was a trend of lack of support during the acute phase of aphasia of their close relative.

Conclusions: Close relatives of persons with aphasia would benefit from increased emotional, informational, and instrumental support. Healthcare professionals should focus more on offering this support to the families of people with aphasia.

Relevance to current work: My study will also explore the impact of aphasia on non-aphasic relatives, but specifically on spouses/partners. This study also provided insight into how to collect and present qualitative data, which my study will also collect.

Northcott, S., & Hilari, K. (2011). Why do people lose their friends after a stroke? *International Journal of Language & Communication Disorders*, 46(5), 524–534.

https://doi.org/10.1111/j.1460-6984.2011.00079.x

*Objective:* The purpose of this study was to understand the reasons why stroke survivors lose their friends. It also explores potential protective factors and the individual's perceptions of changes in friendships.

*Methods:* 29 stroke survivors, 10 of which had aphasia, participated in qualitative interviews.

Results: The most common reasons for friendship loss were, "loss of shared activities, reduced energy levels, physical disability, aphasia, unhelpful responses of others, environmental barriers, and changing social desires." Participants with aphasia reported the most unhelpful and negative responses from others. Potential protective factors for friendships included shared history, demonstration of concern, locality, non-activity-based, and social network preceding the stroke.

Conclusions: Friendships can be crucial for combatting the depression that often follows a stroke. Intervention targeting social participation could be beneficial.

Relevance to current work: My study will also include interviews with aphasic individuals. This study provides valuable insight into how to effectively present and collect qualitative data from interviews with PWA.

Northcott, S., Simpson, A., Moss, B., Ahmed, N., & Hilari, K. (2017). How do speech-and language therapists address the psychosocial well-being of people with aphasia? Results of a UK online survey. *International Journal of Language & Communication Disorders*, 52(3), 356-373. https://doi.org/10.1111/1460-6984.12278

Objective: This study explored how SLTs in the UK address social and psychological needs of PWA.

*Methods:* An online survey was distributed to SLTs in the UK. Descriptive statistics and qualitative content analysis were used to analyze the results.

Results: SLTs acknowledged that addressing social participation and psychological well-being was part of their scope of practice. Most SLTs used supportive listening and holistic goals as strategies to address those aspects of treatment. The main barriers to supporting psychological well-being were time pressures, lack of support and feeling under qualified.

Conclusions: There is a need to improve the confidence and skills of SLTs in order to effectively address psychological distress in people with aphasia.

Relevance to current work: This study indicates a need for counseling training and support for speech-language pathologists. The program outlined in my study is

intended to help speech-language pathologists to take advantage of counseling opportunities.

Northcott, S., Simpson, A., Moss, B., Ahmed, N., & Hilari, K. (2018). Supporting people with aphasia to 'settle into a new way to be': Speech and language therapists' views on providing psychosocial support. *International Journal of Language & Communication Disorders*, 53(1), 16-29. https://doi.org/10.1111/1460-6984.12323

Objective: This study aims to explore how SLTs perceive addressing psychosocial needs as part of their scope of practice.

*Methods:* The researchers held focus groups in stroke healthcare settings and the qualitative results were analyzed using framework analysis. 23 SLTs took part in the focus groups.

*Results:* The SLTs indicated that the following were barriers to addressing psychosocial well-being: emotional challenges, time pressures, senior manager attitudes, and patients' complex backgrounds. Some facilitators they reported were peer support, specialist support, experience, personal belief, and management support.

Conclusions: Services may be improved through collaboration between SLTs and mental health professionals.

Relevance to current work: This study stresses the importance of collaboration between mental health professionals and speech-language pathologists to address the psychosocial well-being of PWA. My study will hopefully be the first step in a stepped psychological care model that will lead to future collaboration between MHPs and SLPs.

Sekhon, J., Oates, J., Kneebone, I., & Rose, M. (2019). Counselling training for speech-language therapists working with people affected by post-stroke aphasia: A systematic review.

International Journal of Language & Communication Disorders, 54(3), 321-346. https://doi.org/10.1111/1460-6984.12455

*Objective:* The aim of this study was to outline what training speech-language therapists receive to counsel individuals impacted by post-stroke aphasia.

*Methods:* The researchers completed a systematic review of literature relating to psychological well-being, speech-language therapy, counseling, stroke, training and aphasia. Nine studies were included in the Search, AppraisaL, Synthesis and Analysis (SALSA) Framework.

*Results:* The amount of counseling training had moderate correlation with the amount of confidence and comfort that speech-language therapists had in addressing the psychological well-being of their patients with post-stroke aphasia.

Conclusions: Speech language therapists feel more confident, knowledgeable, and skilled when working with patients when they've received training on brief psychological approaches and generic counseling skills with support from mental health professionals.

Relevance to current work: This article outlines both the importance of collaboration with mental health professionals and counseling training for speech-language therapists. The program in my study has been developed with the help of mental health professionals and would continue to benefit from future collaboration. It is important to implement basic counseling skills as part of this program to support the psychological well-being of the participants.

Simmons-Mackie, N. & Damico, J. (2011). Counseling and aphasia treatment: Missed opportunities. *Top Lang Disorders*, *31*(4), 336-351.

https://doi.org/10.1097/TLD.0b013e318234ea9f

Objective: The aim of this study was to describe and identify strategies for avoiding counseling opportunities.

*Methods:* Researchers collected data from four aphasia treatment by analyzing clinician interactions with patient with aphasia. Two of the SLPs from the treatment sessions also participated in qualitative interviews.

Results: The following strategies were utilized by speech-language pathologists to avoid counseling opportunities: engaging in superficial conversation, focusing on facts, shifting to therapy tasks, and deflection through humor. These strategies are utilized due to a desire to avoid awkwardness, narrow view of scope of practice, and learned professional values.

