

**People with aphasia's perspectives of the therapeutic alliance during speech-language intervention: A Q methodological approach**

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## **Using Q methodology to reveal people with aphasia's perspectives of the therapeutic alliance during speech and language therapy**

### **Abstract**

**Purpose:** To identify which elements of the therapeutic alliance are important to people with aphasia attending speech-language pathology post stroke.

**Methods:** A Q methodology design was adopted to explore which elements of the therapeutic alliance were valued by people with aphasia. Statements (n=453) relevant to the research question were extrapolated from the literature and qualitative interviews. A representative sample of statements (n=38) was identified from the expansive data set. People with aphasia (n=23) sorted statements hierarchically according to whether they thought the statement was important or unimportant. Completed Q sorts were analysed using a by-person factor analysis.

**Results:** Analysis yielded a five factor solution, representing five distinct viewpoints: 1) acknowledge me, help me to understand; 2) respect me, listen to me; 3) challenge me, direct me; 4) understand me, laugh with me; and, 5) hear me, encourage me.

**Conclusions:** The findings highlight the need for clinicians to adopt a flexible and idiosyncratic approach to therapeutic alliance construction in order to meet the relational needs of a heterogeneous population. This is the first study to use Q methodology with people with aphasia, demonstrating that Q methodology is an effective and viable method for investigating subjectivity in this population.

Keywords: communication disability, engagement, therapeutic connection, therapeutic relationship, speech and language therapy

## **Introduction**

Clinical research in stroke rehabilitation has largely tended to highlight details of treatment protocols when considering the effectiveness of treatment interventions. Arguably, there has been limited acknowledgement of the potential value of the therapeutic relationship or alliance as a vehicle for delivering effective change. Prioritising the efficacy of treatment interventions, without considering the affective and intersubjective aspects of therapeutic relationships, may limit our potential for optimising clinical outcomes and lowering treatment costs. Indeed, there is robust evidence to suggest that the quality of the therapeutic relationship or alliance is a source of variance in treatment outcomes across healthcare disciplines (Hall, Ferreira, Maher, Latimer & Ferreira, 2010; Martin, Garske & Davis, 2000)

### *Therapeutic alliance*

Therapeutic alliance, a term often used interchangeably with working alliance and therapeutic relationship, is an umbrella term referring to the therapist-patient interactional and relational components at play in treatment delivery (Green, 2006). It has been described as consisting of three constituent parts: the interpersonal *bond*, the therapist-

patient agreement in relation to the *goals* of therapy and the *tasks* assigned to each dyadic agent (Bordin, 1979). Within the rehabilitation context, Crepeau and Garren (2011) suggest that the effectiveness of the relationship is dependent on the interaction of technical skills, therapeutic responsiveness and communicative proficiency.

In mental health and physical rehabilitation settings, the quality of the therapeutic alliance has been associated with treatment outcome, adherence and satisfaction (Horvath & Symonds, 1991; Martin et al., 2000; Hall et al., 2010). Similarly, emergent findings suggest the construct of therapeutic alliance may also be highly applicable to the field of communication disability broadly, and aphasia rehabilitation in particular (Bright 2015; Lawton, Sage, Haddock, Conroy & Serrant, 2018<sup>a</sup>; Lawton, Haddock, Conroy, Serrant & Sage, 2018<sup>b</sup>). Ineffectual alliances have the potential to engender feelings of hopelessness and disengagement (Lawton et al., 2018<sup>b</sup>). Similarly, effective alliances influence: motivation, engagement (Bright, 2015), satisfaction (Tomkins, Siyambalapitiya & Worrall 2013), hope (Lawton et al., 2018<sup>b</sup>; Worrall, Davidson, Hersh, Ferguson, Howe & Sherratt 2010) and treatment outcomes (McLellan, McCann, Worrall & Harwood, 2014). It has been suggested that the provision of a warm, caring empathetic therapeutic approach, utilising positive communication provides the synergistic context for effectively managing the psycho-social and existential consequences associated with the communication disorder (Fourie, 2009).

Although previous findings have sought to elucidate the phenomenon of therapeutic alliance from the perspective of people with aphasia (PWA) (Lawton et al., 2018<sup>b</sup>), these

findings have been limited to those with mild to moderate aphasia and, as such, do not capture the viewpoints of those who have more severe language deficits. Additionally, there is a lack of understanding about which components of the alliance are critical to alliance development, as opposed to optional. This study aims to explore which aspects of the therapeutic alliance are important to people with aphasia during speech-language pathology post stroke, using a Q methodology design.

### *Q methodology*

Q methodology was selected because it allows the researcher to systematically and empirically explicate subjective viewpoints (Brown, 1993) and is ideally suited to research aiming to capture a wide and diverse range of opinions. Q methodology was first invented by William Stephenson in 1935 and is rooted in factor analytic theory (Watts & Stenner, 2012). It has been described as a *quali-quantilogical* approach, since it is neither a qualitative nor quantitative method but benefits from the integration of both of these approaches (Stenner & Stainton Rogers, 2004). In contrast to questionnaire data, Q methodology does not seek to make claims about the percentage of people expressing a given opinion; rather it aims to explore similarities and differences between expressed viewpoints. Therefore, the focus is not on the participant as the 'constructor' but on the 'constructions' themselves (expressed viewpoints) (Stainton Rogers, 1995). Q methodology has been applied extensively to the fields of psychology and the social sciences and more recently, to healthcare (Akhtar-Danesh, Baumann & Cordingley, 2008; Hill, Mason, Poole, Vale, Robinson & Team, 2017), but its applications to aphasia rehabilitation have been limited (Zraick & Boone, 1991). However, this methodology is ideally suited to exploring the

opinions of those people with very limited speech, who have previously been excluded from research, because it does not rely on verbal expression.

