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An investigation of social activities of neurologically healthy older adults and relevance of the
Social Activities Checklist (SOCACT-2)
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Pathology

An investigation of social activities of neurologically healthy older adults and content validity of the Social Activities

Checklist (SOCACT-2)

Abstract

Purpose: This preliminary study aimed to describe the type, range, partner and frequency of social activity among neurologically healthy older people in order to evaluate the content validity of the SOCial ACTivities Checklist (SOCACT-2).

Method: Ten neurologically healthy older people were recruited. Participants' social activities were investigated through the completion of the SOCACT-2. Naturalistically occurring social activities were then recorded in a social activity diary over 28 consecutive days. Items recorded in the diaries were compared with SOCACT-2 items, and new items not included in the SOCACT-2 were noted. Frequency and location of participation was also recorded.

Results: All SOCACT-2 items were recorded in the diaries, with the exception of two. Findings suggest that another two SOCACT-2 items could be rephrased to more accurately reflect naturalistically occurring social activities, and two new categories of social activities were identified.

Conclusions: The results provide preliminary evidence for the relevance of the majority of SOCACT items. Revisions to four existing items included in the SOCACT-2, as well as the inclusion of two additional items may be indicated to capture the range of activities participated in by older people.

Introduction

Social activity is increasingly considered an important component of physical and mental health and quality of life among older people (Cruice, Worrall, & Hickson, 2006; Cruice, Worrall, Hickson, & Murison, 2003; Engelhardt, Buber, Skirbekk & Prskawetz, 2010; Levasseur, Desrosiers, & Noreau, 2004; McGue & Christensen, 2007; Toepoel, 2013). It is well-documented that social activity can be affected by life-changing health events, including those that lead to communication difficulties (Cruice et al., 2006; Dalemans, de Witte, Lemmens, van den Heuvel, & Wade, 2008; Desrosiers et al., 2006; Moeller & Carpenter, 2013; Schmid et al., 2012). While a comprehensive battery for assessment of communication impairment exists, there are few tools that specifically assess social activity suitable for use with older adults.

Older people with aphasia have been found to have fewer social contacts and leisure activities than neurologically normal adults (Cruice et al., 2006). Measuring social activity levels is important in clinical practice since factors related to social participation are modifiable (Schmid et al., 2012), and can be successfully targeted in rehabilitation. A systematic review (Dalemans et al., 2008) evaluated measures of social participation (tools/questionnaires) suitable for use with people with aphasia. Measures of social participation were deemed relevant if titles included specific guiding terms, and measures were then reviewed by six speech language pathologists who evaluated suitability for use with people with aphasia. Of the measures examined, the review found only two relevant and suitable tools; the Nottingham Extended Activities of Daily Living (Lincoln & Gladman, 1992) and the Community Integration Questionnaire (Willer, Ottenbacher, & Coad, 1994). However, both tools are more concerned with participation in life activities (e.g. work, study, volunteering) and daily tasks (meal

preparation, personal hygiene, local shopping), rather than social activities. As such, neither tool is a comprehensive measure of social activity.

The SOCial ACTivities Checklist (SOCACT-2; Cruice, 2002) is a tool designed to collect information regarding the social lives of older adults. Originally developed in 1998, the SOCACT records quantitative information about the range, frequency, and partners of social activities of an individual. The tool consists of a checklist of 20 social activities, and individuals are asked to indicate the frequency of engagement in the activity and with whom the activity is performed. There is a need to ensure we have a valid tool in research and clinical practice that can be used to explore participation, guide intervention planning, and potentially capture outcomes at the broader life impact level.

Purpose of this Study

Social activity is an important component of quality of life, and is often adversely impacted upon by life events such as acquired disability. As such, it is important to have a valid tool to measure social activity. The SOCACT was initially developed based on a literature review of relevant research and questionnaires within stroke, gerontology, and mental health fields (Cruice, 2002). Preliminary psychometrics that was recently published (Aujla, Botting, Worrall, Hickson, & Cruice, 2015) indicates that the SOCACT has acceptable known groups validity, but lacks reliability (specifically internal consistency), suggesting that ongoing evaluation of the items in the tool is warranted. To evaluate the relevance of the SOCACT, naturalistic data is required that records the actual activities in which healthy adults engage. This preliminary study aimed to:

- Characterise the nature of social activity participation in neurologically healthy older people, specifically type, range, partner, and location using the SOCACT-2 and real time diary recording;
- Compare the types of social activities engaged in with the items on the SOCACT 2 in order to determine the content validity of the SOCACT-2.

Methods

This project took place within a larger research study investigating the social activities of healthy adults in Australia and the United Kingdom. Ethics was approved by the School of Health Sciences Human Ethics Advisory Group at the University of Melbourne.

Participants

Participants were recruited initially from local community groups in a regional city (a running group, a church group, and a social group for women). The study utilised a convenience sampling method followed by snowball sampling; the three community groups were approached, and members were asked to volunteer to participate in the study, participants then identified other potential volunteers to take part. All participants were self-selected. All eligible participants were included in the study; participants were not specifically recruited according to key indicators.

Ten healthy older people (8 females, 2 males) were recruited according to the following inclusion criteria; neurologically healthy, between 50 and 70 years old, with a minimum score of 6.9 on the General Practitioner Assessment of Cognition (GPCOG; Brodaty et al., 2002), a screening tool rather than a diagnostic assessment. Participants with a history of a neurological disorder were excluded from the study. The mean age of participants was 60.7 years (range 56-65). Six participants were retired; occupations of participants who were working were engineer,

senior prison warden, massage therapist, and homemaker. English was spoken by all the participants; one participant was bilingual in Maltese and English. The mean response for the Dartmouth Cooperative Functional Assessment Charts (COOP; Eaton, Young, Fergusson, Garrett, & Kolbe, 2005) physical fitness question was 1.7 (range 1-3), with a score of 1 indicating the maximum level of fitness, and a score of 5 indicating a minimal level of physical fitness. Mean years of education was 15.7 (range 11-24 years).