Conclusions: Because speech-language pathologists understand aphasia and are able to support communication, they should support PWA in their communication of personal feelings. It is within our scope of practice to counsel patients as it relates to their communication impairments.

Relevance to current work: The program in our study is focused on taking advantage of counseling opportunities in aphasia treatment. This study outlines how these opportunities are avoided and, in our study, we will strive to avoid these mistakes.

Stead, A., & White, J. (2019). Loss of intimacy: A cost of caregiving in aphasia. *Top Lang Disorders*, 39(1), 55-70. https://doi.org/10.1097/0000000000000175

Objective: This article aims to outline the impact that aphasia has on intimacy and potential solutions to address this issue.

*Methods:* This article presents a review of the current literature about relationship intimacy post stroke and also collected feedback from participants of a weekend retreat,

which included counseling sessions, social opportunities, and respite for caregivers.

Participants completed an open-ended survey before and after the retreat.

Results: Spouses of PWA are less satisfied with their relationship intimacy poststroke. The article has three suggestions for supporting couples impacted by aphasia with their intimacy: have discussions about intimacy early in recovery, train intimacy specialists on how to communicate with couples impacted by aphasia and hold local events to open up discussion about intimacy.

Conclusions: Effective communication is critical to maintain relationship intimacy. Implementing the suggested strategies to increase intimacy support for couples impacted by aphasia is an important part of

Relevance to current work: As this article indicates, addressing intimacy during post stroke rehabilitation is often overlooked, yet it is a critical part of relationship satisfaction. Due to this lack of support, my study aims to fill this gap by providing couples with the communication strategies and space to have discussions about their intimacy.

#### APPENDIX B

#### **IRB Approved Consent Form**

# Consent to be a Research Subject

Title of Research Study: The Acceptability of Relationship-Centered Communication Partner

**Training** 

Principle Investigator: Tyson Harmon, Ph.D., CCC-SLP

IRB ID#: IRB2022-257

### **Key Information**

The following is a **short summary** of this study to help you decide whether to be a part of this study. Information that is more detailed is explained later on in this form. The purpose of this study is to determine the acceptability of Relationship-Centered Communication Partner Training. You will be asked to participate in 3 study sessions. The first consisting of gathering personal information and communication partner training. The second consisting of Relationship-Centered Communication Partner Training. Finally, the third consisting of a follow-up interview and surveys. We expect that you will be in this research study for three sessions. The first lasting approximately 2 hours, and the second and third sessions lasting approximately 1 hour each. The primary potential risk for this study is emotional vulnerability. The main benefit of being in this study is providing information to researchers to create and improve treatment for couples impacted by aphasia.

### Introduction

**Procedures** 

This research study is being conducted by Tyson Harmon, Ph.D., CCC-SLP at Brigham Young University. The purpose of this study is to determine the acceptability of Relationship-Centered Communication Partner Training. You were invited to participate in this study to share your thoughts on this training program and if discussing roles and responsibilities is important to couples with aphasia and relevant to the changes you desire.



Your participation in this study will involve three sessions lasting no more than 2 hours each. You have the choice of participating in the sessions in your **own home** or at the Brigham Young University Speech and Language Clinic (John Taylor Building Room 111, 1190 North 900 East Provo, UT).



#### **Session 1:**

The first session will consist of gathering your personal information, as well as completing a communication partner training module. Communication partner training is learning and practicing communication strategies to improve communication between an individual with aphasia and their communication partner. All participants will fill out a personal information survey, depression survey and a marital relationship survey. If you are a participant with aphasia, you will complete a language assessment and the Communication Confidence Rating Scale for Aphasia. If you are a participant without aphasia, you will complete a questionnaire to verify that you have not experienced a stroke or other neurological damage. If results from the language assessment do not confirm an aphasia diagnosis and the questionnaire to confirm stroke-free status does not indicate an absence of neurological damage, then you will not continue to participate this study. After completing the assessment and questionnaires, you will complete a communication partner training module lasting approximately 1-hour with your spouse. The first session will last approx. 2 hours.

#### Session 2:

In the **second session**, you will have the opportunity to **practice the strategies** learned in session 1 to have an **important**, **relationship-centered conversation** with your spouse. First, you and your spouse will fill out the **Relationship Roles Questionnaire (RRQ)** separately. This questionnaire asks about the **distribution of roles and responsibilities** in your relationship. It asks questions about **changes in distribution** after aphasia onset, **distress** caused by distribution of responsibilities, and the



importance of future change in distribution. If you are a participant with aphasia, you will receive visual support and help from a trained research assistant to complete the RRQ. You will then come together with your spouse and the investigator to have a guided conversation about your RRQ results. The researcher will support your conversations with your spouse. The second session concludes with you and your spouse setting a goal to better manage your roles and responsibilities and creating a plan for improving relationship-centered communication. The second session will last approx. 1 hour.

#### Session 3:



The final session will take place **7-10 days after your second session**. You will participate in **an interview about your experiences** with Relationship-Centered Communication Partner Training. All participants will complete the **marital communication styles survey** again. The participants with aphasia will also complete the **Communication** 

Confidence Rating Scale for Aphasia again. The third session will last approx. 1 hour.

## **Audio/video Recordings**

During the sessions, **audio and video recordings** will be obtained throughout the research session. Your consent below allows (BYU) to use these recordings for purposes associated with the Study:

I understand that researchers will take **audio and video recordings** of me as part of this Study. These recordings will include either audio only or both audio and visual information, which may allow me to be **identifiable to viewers**. I give permission for BYU to use the Media in **scientific publications, scientific conferences or meetings, educational presentations, public presentations to non-scientific groups, and other uses** related to the Study so long as my **name is not used**. I agree that all **Media will become the property of BYU**, and I waive my right to inspect, approve, or be compensated for BYU's use of the Media.