Q methodology involves participants rank ordering a set of items (usually viewpoints about a given topic), termed a Q set, according to a subjective dimension, such as most agree to most disagree or most important to most unimportant, placing the statement cards hierarchically on a grid, shaped in a quasi-normal distribution (Figure 1). This forces participants to discriminate between priorities. The resultant ranking or Q sorting provides the researcher with a configuration of the participant's viewpoint, termed a Q sort (Watts & Stenner, 2012). A by-person correlation and factor analytic procedure is then employed to identify commonalities and divergences in people's opinions. Rather than identifying relationships between tests or variables, by-person factor analysis seeks to identify shared ways of thinking amongst participants. It does this, by comparing each individual Q sort with the other Q sorts to see how the placement of statements across individuals overlaps. This allows repeated or common patterns to emerge across the Q sorts. For example, in a recent Q methodology study examining nursing practice in stroke units, four groups of nurses were found to share similar beliefs regarding their role and practice on stroke units (Clarke & Holt, 2015). One group perceived that it was important to integrate rehabilitation principles into routine nursing care. In contrast, a second group felt that physical care should supersede rehabilitation principles, whilst a third group were cautious about nurses involvement in rehabilitation. A fourth group advocated supporting the wider stroke team to provide stroke care.

### *Ethical approval*

Ethical approval was obtained from the Health Research Authority, Research Ethics Committee in the UK, reference 14/NW/0179, in addition to permissions from research and governance departments at individual National Health Service (NHS) sites, prior to the commencement of the study.

### **Method**

A two-stage design was adopted, following Stephenson (1935) and Watts and Stenner (2012): 1) development of a Q set, 2) data collection: Q sorting.

#### Phase 1: Development of the Q set

The Q set is a representative sample of an opinion domain and is developed from an expansive database of information about the topic, reflecting a diverse range of opinions, termed the Q concourse (Stenner & Watts 2012). The Q concourse, in this study, was derived from three main sources: 1) a meta-ethnographic systematic review in stroke rehabilitation (Lawton et al., 2016); 2) interviews with people with aphasia and speech-language pathologists about their experiences of developing and maintaining therapeutic alliances in aphasia rehabilitation (Lawton et al., 2018<sup>a</sup>; Lawton et al., 2018<sup>b</sup>); and, 3) therapeutic alliance literature and measurement in the fields of mental health, rehabilitation and medicine.

In total, 453 items, focusing on aspects of the therapeutic alliance valued by professionals and patients were extracted from these sources by the first author. Any Q set aims to contain a set of items which are broadly representative of the opinion domain (Watts & Stenner, 2012) so that participants can respond in a way that aligns with their own viewpoint. Items are therefore included which allow diverse opinions to emerge and do not bias or push participants to assuming particular viewpoints. In order to identify a representative Q set in this study, the 453 items relevant to the therapeutic alliance were reorganised into categories. Items with similar meanings were grouped together, leading to the development of nine key themes: connection, responsiveness, expectations, collaboration, congruence, readiness, family, sharing information and therapeutic competence. Irrelevant, repetitive or ambiguous statements or constructs were withdrawn, where it was agreed via consensus by the research team. Items were systematically sampled from the whole data set by the research team, resulting in the formation of an unstructured data set. Thus, item selection was based on the item's conceptual relevance to the research aims (unstructured data set), rather than on a preconceived number relative to each theme (structured data set). For example, five items were selected under the theme collaboration, whereas only two items were selected under the theme expectations, consistent with the findings from qualitative research (Lawton et al., 2018<sup>a</sup>; Lawton et al., 2018<sup>b</sup>). The size of the Q set was minimised to make the sorting task accessible for PWA. Therefore, statements were often broad to cover a larger semantic domain, ensuring that conceptual balance was retained within the Q set. For example 'My therapist explains things clearly', covered understanding: the nature of stroke and aphasia, what to expect in therapy, why you are doing something. 40 statements were subsequently identified which were representative of the expansive discourse. Adaptions were made to the statements within the Q set to



minimise linguistic complexity, via simplifying vocabulary and syntax and providing pictorial supports. Statements were written on white cards using large print and increased white space, ensuring maximal inclusion for people with aphasia. A Q set grid or response matrix containing 40 cells, equal to the number of statements, was created in a quasi-normal distribution.

The data collection method was then piloted with one speech-language pathologist, one research assistant and two people with aphasia. Participants were asked to comment on the accessibility, relevance and repetition of statements. A further two statements were removed, as they lacked relevance to the research question, resulting in the final 38 item grid or response matrix (Figure 1). Pictorial supports were also removed because PWA reported that they were often ambiguous due to the abstract nature of the phenomenon under investigation.

### *Recruitment*

Participants were eligible for inclusion if they: 1) had a diagnosis of aphasia caused by a stroke; 2) had experience of at least four sessions of aphasia rehabilitation in the last two years; 3) spoke English as their main language prior to the onset of stroke; 4) had adequate receptive language, as assessed on the Western Aphasia Battery revised (WAB-R) (scoring:  $\geq 6$  on auditory verbal comprehension,  $\geq 5$  sequential commands); and 5) were aged 18 or above. Participants were excluded if they had deficits in vision, cognitive skills or hearing which impacted on their ability to participate in Q sorting.

People with aphasia who had participated in interviews about their experiences of therapeutic alliance development (Lawton et al., 2018<sup>b</sup>), and had consented to be contacted, were invited, via e-mail or post, to take part in the study. Ten people with aphasia, who had taken part in interviews, participated in the study, out a possible 18 who were invited.

