

Outcome Measure	Adapted Kagan Scales for TBI interactions: Measure of Support in Conversation and Measure of Participation in Conversation
Sensitivity to Change	Yes
Population	Adult
Domain	Language and Communication
Type of Measure	Objective test
ICF-Code/s	d3
Description	<p>The Adapted Measure of Participation in Conversation (MPC) examines the ability of the individual TBI to participate in the interactional and transactional elements of conversation (Togher et al., 2010). The Adapted MSC rates the uninjured communication partner's ability to: (i) acknowledge and (ii) reveal communication competence of the individual with TBI. The original measures were designed to reduce the focus of ratings solely on the person with aphasia and represent the person in the context of another, along with the degree of support their communicative partner provides, with the adapted measures modified for individuals with TBI.</p> <p>Administration of the Adapted Measure of Participation in Conversation (MPC) and Measure of Support in Conversation (MSC) scales involves a rater scoring a 10-minute videotape of a social interaction between the person with TBI and their communication partner on several 9-point Likert scales, presented as a range of 0–4 with 0.5 levels for ease of scoring. The scale ranges from 0 (no participation) through 2 (adequate participation) to 4 (full participation in conversation).</p> <p>The MPC and MSC each contains 2 subscales that are composed of 2-3 elements that are scored separately and averaged to give the score for the subscale.</p> <p>The two MPC subscales include: Interaction (verbal and non-verbal) and Transaction (verbal and non-verbal); while the MSC subscales include: Acknowledging Competence (Natural adult talk appropriate to context and Sensitivity to partner) and Revealing Competence (Ensuring the adult understands, Ensuring the adult has a means of responding, and Verification).</p>
Properties	<p>Excellent inter-rater agreement was established on the MSC (ICC = 0.85–0.97) and the MPC (ICC = 0.84–0.89). Intra-rater agreement was also strong (MSC: ICC = 0.80–0.90; MPC: ICC = 0.81–0.92). Over 90% of all ratings scored within 0.5 on a 9-point scale. The ICC ratings were comparable with those reported by Kagan et al. (2001, 2004).</p> <p>Psychometric data for the original Kagan scales (Kagan et al., 2004) indicated the robust nature of this measure when evaluating the interactions of people with aphasia and volunteer conversational partners</p>

	<p>– with inter-rater reliability on the Patient Participation (MPC) and Partner Support (MSC) Measures also ranging between .91 and .96 ($p < .001$).</p> <p>Construct validity for the original scales was measured by correlating informal clinical judgements by speech pathologists of communicative proficiency with MPC and MSC ratings on 10 individuals with aphasia. There was a significant positive correlation between informal clinical judgement and scores on all categories of the measures for both raters (rater 1: rho ranged from .87 to .95, $p < .01-.001$; rater 2: rho ranged from .83 to .88, $p < .001-.003$).</p>
Advantages	The Adapted MPC and MSC scales is a new way of examining communication partner contributions to TBI interactions, as well as the participation of the individual with TBI.
Disadvantages	Complex scale – requires training – up to approximately 10 hours to achieve reliability
Additional Information	<p>Togher et al. (2010) sought to adapt the MSC and MPC to capture the specific conversational supports that were relevant to TBI interactions due to a paucity of measures to evaluate the contributions of communication partners in addition to those of the person with TBI.</p> <p>The original MSC and MPC scales were developed for use with volunteers in conversations with people with aphasia (Kagan, Black, Duchan, Simmons-Mackie, & Square, 2001; Kagan et al., 2004). Development of the Adapted MPC and MSC scales occurred in four stages: Stage (1) Behavioural descriptors from Ylvisaker et al.'s collaborative/elaborative approach were mapped onto the themes and categories of the original MPC/MS scales; Stage (2) Overlapping and irrelevant information to TBI was deleted to the original scales; Stage (3) Modification of descriptors and anchors as the original anchors of the scale (“very poor, adequate, and outstanding”) produced binomial results because raters had difficulty differentiating “adequate” and “outstanding”. Anchors were changed to: MPC: “No participation / Some participation / Full participation”. MSC: “Not supportive / Basic skill in support / Highly skilled support”. Stage (4) the final adapted versions were developed after group discussion between the authors and pilot testing on 40 conversational samples of people with TBI from previous studies.</p>
Reviewers	Leanne Togher Kimberley Docking

References

- Togher, L., Power, E., Tate, R., McDonald, S. & Rietdijk, R. (2010). Measuring the social interactions of people with traumatic brain injury and their communication partners: The adapted Kagan scales, *Aphasiology*, 24 (6–8), 914–927.
- Kagan, A., Black, S. E., Duchan, J. F., Simmons-Mackie, N., & Square, P. (2001). Training volunteers as conversational partners using “Supported Conversation with Adults with Aphasia” (SCA): A controlled trial. *Journal of Speech, Language and Hearing Research*, 44, 624–638.
- Kagan, A., Winckel, J., Black, S., Duchan, J. F., Simmons-Mackie, N., & Square, P. (2004). A set of observational measures for rating support and participation in conversation between adults with aphasia and their conversation partners. *Topics in Stroke Rehabilitation*, 11(1), 67–83.