By signing below, I certify that I have read this Consent to Use Video Recording and agree to its terms.

Name of Participant:			
	(Please Print)		
Signature:		Date	

## **Risks/Discomforts**



Minimal risks for participants relate to fatigue, vulnerability, and confidentiality. You may become fatigued from the language, self-report, and interview tasks that you are asked to complete. Additionally, the nature of the study will require you to discuss your roles and responsibilities in marriage and reveal related strengths and weaknesses. This has the potential to lead to feelings of embarrassment.

There is also a rare risk of breach of confidentiality, which could also cause emotional distress or embarrassment.

You will be offered **breaks after every 30 minutes of participation**. Additionally, you will always have the option of **terminating participation at any time** if you become frustrated. To **reduce risks associated with breach of confidentiality**, we will take all appropriate measures to conduct testing in quiet, private rooms and secure data so only study personnel have access.

### **Benefits**

There are **no direct benefits**. However, your participation in this study has the potential to **improve your marital communication and communication confidence**. In addition, your participation could **provide beneficial information to researchers** about the effects of relationship-centered



communication partner training on marital communication, which could lead to **more effective treatments** for couples impacted by aphasia.



#### **Confidentiality**

All data collected for the purposes of this study will be kept confidential and will only be reported **without personally identifiable information**. Any personally identifiable information will be stored separate from research data

in a **locked cabinet** in the researcher's office. As stated previously, if audio or video clips are used for any purpose associated with the study, your **name will not be used**.

You will be given a **number that will identify you** for this study. All data obtained from you will be associated with this number instead of your personally identifiable information. Any paper forms or test protocols will be kept in **locked cabinets in a locked research lab** at BYU. Any electronic forms or files (e.g., audio/video files) will be kept indefinitely on a **secured**, **password protected server**. Only those directly involved with the research will have access to these data.

#### Data Sharing

We will **keep the information** we collect about you during this research study for analysis and for potential use in future research projects. **Your name and other information that can directly identify you** will be **stored securely and separately** from the rest of the research information we collect from you.

**De-identified data from this study may be shared** with the research community, with journals in which study results are published, and with databases and data repositories used for research. We will **remove or code any personal information** that could directly identify you before the study data are shared. Despite these measures, **we cannot guarantee anonymity** of your personal data.

The **results of this study could be shared** in articles and presentations, but will **not include any information that identifies you** unless you give permission for use of information that identifies you in articles and presentations.

### Compensation

You will receive \$20 cash for each completed session. This will be distributed at the completion of each session. If you complete all three sessions, therefore, you will receive a total of \$60.



#### **Participation**

Participation in this research study is **voluntary**. You have the right to **withdraw at any time** or refuse to participate entirely.



## **Questions about the Research**

If you have questions regarding this study, you may contact Tyson Harmon, Ph.D., CCC-SLP by phone at 801-422-1251 or email at tyson\_harmon@byu.edu.

If you have questions regarding your rights as a research participant contact Human Research Protection Program at (801) 422-1461; byu.hrpp@byu.edu.

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I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.								
Name (Printed):	Sign <u>ature:</u>							

#### APPENDIX C

# **Marital Relationship Survey**

# BARE (Brief Accessibility, Responsiveness, and Engagement) Scale

Please select the option that best represents your experiences in your current relationship with your partner:

1 = Never true, 2 = Rarely true, 3 = Sometimes true, 4 = Usually true, 5 = Always true

I am rarely available to my partner.	1	2	3	4	5
It is hard for my partner to get my attention.	1	2	3	4	5
I listen when my partner shares her/his deepest feelings.	1	2	3	4	5
I am confident I reach out to my partner.	1	2	3	4	5
It is hard for me to confide in my partner.	1	2	3	4	5
I struggle to feel close and engaged in our relationship.	1	2	3	4	5
My partner is rarely available to me.	1	2	3	4	5
It is hard for me to get my partner's attention.	1	2	3	4	5
My partner listens when I share my deepest feelings.	1	2	3	4	5
I am confident my partner reaches out to me.	1	2	3	4	5
It is hard for my partner to confide in me.	1	2	3	4	5
My partner struggles to feel close and engaged in our relationship.	1	2	3	4	5

# Conflict and Conflict Resolution

Do you and your spouse have arguments or disagreements about whether one of you is doing your share of the housework?	No	Yes			
In general, how often do you disagree with your spouse?  1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often,  5 = Very often	1	2	3	4	5
How many serious quarrels have you had with your spouse in the last two months?	0	1	2	3	4+
How satisfied are you with the strategies that you have for resolving your conflicts?  1 = Very satisfied, 2 = Satisfied, 3 = Works sometimes but could be better, 4 = Dissatisfied, 5 = Very dissatisfied	1	2	3	4	5

# Loneliness

How often have you....

1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Always

Lacked companionship?	1	2	3	4
Felt left out?	1	2	3	4
Felt isolated from others?	1	2	3	4

# **Relationship Communication**

How are YOU in your relationship?