Further purposive sampling was employed to identify participants who met the inclusion criteria. Speech-language pathologists (SLTs), who specialised in stroke rehabilitation, from 14 NHS Trusts within a 90 mile radius of the field researcher (ML) were contacted via e-mail and asked to distribute summary information about the study to all eligible individuals. All referring SLTs obtained a written consent form from participants for the research team to make contact. Participants were then visited by the first author and given detailed verbal and written information, which had been both pictorially and syntactically adapted to optimise accessibility for people with aphasia (Rose, Worrall, Hickson & Hoffman 2011). Participants were assessed on the WAB-R bedside screen to determine eligibility. All participants provided written consent prior to taking part in the study. Further purposive sampling was employed in the latter stages on the study to identify participants with more profound language difficulties to ensure that the viewpoints of people with a range of aphasia severity were represented in the sample. Thus, referring therapists were asked to approach potential participants who had more limited expressive language skills. In total, 23 participants were recruited across five different NHS trusts in the North West of England. The number of participants was deemed acceptable, given that the objective in Q

methodology is to explicate and compare viewpoints, not to generalise findings to a wider population (Brown 1980; Watts & Stenner, 2012). No participants were excluded.

#### Phase 2: Data collection: Q sorting

The purpose of ranking items in terms of importance (Q sorting) was to reveal participants' subjective viewpoints in relation to which aspects of the therapeutic alliance they valued the most and least. All participants were seen on a face-to-face basis in their own home by the first author. Participants were assessed on the WAB-R and demographical data were recorded. The purpose of Q sorting was reiterated to all participants. Participants were then given 38 shuffled cards. The participant or the field researcher (ML), an experienced SLT, read through the Q sort statements carefully to ensure participants understood each statement. Supportive communication techniques, such as the use of gesture, pictures and keywords, were employed to facilitate understanding of statements (Kagan, Black, Duchan, Simmons-Mackie & Square, 2001). Examples were used and participants were encouraged to think about how each statement related to their own experience. Participants were then instructed to place each card into one of three piles based on whether: 1) the statement was *important* to them; 2) the statement was *less important* to them; or, 3) they felt *unsure* about how important it was to them.

Although recognising that dimensions should ideally run from most important to most unimportant, allowing for items of low importance to gather towards the centre (Stenner & Watts, 2012), the terms used at the top of the sorting diagram needed to be accessible for

PWA; 'less important' and 'more important' at each end of the sorting diagram encouraged participants to differentiate between the two ends of the spectrum and to place those items which were neither important nor unimportant in the middle space.

Participants who placed a large number of cards in the important pile were then instructed to sort those cards into three further piles: 1) *important*; 2) *very important*; or, 3) *very, very important*. Sorting was supported by verbal instruction, written text and pictorial representation. Participants were then given statements from the important (or very, very important) pile and were asked to select two statements which were the most important to them from that pile. Statements were reread and explanations provided as necessary. These two statements were then placed at the far right hand side of the response matrix (Figure 1, column ++++). Participants were then asked to select the next three most important statements from the pile and place them in the adjacent column (Figure 1, column +++ ) and so on, until they had placed all the statements from the important pile onto the response matrix. They were then asked to select the statements which they had placed in the less important pile and identify two statements which were the least important. These statements were subsequently placed at the far left hand side of the response matrix (Figure 1, column ----). They were then asked to select the next three items that were the least important from the pile and place them in the adjacent column (Figure 1, column ---) and so forth, until all of the cards from the less important pile had been placed on the matrix. Finally, participants were asked to place the statements from the unsure pile in terms of importance in the remaining gaps on the matrix. Participants were given the opportunity to review the matrix and move statements in relation to other statements, until

they were satisfied that the ranking reflected their views. Photographs were taken of the final Q sort and ascribed to a participant identifier. Participants were seen on two separate occasions to complete the WAB-R assessment and Q sorting, which took up to one hour respectively. Qualitative data relevant to the Q set were recorded during the process and participants were asked to comment, where able, on their ranking, particularly in relation to those statements which were the most or least important.

### *Q-analysis*

Twenty three Q sorts were analysed by the first author using PQmethod (Schmolck 2014), a software package which employs a by-person analysis design to identify similarities and differences across participants' perspectives. Participants who have similar views (evidenced by similar rankings of items on the Q sorting) will load onto the same factor. Therefore a factor represents an underlying grouping or pattern in the data set, which in Q methodology typifies a similar way of thinking about a given topic. Q analysis involved four phases: 1) factor extraction; 2) factor rotation; 3) preparation of factor estimates and factor arrays; and, 4) factor interpretation. The first phase involved extracting factors using centroid factor analysis in PQmethod, allowing the researcher to explore all potential solutions through rotation (Watts & Stenner 2012). Factors satisfying the following criteria were then selected for extraction:

- 1) factor eigenvalues (EVs)  $\lambda > 1$  following Kaiser-Guttman's criterion (Guttman, 1954; Kaiser, 1960)

- 2) two or more significant factor loadings present following extraction (Humphrey's rule) (Brown, 1980)
- 3) observed EVs exceeding the 95<sup>th</sup> percentile EVs, when subjected to parallel analysis (Horn, 1965). Parallel analysis calculates the resultant EVs from a data set if participants had ranked their Q sorts completely randomly (Stenner & Watts, 2012). Our observed (unrotated) EVs are then compared to the 95% centile EVs for 1000 random data sets. As such, it is expected that the observed EVs exceed the 95% percentile EVs and it is concluded that there is a less than 5% chance that the observed EVs could have occurred randomly in the data set.