1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often

I am able to listen to my partner in an understanding way.	1	2	3	4	5
In most matters, I understand what my partner is trying to say.	1	2	3	4	5

When I talk to my partner, I can say what I want in a clear manner.	1	2	3	4	5
I sit down with my partner and just talk things over.	1	2	3	4	5
I understand my partner's feelings.	1	2	3	4	5

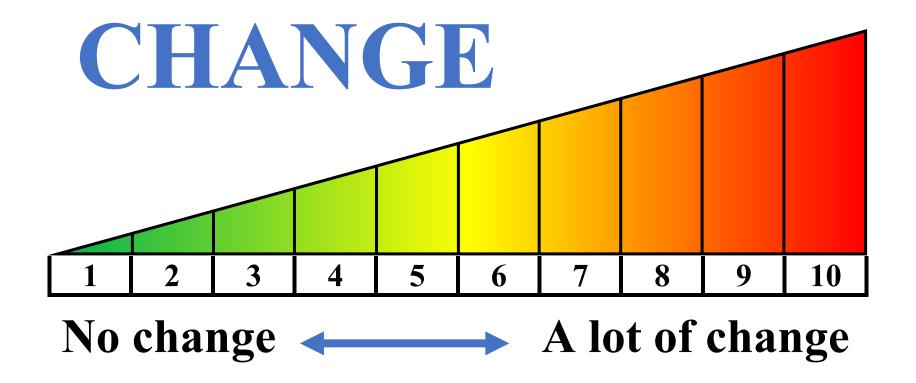
# How is YOUR PARTNER in your relationship?

1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often

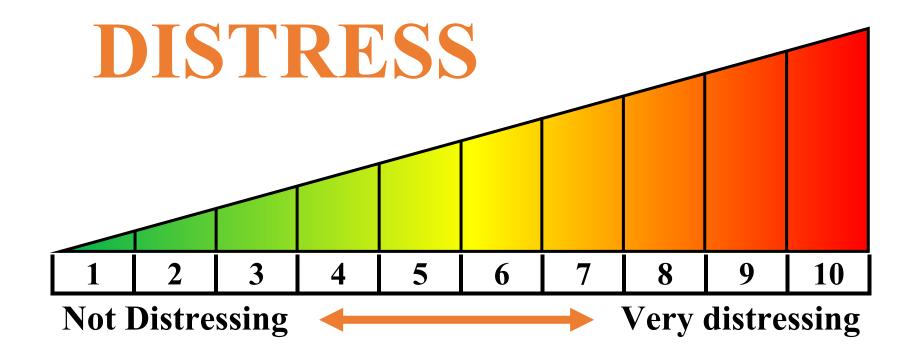
My partner is able to listen to me in an understanding way.	1	2	3	4	5
In most matters, my partner understands what I am trying to say.	1	2	3	4	5
My partner can say what he/she wants in a clear manner.	1	2	3	4	5
My partner sits down with me just to talk things over.	1	2	3	4	5
My partner understands my feelings.	1	2	3	4	5

# APPENDIX D

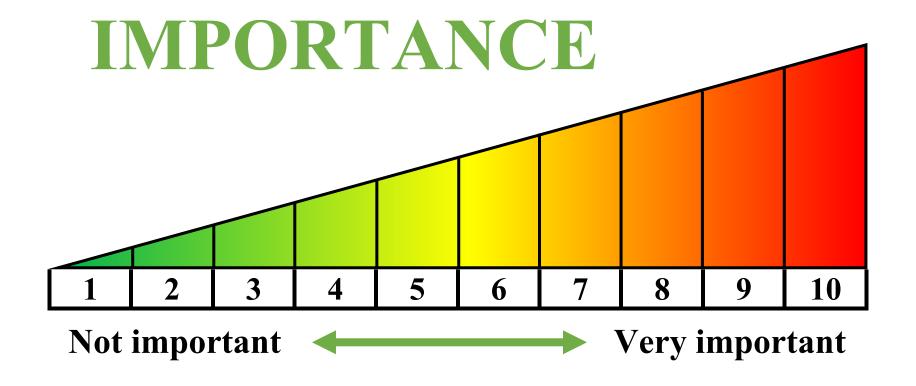
Relationship Roles Questionnaire Visual Support for Persons With Aphasia



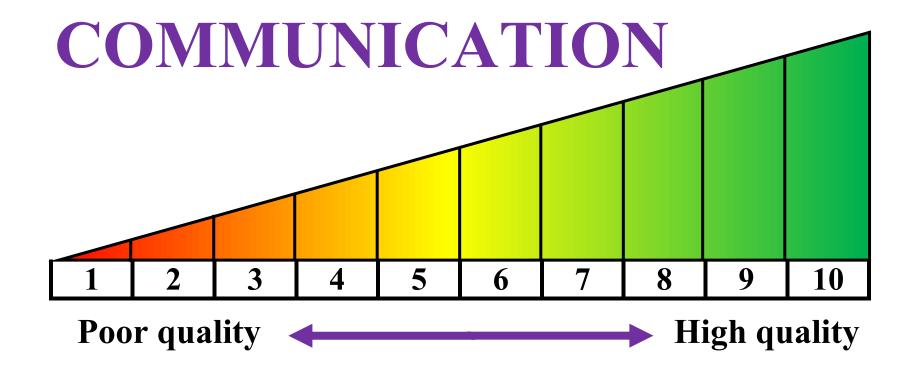
Since the onset of your aphasia, how much have your **responsibilities** in this area **changed**?



How distressing has distributing responsibilities in this area been to you personally?



How **important** is it for you **to see change** in how you and your spouse divide responsibilities within this area?



How would you rate the quality of your communication with your spouse about roles and responsibilities?

# HOUSEHOLD CHORES

- Doing the laundry
- Cleaning the house
- Washing the dishes







# MEAL PREPARATION

- Grocery shopping
- Cooking meals
- Meal planning



# FINANCIAL MANAGEMENT

- Paying bills
- Budgeting
- Financial planning



# TRANSPORTATION &/OR CHILD CARE

- Driving to events & activities
- Pickup and dropoff from school or appointments
- Bedtime/wakeup routines



# MEDICAL AND LEGAL DECISIONS

- Insurance management
- Scheduling hospital visits
- Interactions with medical or legal professionals



# RELATIONSHIP AND INTIMACY

- Coordinating dates
- Initiating personal discussions
- Initiating sex



#### APPENDIX E

#### Relationship Roles Questionnaire Clinician Form

**Clinician:** Couples may share responsibilities in several areas. Please use the scale in front of you to choose a number between 1 and 10 to rate your level of change, distress, and importance for 6 different responsibility areas.

#### Questions for clinician reference:

Change – Since the onset of your aphasia, how much have your responsibilities in this area changed? (1: No change  $\rightarrow$  10: A lot of change)

Distress – How distressing has distributing responsibilities in this area been to you personally? (1: Not distressing  $\rightarrow$  10: Extremely distressing)

Importance – How important is it for you to see change in how you and your spouse divide responsibilities in this area? (1: Not important → 10: Very important)

Responsibility Area	Change	Distress	Importance
<b>HOUSEHOLD CHORES</b> – such as doing the laundry, cleaning the house, washing the dishes			
MEAL PREPARATION – such as grocery shopping, cooking meals, meal planning			
FINANCIAL MANAGEMENT – such as paying bills, budgeting, financial planning			
TRANSPORTATION &/OR CHILD CARE – such as driving to events & activities, pickup/drop-off from school or appointments, bedtime/wakeup routines			
MEDICAL & LEGAL DECISIONS – such as interactions with medical or legal professionals, scheduling hospital visits, insurance management			
<b>RELATIONSHIP &amp; INTIMACY</b> – such as coordinating dates, initiating personal discussions, initiating sex			

Clinician: Pick the area where you would most like to see change. Then, pick one more area.

Communication – How would you rate the quality of your communication with your spouse about roles and responsibilities within your marriage on a scale of 1-10? (1: poor quality  $\rightarrow$  10: high quality)

Before aphasia onset: After aphasia onset:

#### APPENDIX F

#### **Relationship Roles Questionnaire Spouse Form**

Couples may share responsibilities in the bolded areas below. For each **Responsibility Area**, answer the following questions on the scales provided:

- **1. Change** Since the onset of your spouse's aphasia, how much have your responsibilities in this area changed?
- 2. Distress How distressing has distributing responsibilities in this area been to you personally?
- **3. Importance** How important is it for you to see change in how you and your spouse divide responsibilities in this area?

**HOUSEHOLD CHORES** – such as doing the laundry, cleaning the house, washing the dishes

No change in this area	1	2	3	4	5	6	7	8	9	10	A lot of change in this area
No distress in this area	1	2	3	4	5	6	7	8	9	10	Extreme distress in this area
Not important to change this area	1	2	3	4	5	6	7	8	9	10	Very important to change this area

MEAL PREPARATION – such as grocery shopping, cooking meals, meal planning

No change in this area	1	2	3	4	5	6	7	8	9	10	A lot of change in this area
No distress in this area	1	2	3	4	5	6	7	8	9	10	Extreme distress in this area
Not important to change this area	1	2	3	4	5	6	7	8	9	10	Very important to change this area

FINANCIAL MANAGEMENT – such as paying bills, budgeting, financial planning

No change in this area	1	2	3	4	5	6	7	8	9	10	A lot of change in this area
No distress in this area	1	2	3	4	5	6	7	8	9	10	Extreme distress in this area
Not important to change area	1	2	3	4	5	6	7	8	9	10	Very important to change this area

**TRANSPORTATION &/OR CHILD CARE** – such as driving to events and activities, pickup and drop-off from school or appointments, bedtime/wakeup routines

No change in this area	1	2	3	4	5	6	7	8	9	10	A lot of change in this area
No distress in this area	1	2	3	4	5	6	7	8	9	10	Extreme distress in this area
Not important to change area		2	3	4	5	6	7	8	9	10	Very important to change this area

**MEDICAL & LEGAL DECISIONS** – such as interactions with medical or legal professionals, scheduling hospital visits, insurance management

No change in this area	1	2	3	4	5	6	7	8	9	10	A lot of change in this area
No distress in this area	1	2	3	4	5	6	7	8	9	10	Extreme distress in this area
Not important to change area		2	3	4	5	6	7	8	9	10	Very important to change this area

**RELATIONSHIP & INTIMACY** – such as coordinating dates, initiating personal discussions, initiating sex

No change in this area	1	2	3	4	5	6	7	8	9	10	A lot of change in this area
No distress in this area	1	2	3	4	5	6	7	8	9	10	Extreme distress in this area
Not important to change area	1	2	3	4	5	6	7	8	9	10	Very important to change this area

Responsibility Area	Change	Distress	Importance
HOUSEHOLD CHORES			
MEAL PREPARATION			
FINANCIAL MANAGEMENT			
TRANSPORTATION &/OR CHILD CARE			
MEDICAL & LEGAL DECISIONS			
RELATIONSHIP & INTIMACY			

Circle the two areas above where you would most like to see change.

**Communication** – How would you rate the quality of your communication with your spouse about roles and responsibilities within your marriage on a scale of 1-10?

Before aphasia onset:

<b>Poor Quality</b>	1	2	3	4	5	6	7	8	9	10	<b>High Quality</b>
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After aphasia onset:

<b>Poor Quality</b>	1	2	3	4	5	6	7	8	9	10	<b>High Quality</b>
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# APPENDIX G

# Relationship Roles Questionnaire Worksheet

Negotiate an area you would both like to focus on as a couple:
<ul><li>What is impacting your relationship and home the most right now?</li><li>In which area is it most important for both of you to see change?</li></ul>
Discuss what you value about this area:
<ul><li>Why is it important to you and your family to see improvement in this area?</li><li>What would be an ideal outcome?</li></ul>
Brainstorm possible solutions to seek improvement in this area:

Write down a specific goal for improvement in this area – what would it look like?	
What would be signs that the plan is not going smoothly; and we need to discuss tweaks our plan?	s to
<ul> <li>What would be signs that things are not going according to plan?</li> <li>What would you feel or notice that suggests you need more help?</li> <li>What might be something you notice suggesting your spouse needs more help?</li> </ul>	
Communication Plan: What is the best way to approach one another?	