A five factor solution satisfied all three criteria. Factors were subsequently rotated, using a varimax procedure in PQmethod (phase 2). Varimax rotates the factors according to statistical criteria, positioning the factors to account for the maximum amount of study variance (Watts & Stenner 2012). Q sorts were then identified which most closely approximated or exemplified the factor's viewpoint (phase 3). Q sorts possessing a factor loading of 0.42 (significant factor loading) or greater, at  $p > 0.01$ , were selected for inclusion. Confounding Q sorts (those Q sorts loading onto more than one of the study's factors) were excluded. Factor arrays or factor exemplifying Q sorts were generated, which represented a single Q sort typifying the factor's viewpoint (Table 1). Z scores are converted to a value or rank in line with the original format of the data. Therefore items with the two highest z scores are ranked +4 and the items with the lowest z scores are ranked -4 and so on. Factor arrays allow the viewpoints to be viewed as a whole. The factor arrays form the basis for factor interpretation (Watts & Stenner 2012). Interpretation involved creating *crib sheets*

from the factor arrays (Watts & Stenner 2012), detailing items which were ranked higher (+4, +3) and lower (-4,-3), and items which were either ranked higher or lower in comparison to any other factor (phase 4). The first author then revisited each omitted item and considered their relevance to the overall viewpoint and whether these items contributed further to the interpretation of a given viewpoint. Qualitative data and demographical information were used to support and contextualise factor interpretation. Factors were then given titles which reflected their content. Factors were subsequently reviewed by two members of the research team (GH, PC) to ensure factor interpretations were consistent with the data (factor arrays and qualitative findings).

## Results

A five factor solution explained 55% of the variance, accounting for 18 of the 23 Q sorts (4 Q sorts were confounding, 1 was non-significant). Loading participants' summary information is provided in Tables 2-6 for the five factors respectively. Analysis resulted in a five factor solution: factor 1: *acknowledge me, help me to understand*; factor 2: *respect me, listen to me*; factor 3: *challenge me; direct me*; factor 4: *understand me, laugh with me*; and, factor 5: *hear me, encourage me*.

Insert Table 1 about here

*Factor 1: Acknowledge me, help me to understand*

Insert table 2 about here

Factor 1 has an eigenvalue of 4.94 and explained 13% of the study variance. Five participants loaded significantly on to this factor, with a mean age of 69.6 years (range 54-70 years). The average time post stroke onset was 23.4 months (range 4-48 months), with participants receiving an average of 4.8 months of speech-language pathology input (range 2-8 months). The mean aphasia quotient (AQ) for participants loading onto factor 1 was 63.96 (range 24.8-89.8). Aphasia severity was categorised as very severe (n=1), severe (n=1) and mild (n=3).

Seeing the same therapist (23:+4) within my own home (13:+1) is important for me, to be able to trust my therapist (2:+3) and feel comfortable (3:+2). This context provides the bedrock for self-disclosure and allows me to tell my therapist things that might be worrying me (22:0). Similarly, it is far more important for my therapist to assume a caring approach (12:+3) as opposed to a formal (7:-3) or firm approach (20:-4) in therapy delivery. In fact, the therapist's competence is unimportant (28:0). Whilst I think it is important that I like my therapist (1:+2), I do not particularly want my therapist to be my friend (25:-3) and it does not concern me that we have shared interests or commonalities which bind us (6:-2).



## Alliances in aphasia rehabilitation

For me, it is important for the therapist to acknowledge my competence, by recognising my intelligence (10: +4), explaining things clearly (27:+3) and supporting me to have my say (36:+1). In being recognised as a competent dyadic member and taking ownership of my therapy, my family's involvement and the therapist's relationship with family members assumes less importance (15:-4, 16:-3): "*It was my therapy*" (P20). It is less important for my therapist to give me hope (32:-1) or encouragement (18:-1), since readiness to commit to therapy resides with me (31:+2). Likewise, working on things that are important to me is relatively unimportant (34:0).

### *Factor 2: Respect me, listen to me*

Insert Table 3 about here

Factor 2 has an eigenvalue of 3.8 and explained 10% of the study variance. Participants average age was 60 years (range 45-69 years). All participants within this factor were classified as having mild aphasia (AQ >76), with a mean AQ of 87.25. Participants loading onto factor 2 had received an average of 20.25 months of speech-language pathology interventions, with stroke onset ranging from 12 to 67 months (mean=43.25).

## Alliances in aphasia rehabilitation

It is important that my therapy goals are personally relevant and I am working on things that are important to me (34:+3), which is dependent on my therapist listening to me (9: +3) and getting to know me (5:+1). However, it is not important that my therapist and I make this plan together (37:-3). Although I would not advocate that my therapist adopts a formal approach (7:-4), I also do not think it is important for my therapist to be my friend (25:-4). Familial involvement in therapy is crucial (16:+3), whilst relational elements of the alliance such as caring (12:-1) or showing empathy (14:0) are less important to me: “not needed, I have my family and friends for support” (P4). It is important that the therapist is prepared (30:+2) and shows me respect, by being honest about my recovery (33:+4), being non-judgemental (11:+1) and recognising my intelligence (10:+4). My own readiness for therapy is relatively unimportant (31:-2), as is the therapist’s reliability (21:-1) or the privacy associated with the therapeutic setting (26:-3).

### *Factor 3: Challenge me, direct me*

Insert Table 4 about here

Factor 3 had an eigenvalue of 4.56 and explained 12% of the study variance. Participants loading significantly on to this factor presented with mild aphasia (mean AQ=90.23). Participants’ average age was 67 years and they had attended speech-language pathology for an average time of 4.3 months (range 4-5 months). Time post onset of stroke ranged from 4 to 20 months (mean 9.67 months).

The therapist's technical and professional competence are crucially important to me, in contrast to other aspects of the alliance. As such, it is important that the therapist knows what they are doing (28:+4), that they are prepared (30:+1) and that therapy is targeted at the right level for me (29:+4). It is important for my therapist to be firm with me (20:+2) and challenge me within my abilities (19:+3; 29:+4). Likewise, it is essential that I receive honest feedback about my recovery (33:+3), but that this be balanced by instilling hope for future change (32:+3).