Com	imunication st	trategies:			

#### APPENDIX H

### **Relationship-Centered Communication Partner Training Protocol**

Research Investigator (RI):

- Prior to the session, review the **possible scenarios** and **counseling microskills** outlined at the end of this protocol. Utilization of these microskills during the session is vital to fulfilling the session's purpose.
- Thank couple for inviting us into their home or welcome them to the clinic.
- Build rapport with participants to create comfortable and inviting atmosphere.
- Set up video camera on tripod and microphone in front of the couple.
- Check the microphone to ensure the sound is working.

Then proceed with the following script:

RI: "The purpose of our session today [Present Purpose visual] is to learn to and practice conversing together as partners in the context of roles and responsibilities in marriage.

Couples often share responsibilities and roles in various areas. After the onset of aphasia, these roles and responsibilities can change. These changes can cause both stress and loss of identity. Today we want to support meaningful communication about these changes.

We hope to fulfill this purpose by focusing on the following three objectives.

[Present Objective 1 visual] *Have a collaborative discussion about roles and responsibilities.* 

[Present Objective 2 visual] Set goals and make plans for the week.

[Present Objective 3 visual] And practice communication strategies.

*To meet our objectives, we will need to meet the following session expectations:* 

[Present Expectation 1 visual] This is a safe space for communication. Give each other time and respect to communicate as equal partners. Be open to what each other has to say.

[Present Expectation 2 visual] This session and your plans may not go smoothly and that's okay. We are trying to find strategies and goals that will help you move forward but if things don't work out or take time, that's okay.

[Present Expectation 3 visual] I am here to support your communication and adjustment to life with aphasia. Specific emotions or problems may come up that would be better addressed by a marriage and family therapist or a psychologist and that's okay. We will let you know when those things come up and help refer you to other resources at the end of the session.

Do you have any questions about the purpose, objectives, or expectations of this session?"

[Answer any questions the couple may have.]

[Post the purpose, objectives, and expectations in a place where both participants can see them and where the clinician can refer the couple back to them throughout the session as needed.]

"We will start by having each of you complete the Relationship Roles Questionnaire separately. [name of aphasic participant], you will complete the RRQ with me and [name of non-aphasic participant], you will complete the RRQ independently. [Research assistant] will accompany you to another room and answer any questions you have as you fill out the questionnaire."

[Give the non-aphasic participant the "RELATIONSHIP ROLES QUESTIONNAIRE (RRQ)-Partner/Spouse form" and have them complete the questionnaire in another room, so the participants will not be influenced by each other's answers]

[Read the clinician script at the top of the "RELATIONSHIP ROLES QUESTIONNAIRE (RRQ)- Clinician Form" then proceed to ask the three questionnaire questions for each of the responsibility areas and record their responses on the form. Present the aphasic participant with both the question visual and responsibility area visual for each question. Once the participant has answered all three questions for each responsibility area, lay out all 6 of the responsibility area visuals and read the second clinician script on the "RELATIONSHIP ROLES QUESTIONNAIRE (RRQ)- Clinician Form". Circle the two chosen areas on the clinician form. End the questionnaire by presenting the communication question visual and asking them the final question as it relates to both their experience before and after aphasia onset.]

[Once both participants have completed the RRQ, bring them together again to complete the "RELATIONSHIP ROLES QUESTIONNAIRE (RRQ) – WORKSHEET"]

"Thank you for being vulnerable and sharing some of your experiences with adjusting to life with aphasia."

[Have a brief discussion about their experience with the RRQ. Validating any challenges or emotions they experienced during the process.]

"We will now continue to the discussion and worksheet portion of our session. I will guide the discussion, between the two of you, with questions and tasks outlined on the worksheet. I will also write down the ideas, goals, and plans that you two discuss. Do either of you have any questions before we begin?"

[Answer any questions the couple may have.]

"We will start by reviewing your worksheet from the communication partner training that was completed in the last session."

[Briefly review the strategies that the couple identified as being helpful or the ones they'd like to work on. Ask them how they approached their communication strategy goal since the last session. Encourage them to use the strategies they identified throughout the session.]

[Then proceed to work through the worksheet, assisting the couple in completing each task.]

- Spend about 5 minutes on each section of the worksheet. If couples need to discuss one topic more or less, allow for flexibility, but try to prevent prolonged or insufficient discussion about any of the areas.
- Encourage use of CPT strategies (especially strategies focused on during session 1)
- Provide materials such as whiteboards, paper and pen, visuals, etc. to enhance communication
- As necessary, refer the couple back to the session purpose, objectives, and expectations to enhance session productivity.
- Some of the tasks have questions to prompt reflection and discussion. Ask these questions as necessary to foster rich communication for each of the tasks.
- Guide the couple to make goals and plans that are attainable, specific, measurable, time-bound, and relevant.
- Offer help and suggestions when appropriate but keep the focus of the session on supporting communication between the partners.

[For the first task of negotiating an area to focus on, assist the couple in referring to the responses of both the participant with aphasia and their spouse on the questionnaire, specifically the two areas that they each chose to circle.]

[Upon completion of the worksheet, review the goals and plans with the couple to confirm understanding. Scan a copy of the worksheet for study records and then give the worksheet to the couple to refer to throughout the week.]

"Thank you again for your participation. We look forward to meeting with you next week to discuss your experiences with the goal and plans you've created together. We also want to provide you with a list of resources that could be helpful for addressing some of the emotional impacts of aphasia on yourself or your marriage. [Give the list of resources to the couple.] We are more than happy to offer our assistance in connecting you with any of these services, including counseling services at BYU. Would you like help connecting to any of these services at this time?"

[If the couple indicates that they would like help connecting to services, proceed to assist them.]

[Provide cash compensation for participation in session (\$20/participant). Have each participant sign the payment agreement form.]

Possible Scenarios & Counseling Microskills on following pages...

#### **Possible Scenarios**

The emotional nature of the topics discussed during this session could elicit various responses. Below are some examples of possible scenarios that could occur and potential scripted responses. These responses can and should be individualized and accompanied by counseling microskills to address the specific needs and emotions of participants.

- Emotional breakdown
  - o Example: Participant with aphasia begins to cry.
  - Voice observations: "Bill, I'm noticing that you appear upset, can you please share with us some of the feelings you're having?"
  - o Confirm understanding: "Let me make sure I understand, you are frustrated that you are no longer able to drive the children to school?"
  - o Validate emotion/pain: "That is incredibly frustrating."
  - Refer to expectation 1: "Thank you for being vulnerable and communicating how you feel. Please continue to share your thoughts and feelings as they come up."
- Speaking for behaviors
  - o Example: Spouse of participant with aphasia dominates the discussion.
  - O Voice observations: "Nancy, I'm noticing that you are frequently speaking for Bill. Is this a role that you've taken on since his stroke? Please tell me more about what that experience has been like for you."
  - o Confirm understanding: "Let me make sure I understand, you often talk for Bill because some people are impatient when it takes Bill a while to speak"
  - o Validate emotion/pain: "I understand how that could be very difficult for you."
  - Refer to objective 3: "I appreciate your efforts to support Bill. We are in no rush, so you may both take as long as you need to practice your communication strategies and express your thoughts."
- Argument between participants
  - o Example: The couple's discussion becomes tense and unfriendly.
  - O Voice observations: "Nancy and Bill, I'm noticing that it appears to be difficult for you two to come to an agreement. Let's confirm understanding between the two of you. Bill, please tell us more... Nancy please tell us how you're feeling..."
  - o Confirm understanding between the participants
  - Validate emotion/pain: "It is normal and can be upsetting to disagree and have trouble understanding each other."
  - Refer to expectation 3: "I am not able to address all the things that have come up in our discussion, but I am here to support you as much as I am able."

If heightened emotions render the session unproductive or outside of the scope of practice at any point during the session, refer to expectation 3, validate the difficulty of the discussion topic and offer the couple the opportunity to terminate the session. Provide them with the list of resources and offer assistance in connecting them with mental health and/or relationship professionals. Allow couples to make the choice between rescheduling the session or terminating participation in the study.

#### **Counseling Microskills**

- Active listening
  - o Be fully present to the participants and their experience
  - o Manage internal thoughts, dialogue, and distractions
  - o Be observant of the following:
    - Nonverbal messages (i.e., body language, crying, etc.)
    - Affective messages (i.e., "I feel frustrated," "Sometimes I get upset," etc.)
    - Patterns of behavior (i.e., withdrawal from participation, 'speaking-for' behaviors, etc.)
- Nonverbal communication
  - o "SOLER" mnemonic
    - S: Sit at a comfortable angle and distance.
    - O: Open posture. Arms and legs uncrossed.
    - L: Lean forward occasionally. Look genuinely interested.
    - E: Effective eye contact without staring.
    - R: Remain relatively relaxed.
- Silence
  - o Take time to organize thoughts and identify appropriate responses.
  - o Allow time for the participants to reflect and generate responses.
  - Use silence to honor emotional moments.
  - o Be comfortable and fully present in the silence.
- Conveying empathy
  - Understand the participants' experiences, feelings, and cognitive state (refer to active listening).
  - o Communicate understanding of the participants' point of view with accuracy and unconditional positive regard (*refer to verbal responding*).
- Verbal responding
  - o Clarifying: confirm understanding
    - "Correct me if I'm wrong..."
    - "Let me make sure I understand..."
    - "Is that right?"
  - Paraphrasing/reflecting: demonstrate active listening
    - "What I'm understanding is..."
    - "What I'm hearing from you is..."
  - o Summarizing: confirm understanding
    - Summarize concepts communicated before moving on to another topic to confirm understanding between the participants and yourself.
  - Validation: acknowledge pain and emotion
    - "I can see that is really difficult for you"
    - "That sounds very frustrating"
    - "How terrible"

#### APPENDIX I

#### **Community Resources Handout**

#### **Psychological Support Resources**

#### **Therapy Clinics:**

BYU Comprehensive Clinic: Marriage & Family Therapy

Meadowbrook Counseling

Betterhelp (online counseling)

#### **Information Sources:**

National Institute of Mental Health

Medline Plus

#### **Call Center Services:**

1-800-273-TALK (8255) to reach a 24-hour crisis center

Text MHA to 741741

988 Suicide and Crisis Lifeline

#### Apps:

Sanvello

Aloe Bud

Bloom: CBT Therapy & Self-Care

Lasting: Marriage & Couples

#### **Breathing Techniques:**

Shut your eyes and pay attention to the way you normally breathe for several breaths. Then, slowly count 1-2-3-4 as you inhale through your nose. Exhale for the same four-second count. As you inhale and exhale, be mindful of the feelings of fullness and emptiness in your lungs.

Before you take a big, deep breath, try a thorough exhale instead. Push all the air out of your

lungs, then simply let your lungs do their work inhaling air. Next, try spending a little bit longer exhaling than you do inhaling. For example, try inhaling for four seconds, then exhale for six. Try doing this for two to five minutes.