It is important to me to be able to engage collaboratively with my therapist, making a plan together (37:+2), but also that I feel comfortable enough with my therapist (3:+2) to be able to disagree with him/her (38:+1). Provision of emotional support is less important for me. Indeed, neither being able to confide in my therapist (22:-3) or that my therapist understands what I'm going through (14:0) are important. Similarly, a trusting connection (2:0), characterised by liking (1:-2) and active listening (9:0) within a caring ethos (12:-1) are unimportant. Indeed, these "soft" elements of speech-language pathology, liking and caring are: *"not crucial to therapy, although they are nice"* (P12). However, I strongly feel that my therapist should not be overtly formal (7:-4). For me, being given more time (4: -1) and support to help me express my opinions (36:-2) are unimportant. Both my family involvement and the relationship my family has with the therapist are of less importance to me (15:-4, 16:-3).

*Factor 4: Understand me, laugh with me*

Insert Table 5 about here

Factor 4 had an eigenvalue of 3.8 and explained 10% of the study variance. Participants loading significantly on to factor 4 presented with very severe (n=1), severe (n=2) and moderate aphasia (n=1) (mean AQ=45.7). Participants in this factor had an average age of 65 years and had received an average of 18.5 months of aphasia rehabilitation. Time post onset of stroke ranged from 5 to 44 months at participation (mean=22.5).

Enjoyment of therapy is important to me, not only that I look forward to therapy (24:+2) but that I am able to have a laugh (17:+3) and like my therapist (1:+2) or even that my therapist becomes my friend (25:+1). *“It was hard at the beginning. I couldn't say anything...just have a laugh is the main thing.”(P13)*. It is important that my therapist motivates me by giving me hope (32:+4) and encouragement (18:+3) during therapy sessions; however my own readiness for therapy is also a key driver for recovery (31:+3). For me, it is important that my therapist gives me honest information about my recovery (33:0). It is not about the therapist directing therapy at the right level (29:-2), feeling challenged sufficiently (19:-2) or the therapist being prepared (30:-1). Rather, it is vitally important that my therapist understands what I'm going through (14:+4). It is not particularly important that my

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therapist assumes a non-judgemental position (11:-4) or even that the therapist listens to me (9:0). Although it is important for me to like my therapist (1:+2), it is less important for me to see the same therapist (23:-3).

It is important that this emotional bond is extended to my family and that the therapist also gets along with them (15:+2). It is not important that my therapist decides what we are doing (35:-3) or that we make a plan together (37:-1), but rather that the things we work on are important to me (34:+1). Likewise, being able to disagree with my therapist (38:-3) is unimportant. The significance of the emotional bond for me means that formality has very little value (7:-4).

### *Factor 5: Hear me, encourage me*

Insert table 6 about here

Factor 5 had an eigenvalue of 3.8 and explained 10% of the study variance. Participants loading significantly on to this factor presented with moderate (n=2) and mild aphasia (n=1), with a mean AQ of 74.5. Participants had an average age of 59.7 years and had received, on average, 17.3 months of aphasia rehabilitation. Time post onset of stroke ranged from 34 to 50 months (mean=36.3).

A sense of being heard (9:+4) is of central importance to me and is dependent, in part, on not rushing me (4:+2). For me, the provision of a caring and empathetic climate (12:+3, 14:+2) is fundamental to alliance development. A personal liking, friendship or knowledge of the therapist as a person, however, is unimportant (1:-1, 8:-3, 25:-4). Similarly, humour in the therapeutic context is not important to me (17:-1) nor is the need to know about the trajectory of my recovery (33:-2). *"I didn't want to know that full recovery wasn't going to happen in the early stages, it would have been too much"* (P1). Encouragement is of paramount importance to me (18:+4) and has a greater motivational influence than my own readiness (31:0) or the therapist knowing how far to 'push me' (19:0). I also value my therapist's support in helping me to express my opinions (36:+1).

For me, professional attributes such as reliability (21:+3) and therapeutic preparedness (30:+1), alongside a degree of formality (7:-1) are important. Similarly, the maintenance of privacy is salient to me (26:+3), although conducting therapy within the home setting is far less important (13:-4). It is important to have a degree of guidance from my therapist in determining the direction of therapy (35:+1, 37:0), however, therapy goals need to be personally relevant to me (34:+2). Familial involvement or the therapist's relationship with the family (15:-3, 16:-3) are unimportant.

## Discussion

The aim of the study was to explore which aspects of the therapeutic alliance are important to people with aphasia using a Q methodology design. Although the findings are not representative of all people with aphasia's viewpoints about the therapeutic alliance, for these participants with aphasia, five dominant and distinct viewpoints emerged from the 23 completed Q sorts. The data highlight the need for clinicians to adopt a flexible and person-centred approach to therapeutic alliance construction to meet the needs of individuals within a heterogeneous population. Certainly those clinicians who are able to readily adapt their behaviour and communication style to align with those of the patient are thought to be more successful at building relationships (Slingsby 2006).

The findings importantly reveal that people with varying degrees of aphasia are able to express their views about which aspects of the therapeutic alliance they value, through Q sorting. Q sorting is a non-threatening method, since there is no testing involved or demands on expressive language, "nor does it impose meaning *a priori*" (Watts & Stenner, 2005 p74) and so it is ideally suited to explicating novel phenomenon, particularly with people with a communication disability. Indeed, Q sorting not only encouraged reflection, but allowed participants to consider aspects of the alliance which they may not have considered before. In the current study, many participants reported that they enjoyed participating in Q sorting and valued being asked about their viewpoints. Likewise, all participants were able to complete the process of Q sorting with support from the field

research, despite the complexity and abstract nature of the topic under investigation. This suggests that this user-friendly and engaging tool may not only have further applications in researching subjectivity with this population, but it may also be a valuable tool in clinical practice, helping PWA identify priorities both in terms of rehabilitation and life goals. The results are important in demonstrating that PWA have distinct and varied views in relation to which aspects of the alliance they value. The data highlight the contrastive and diverse relational needs of PWA and emphasise the importance of adapting a flexible therapeutic approach in order to meet those needs, creating a therapeutic milieu conducive to therapeutic working.

Interestingly, the findings suggest that certain elements of the therapeutic alliance were valued by PWA with more severe aphasia as opposed to those with mild aphasia. Those with more severe aphasia (loading onto factor 4), who also attended therapy for longer periods of time, valued therapeutic empathy, enjoyment of therapy and hope. People feel both alienated and demoralised following the onset of communication difficulties and therefore value therapists' attempts to enter their world (Fourie 2009; Lawton et al., 2018<sup>b</sup>). Indeed, the ability of a therapist to impart a sense of understanding is perceived by people with speech and language deficits to counter those existential sequelae associated with the communication disability (Fourie 2009).

In contrast, exemplars loading onto factor 3 with mild aphasia, who attended therapy for shorter periods of time, valued technical and professional competence, therapeutic



challenge and firmness. It could be posited then that personhood assumes more importance for those with greater rehabilitation needs, attending therapy for longer periods of time.

However, further research is required to explore whether it is the severity of the aphasia as oppose to the severity of the disability which impacts on individuals' alliance needs. This is not to ignore the fact that PWA will have specific individual relational and interaction preferences (exemplified in factors 1, 2 and 5), but rather, provides a strong rationale for working relationally attending to the psychosocial needs of those with more complex needs and long term disabilities.

Collaboration did not emerge as key to participants in the present study, despite its predominance in psychotherapeutic conceptualisations and national stroke guidelines (Elvins & Green 2008; National Clinical Guidelines for Stroke, 2016). It may be that genuine collaboration is a process in which the therapist listens carefully to the person's narrative and identifies goals concordant with individual priorities, rather than a process in which the PWA assumes active decision making (Lawton et al., 2018<sup>b</sup>). Certainly the current findings support this contention, since being heard was central to understanding what participants valued (factors 5 & 2). Likewise, patients in medical settings value human connectedness over empowerment and activation (Wolf, Moore, Lydahl, Naldemirci, Elam & Britten, 2017). These findings challenge the current healthcare agenda, which focuses on patient centred decision-making, suggesting that collaboration may need to take a *back seat*, to make room for relational practices in line with patient preference. Clinicians need to not only prioritise the therapeutic alliance but also become more relationally aware, by engaging in reflective practice and activating the use of self.

Acknowledgment of the person's intelligence was central to understanding factor 1's viewpoint and important to participants loading onto factor 2. This finding can be understood from the participant's contextual frame of reference, in which the onset of aphasia can challenge both self-identity (Shadden 2005) and personal competence (MacKay 2003). It is perhaps unsurprising then that acknowledgment of intelligence assumed great importance for people with aphasia, since it may be closely linked to self-identity and competence, particularly for those people with communication disability. The current findings suggest that clinical applications need to consider approaches aimed at explicitly recognising individual competence in order to build successful alliances.

Participants loading onto factors 1 and 2, with a range of aphasia deficits, did not want their therapist to be their friend, but equally did not endorse formality, indicating that they had a covert awareness of what level of relational proximity was acceptable, despite professionals suggesting that boundaries are often nebulous (Lawton et al., 2018<sup>b</sup>). Similarly, across all factors, neither friendship nor getting to know their therapists on a personal level were deemed to be crucial to alliance construction. This contrasts with earlier qualitative findings in aphasia rehabilitation in which some very close professional relationships were often synonymous with friendship (Hersh 2010; Lawton et al., 2018<sup>b</sup>). The current results suggest that PWA, loading onto factors 1 and 2, valued a *middle ground*, balancing professionalism with humanity.

The importance of receiving honest feedback about their recovery was central to the therapeutic alliance for participants loading onto factor 2, a finding resonating with earlier qualitative research with people with aphasia (Lawton et al., 2018<sup>b</sup>). It appears that this was particularly important for people with milder impairments, since participants presenting with milder aphasia, loading onto both factor 2 and 3, valued honest feedback in relation to their recovery (33:+4,+3 respectively). The current findings suggest that the preservation of hope in recovery may supersede the need to receive honest feedback concerning the trajectory of recovery in the face of more severe impairments. This is certainly evident for participants loading onto factor 4, in which those with more severe impairments show a preference for hope over realism. However, further in-depth research is required to explore this potential association.

Participants loading onto factor 4 prioritised the enjoyment of therapy and more specifically the importance of humour. Although humour is not central to psychotherapeutic constructs of the therapeutic alliance (Bordin, 1979; Elvins & Green, 2008), in aphasia rehabilitation, humour can foster solidarity and togetherness between dyadic agents (Simmons-Mackie & Schultz 2003). Within this function, humour can provide a shared experience or focus and a platform for equalising interactions, thereby fostering affiliation (Simmons-Mackie & Schultz, 2003). Humour appears to function in this factor not as a mechanism for facilitating equity but rather as part of the process of enjoying therapy, thereby promoting engagement. Enjoyment of therapy is central to paediatric SLT (Fourie, 2011) but is rarely

acknowledged in aphasia rehabilitation, highlighting the need to not only consider the transactional elements of therapy but also the interactional components.

Being heard and having a sense that the therapist was listening was highly endorsed by participants loading onto factor 5 (*hear me, encourage me*). For participants loading onto factor 5, this appeared to serve several functions, as: 1) a prerequisite to relevant and personalised goal setting; and, 2) a precursor to establishing a positive affective bond. In the context of aphasia rehabilitation, particularly impairment-based intervention, targeting linguistic symptoms only, may silence the client's voice precisely because of the focus on prompting, responding and correcting in therapy (Simmons-Mackie & Daminico 2011). This highlights the importance of acknowledging the person's lived experience (Simmons-Mackie & Daminico 2011) and leaving behind one's own preconceived expectations of the client's narrative by being open to new and alternative perspectives in the clinical context (Duchan and Leahy, 2008).