# **Aphasia Support Resources**

Utah Valley Brain Injury and Stroke Support Group

- Located at the BYU Comprehensive Clinic
- Monthly meetings on first Thursday of the month
- In-person and zoom options
- For caregivers, family members, and brain injury/stroke survivors
- tbigroup.weebly.com
  - o Go to their website to sign up for emails

#### **Aphasia Recovery Connection**

- Mission to connect families impacted by aphasia
- Online resources and videos
- Virtual and in person programs
- aphasiarecoveryconnection.org

# Aphasia Just ASK

- Connect, locate, and share aphasia resources
- Aphasia social network groups
- justaskri.com

#### Aphasia Synergy

- Up and coming organization

#### APPENDIX J

#### **Semi-Structured Interview Guide**

"Thank you for agreeing to participate in this program and interview. We are very interested to receive your feedback about your experiences with relationship-centered communication partner training. We want to learn more about your perceptions of how this program was or was not helpful to your everyday life and communication with your spouse."

[Make sure to give people time to think before answering the questions and don't move too quickly. Move on when you feel you are starting to hear repetitive information.]

#### Questions:

- 1. Let's start by talking about your experiences over the past week with using the plan we created together in the last session.
  - a. Tell us about the experiences you had as you worked on your goal this past week.
    - i. Potential follow-up questions:
      - 1. What facilitated your progress towards your goal?
      - 2. What interfered with your progress towards your goal?
    - ii. Do you feel like you accomplished your goal this week? *Circle their response*: YES / NO
  - b. Please describe how you used your communication plan and strategies over the past week.
    - i. Potential follow-up questions:

- 1. What were some facilitators to using your plan and strategies?
- 2. What were some barriers to using your plan and strategies?
- 2. Next, I would like to hear about some of your impressions regarding the relationshipcentered communication partner training program (i.e., session with the clinician, the RRQ, the RRQ worksheet, and homework)
  - a. What did you like about the program?
  - b. What would you change about the program?
  - Please describe what impact, if any, this program had on your communication as a couple.
  - d. Please describe what impact, if any, this program had on your relationship.
  - e. Is there anything else you think researchers and clinicians could consider in the development of this program?
  - f. If this program, with continued follow-up and support, were a part of your rehabilitation experience, would you find it helpful? *Circle their response:* YES / NO

"That concludes our interview. Thank you so much for sharing your thoughts and opinions. If you have additional information that you did not get to share, please feel free to contact Dr. Tyson Harmon" [provide business card].

#### APPENDIX K

#### Final Codebook

#### **Impact on Communication**

- IMPROVED COMMUNICATION
  - o Generic code for improved communication (both for the PWA and the couple)
  - "It helped me communicate better"
  - "Help us achieve better communication"
- INCREASED AWARENESS
  - metacognitive; key words include "aware," "focus," etc. & results of increased awareness
  - "I liked the focus"
  - o "I liked that it um helped us focus on having communicate- better communication"
- PURPOSEFUL COMMUNICATION STRATEGY USE
  - More purposeful use of communication strategies when participants mentioned specific examples of how they had used the communication strategies over the course of the program; including communicative validation such as confirming what their spouse said, eye contact, posture, etc.
- RIPPLE EFFECT
  - when couples mentioned teaching others to use or take advantage of these strategies;
     also includes advocacy

#### Impact on Relationship

- ALIGNMENT OF EXPECTATIONS
  - when couples talk about being on the same page and how the program helped them get on the same page
- EMOTIONAL VALIDATION
  - o whenever they talk about acknowledging their spouse's feelings or show it
- INCREASED CLOSENESS AND ENGAGEMENT anything that brings the couple closer together as a result of the program, such as...
  - o One-on-one time
  - Deeper conversations
  - Increased unity/support from spouse
  - Initiation of conversations
- RESTART
  - o any mention of the program helping couples start fresh
  - o return to normalcy, etc.
  - "Bringing back part of something that was very important before"
  - "It was like a restart"

#### Impact on Psychosocial Well-being

- INCREASED CONFIDENCE AND EMPOWERMENT
  - o "I've really like I said I just find like this week I feel a little more in control." C1 1B
  - o "Having that conversation then empowers you to have other conversations" Couple 2
- CLINICIAN SUPPORT
  - mentions of having psychosocial support from the clinician/someone who understands aphasia and what they are going through – any kind of clinician support that isn't moderation
- SENSE OF ACCOMPLISHMENT
  - o Feeling of achievement of goals
  - Goals result in positive outcomes

#### **Feedback for Future Development**

- GENERAL POSITIVE REACTIONS
  - Comments about liking the program/parts of the program
  - "I liked all of it"
- SUGGESTIONS FOR IMPROVEMENT
  - FREQUENCY AND CONSISTENCY
    - Comments about how frequent to meet, and comments emphasizing importance of consistency
    - "I think the key will be like staying on top of it" Couple 2 line 302
  - OUTCOME MEASURES CREATE survey included here
    - Comments about surveys
  - OTHER SUGGESTIONS
    - Talking about deeper topics/choosing topics
    - Desire to set more goals
- BARRIERS anything that prevented the couple from working on or reaching their goals
  - o "We were busy"
  - "Kids got in the way"
- FACILITATORS— anything that helped the couple progress in the program generally or has the potential to help with future steps
  - SPECIFIC GOALS specificity of goals
    - Comments about how specific goals helped them progress
  - ACCOUNTABILITY comments about knowing that they would be reporting back to someone and how that helped them achieve their goals
    - "I think the accountability is huge"
  - SUPPORT PERSON having someone to help them set goals, etc.