### *Strengths & Limitations*

Given that the Q sort responses are only as valid as the generated Q set (Watts & Stenner, 2012), every attempt was made to create an exhaustive set of items derived directly from PWAs subjective viewpoints (Lawton et al., 2018<sup>b</sup>) and an expansive literature search. Credibility was further enhanced by: 1) ensuring that items selected for the Q sort were reviewed by two further researchers (PC, GH) and repetitive or irrelevant items were removed if agreed via consensus; 2) conducting pilot Q sorting; and, 3) supporting

participants receptively to ensure item interpretation was consistent across Q sorts. In supporting participants understanding of verbal information, the field researcher (ML) may have influenced participants' responses, possibly biasing participants towards the researcher's own understandings. Similarly, the field researcher's position as an experienced speech-language pathologist, who had recently conducted qualitative research in the field of therapeutic alliance, could have influenced the way the factors were interpreted (Stainton Rogers 1995). To counter these effects, the researcher applied a systematic approach to factor interpretation and involved members of the research team (GH, PC) to ensure that factor interpretation was grounded with in the data. The sample size, although small (n=23), accords with recommendations for Q studies (Stephenson, 1935; Watts & Stenner, 2012) and was diverse in terms of the participants' age, severity of aphasia, duration of therapeutic input, time post stroke onset and socio-economic status. However, the researcher's presence may have led participants to make socially desirable responses. The researcher sought to counter this effect by reinforcing anonymity and providing a comprehensive range of items to emphasise that there was no 'right' way to respond.

### *Conclusions*

This is the first study to employ a Q methodological approach to studying subjectivity with people with aphasia. The current findings show that Q methodology is a viable and user-friendly method for exploring viewpoints in this population, where communication and introspection are more challenging. The findings emphasise the need for therapists to adapt to individuals' relational preferences and needs in order to foster effective therapeutic alliance construction.

Alliances in aphasia rehabilitation

Future research should focus on developing a theoretically robust measure of therapeutic alliance, which can be used to determine whether alliance has a variable impact on outcome in aphasia rehabilitation.

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## References

- Akhtar-Danesh, N., Baumann, A., & Cordingley, L. (2008). Q-Methodology in Nursing Research A Promising Method for the Study of Subjectivity. *Western Journal of Nursing Research, 30*(6), 759-773.
- Bachelor, A. (1995). Clients' perception of the therapeutic alliance: A qualitative analysis. *Journal of Counseling Psychology, 42*(3), 323.
- Barrow, R. (2011). Shaping practice: The benefits of really attending to the person's story. In R. Fourie, J (Ed.), *Therapeutic processes for communication disorders* (pp. 21-35). New York: Psychology Press.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, research & practice, 16*(3), 252.
- Bright, F. (2015). *Reconceptualising engagement: a relational practice with people experiencing communication disability after stroke*. Auckland University of Technology.  
<http://aut.researchgateway.ac.nz/bitstream/handle/10292/9754/BrightFAS.pdf?sequence=3>.  
Retrieved January 2018
- Brown, S. (1980). *Political subjectivity: Applications of Q methodology in political science*. New Haven, CT: Yale University Press.
- Brown, S. R. (1993). A primer on Q methodology. *Operant subjectivity, 16*(3/4), 91-138.
- Clarke, D. J., & Holt, J. (2015). Understanding nursing practice in stroke units: a Q-methodological study. *Disability and rehabilitation, 37*(20), 1870-1880.
- Crepeau, E. B. (2015). "I need someone to keep an eye on me:" the power of attention in patient-practitioner interactions. *Disability and rehabilitation, 1*-9.
- Crepeau, E. B., & Garren, K. R. (2011). I looked to her as a guide: the therapeutic relationship in hand therapy. *Disability and rehabilitation, 33*(10), 872-881. doi:10.3109/09638288.2010.511419
- Duchan, J., F, & Leahy, M., M. (2008). Hearing the voices of people with communication disabilities. *International Journal of Language & Communication Disorders, 43*(S1), 1-4.

- Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical Psychology Review, 28*(7), 1167-1187. doi:10.1016/j.cpr.2008.04.002
- Fourie, R. J. (2009). Qualitative study of the therapeutic relationship in speech and language therapy: Perspectives of adults with acquired communication and swallowing disorders. *International Journal of Language & Communication Disorders, 44*(6), 979-999.
- Green, J. (2006). Annotation: The therapeutic alliance - a significant but neglected variable in child mental health treatment studies. *Journal of Child Psychology and Psychiatry, 47*(5), 425-435. doi:10.1111/j.1469-7610.2005.01516.x
- Guttman, L. (1954). Some necessary conditions for common-factor analysis. *Psychometrika, 19*(2), 149-161.
- Hall, A. M., Ferreira, P. H., Maher, C. G., Latimer, J., & Ferreira, M. L. (2010). The Influence of the Therapist-Patient Relationship on Treatment Outcome in Physical Rehabilitation: A Systematic Review. *Physical therapy, 90*(8), 1099-1110. doi:10.2522/ptj.20090245
- Halldorsdottir, S. (2008). The dynamics of the nurse-patient relationship: Introduction of a synthesized theory from the patient's perspective. *Scandinavian Journal of Caring Sciences, 22*(4), 643-652.
- Hersh, D. (2010). I can't sleep at night with discharging this lady: The personal impact of ending therapy on speech-language pathologists. *International journal of speech-language pathology, 12*(4), 283-291.
- Hill, S. R., Mason, H., Poole, M., Vale, L., Robinson, L., & Team, S. (2017). What is important at the end of life for people with dementia? The views of people with dementia and their carers. *International Journal of Geriatric Psychiatry, 32*(9), 1037-1045. doi:10.1002/gps.4564
- Horvath, A. O., Del Re, A., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. *Psychotherapy, 48*(1), 9.
- Kagan, A., Black, S. E., Duchan, J. F., Simmons-Mackie, N., & Square, P. (2001). Training volunteers as conversation partners using "Supported Conversation for Adults with Aphasia" (SCA): A



controlled trial. *Journal of Speech Language and Hearing Research*, 44(3), 624-638.

doi:10.1044/1092-4388(2001/051)

Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and psychological measurement*, 20(1), 141-151.

Kertesz, A. (2007). Western Aphasia Battery Revised. San Antonio, TX: Pearson.

Lawton, H. M., Haddock, G., Conroy, P., & Sage, K. (2016). Therapeutic alliances in stroke rehabilitation: A meta-ethnography. *Archives of Physical Medicine and Rehabilitation*, 97, 1979-93

Lawton, M., Haddock, G., Conroy, P., Serrant, L., & Sage, K. (2018)<sup>b</sup>. People with aphasia's perception of the therapeutic alliance in aphasia rehabilitation post stroke: a thematic analysis. *Aphasiology*, 1-21. doi:10.1080/02687038.2018.1441365

Lawton, M., Sage, K., Haddock, G., Conroy, P., & Serrant, L. (2018)<sup>a</sup>. Speech and language therapists' perspectives of therapeutic alliance construction and maintenance in aphasia rehabilitation post-stroke. *International Journal of Language & Communication Disorders*, 53(3), 550-563.

Luborsky, L., Barber, J. P., Siqueland, L., Johnson, S., Najavits, L. M., Frank, A., & Daley, D. (1996). The Revised Helping Alliance Questionnaire (HAQ-II) : Psychometric Properties. *The Journal of Psychotherapy Practice and Research*, 5(3), 260-271.

Mackay, R. (2003). 'Tell them who I was' 1 : the social construction of aphasia. *Disability & Society*, 18(6), 811-826. doi:10.1080/0968759032000119532

Maclean, N., Pound, P., Wolfe, C., & Rudd, A. (2002). The concept of patient motivation: a qualitative analysis of stroke professionals' attitudes. *Stroke (00392499)*, 33(2), 444-448.

Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68(3), 438-450. doi:10.1037//0022-006x.68.3.438

- McLellan, K. M., McCann, C. M., Worrall, L. E., & Harwood, M. L. (2014). Māori experiences of aphasia therapy: "But I'm from Hauti and we've got shags". *International journal of speech-language pathology, 16*(5), 529-540.
- Palmadottir, G. (2006). Client-therapist relationships: Experiences of occupational therapy clients in rehabilitation. *The British Journal of Occupational Therapy, 69*(9), 394-401.
- Rogers, C., R. (1967). *On becoming a person: A therapist's view of psychotherapy*. London: Constable.
- Royal college of physicians: Intercolligate stroke working party (2016). *National Clinical Guideline for Stroke*. 5. Retrieved from [www.strokeaudit.org](http://www.strokeaudit.org) on 15<sup>th</sup> November 2017
- Schmolck. (Mar 2014). PQMethod (Version 2.35). Retrieved from <http://schmolck.userweb.mwn.de/qmethod/downpqwin.htm>
- Shadden, B. B. (2005). Aphasia as identity theft: Theory and practice. *Aphasiology, 19*(3-5), 211-223. doi:10.1080/02687930444000697
- Simmons-Mackie, N., & Damico, J. S. (2011). Exploring clinical interaction in speech-language therapy: Narrative, discourse and relationships. *Therapeutic processes for communication disorders, 35-52*.
- Simmons-Mackie, N., & Schultz, M. (2003). The role of humour in therapy for aphasia. *Aphasiology, 17*(8), 751-766. doi:10.1080/02687030344000229
- Slingsby, B. T. (2006). Professional approaches to stroke treatment in Japan: A relationship-centred model. *Journal of Evaluation in Clinical Practice, 12*(2), 218-226.
- Stainton Rogers, R. (1995). Q methodology. In J. Smith, A, R. Harre, & L. Van Langenhove (Eds.), *Rethinking methods in psychology* (pp. 178-192). Thousand Oaks; CA: Sage.
- Stenner, P., & Stainton Rogers, R. (2004). Q methodology and qualiquantology: the example of discriminating between emotions. . In B. Todd, S. Nerlich, D. McKeown, & D. Clarke (Eds.), *Mixing methods in psychology: the integration of qualitative and quantitative methods in theory and practice*. New York: Psychology Press.

- Stephenson, W. (1953). *The study of behavior; Q-technique and its methodology*. Chicago, IL, US: University of Chicago Press.
- Tomkins, B., Siyambalapitiya, S., & Worrall, L. (2013). What do people with aphasia think about their health care? Factors influencing satisfaction and dissatisfaction. *Aphasiology, 27*(8), 972-991.
- Watts, S., & Stenner, P. (2005). Doing Q methodology: theory, method and interpretation. *Qualitative research in psychology, 2*(1), 67-91.
- Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory method and interpretation*. London: Sage publications.
- Wolf, A., Moore, L., Lydahl, D., Naldemirci, Ö., Elam, M., & Britten, N. (2017). The realities of partnership in person-centred care: a qualitative interview study with patients and professionals. *BMJ Open, 7*(7). doi:10.1136/bmjopen-2017-016491
- Worrall, L., Davidson, B., Hersh, D., Ferguson, A., Howe, T., & Sherratt, S. (2010). The evidence for relationship-centred practice in aphasia rehabilitation. *Journal of Interactional Research in Communication Disorders, 1*(2), 277-300.
- Zraick, R. I., & Boone, D. R. (1991). Spouse attitudes towards the person with aphasia. *Journal of Speech and Hearing Research, 34*(1), 123-128.

## Figures

Figure 1: 38 item response matrix