All participants reported that they were in good health (with 90% of participants reporting to be in very good or excellent health). The majority of participants reported that their physical or emotional health did not limit their activities at all.

The age bracket of 50 to 70 years was chosen to investigate social activity particular to older people. While in many developed countries the conceptualisation of an 'older' person begins closer to the age of retirement, developing countries with shorter life expectancies may conceptualise old age as significantly younger (World Health Organisation, 2014). This age bracket was chosen to ensure inclusivity and relevance of the study to all geographical contexts.

Procedures

The data collection involved three stages: an initial meeting with the researcher for collection of participant data and completion of the SOCACT-2, the diary completion period, and a follow-up meeting for diary collection and clarification.

1. In the first meeting, basic demographic information was collected, and the GPCOG (Brodaty et al., 2002) was administered. Individuals who scored below 6.9 on this cognitive screen were excluded. Physical fitness level was identified using the COOP physical fitness question (Eaton et al., 2005). Finally, social activity was measured using the SOCACT-2 (Cruice, 2002), where 20 activities are checked for frequency of participation across daily,

weekly, fortnightly, monthly, rarely, and not at all frequency, as well as not applicable. Scores are assigned 1 for each activity participated in, regardless of frequency.

- 2. Participants were provided with a 28 day paper structured diary; each day included a column each for participants to record activities and activity partners. At the end of seven days, space was included to note any factors that may have influenced social activity during that week (e.g., health, holidays). As compliance has been found to be an issue with the use of paper diaries (Stone, Shiffman, Schwartz, Broderick, & Hufford, 2002, 2003), each participant was contacted weekly by the first author to ensure regular diary completion.
- 3. At the end of the 28-day diary period, the researcher met with the participants a second time. The contents of the diary were discussed, and participants were prompted to consider other social activities not recorded, and factors that may have influenced social activity during the 28-day period, with factors noted for inclusion in the analysis stage.

Data analysis. Descriptive statistics were used to analyse frequency counts and proportions of social activities recorded on the SOCACT-2 and in diaries. Social activities were counted across the 10 participants' diaries, and counts tallied according to the type of social activity in the SOCACT-2. Activities that did not fall under any SOCACT-2 categories were recorded as new social activities. Activity location was categorised as "at home" and "outside the home", and frequency counts for number of activities participated in each location recorded. Coding was undertaken against guidance provided by the author of the original tool as used in the UK project, and agreed with the broader research team in Melbourne. Any coding queries were checked with the first author's direct supervisor.

Results

The results are reported according to the aims of the study: to characterise the nature of social activity participation in neurologically healthy older people as recorded in the SOCACT-2 and the diaries, and to compare the types of social activities recorded in the diaries with the items on the SOCACT-2.

Social Activities Recorded in the 28-day Diaries

Participants engaged in a diverse range of social activities, in a number of different settings.

All SOCACT-2 items were represented in the diaries with the exception of two: item 17 "go to professional events or union meetings" and item 20 "go to political activities or occasions". In addition to the 18 activity types already represented in the SOCACT-2, six new items were identified: going for coffee in a café, dinner/drinks not in a restaurant, receiving visitors at home, festivities with friends, communication via technology, and "other". Going for coffee in a café was recorded by all participants (frequency range= 2-10 times), dinner/drinks either at the participants' home or someone else's home was engaged in by seven of the ten participants (frequency range= 1-9 times), while receiving visitors at home was recorded by four participants (frequency range= 1-7). Festivities with friends was recorded by two participants (frequency= 1 time each) The new item "communication via technology" included talking on Skype, sending and receiving emails, chatting on the phone, communicating via Facebook and text messaging. Figure 1 records the frequency of each sub-type of communication included in this new item. The item "other" included a range of activities not represented by current SOCACT-2 categories. These activities were infrequent, both in number of participants and number of times engaged in during the 28-day period. This item included home or self-study, relaxation activities (massage, meditation), listening to the radio, and attending sporting events.

Insert Figure 1 here

Figure 1. Frequency count for items included within the new item "communication via technology".

Frequency of Social Activities Recorded in Diaries

Tables 1 and 2 report the frequency count of each activity, and the number of participants who recorded the activity.

Most common activities. The activities most frequently engaged in were watching television, reading, exercising or playing sports, taking part in outdoor activities, communication via technology, and going to restaurants. The majority of participants recorded watching television every day or every two days (n=7). Reading was engaged in by seven participants, and occurred daily or every second day by five participants. Eight of the ten participants engaged in exercise, with five participants engaging in sports every day or every second day. All participants took part in outdoor activities; five participants engaged in outdoor activities every day or every second day. Communication via technology was recorded by seven participants, with a range in frequency from 1 to 36 times. All participants went to a restaurant at least twice in the month (frequency range= 2-11 times)

Table 1

Frequency Count and Number of Participants for SOCACT-2 Categories Recorded in Diaries

Insert Table 1 here

Table 2

Frequency Count and Number of Participants for new items

Insert Table 2 here

Social Activity Partners

Figure 3 shows the percentage of activities undertaken with different activity partners.

Insert Figure 2 here

Figure 3. Percentage of activities undertaken with each type of activity partner as recorded in the diaries

The highest proportion of activities was participated in either alone or with a partner, accounting for 55% of all activities. Seventy-six percent of the activities participated in alone were made up of just four activity types (reading 36%, exercising 16%, outdoor activities 13%, indoor games 11%). Sixty-one percent of activities participated in with partners were made up of four activity types (watching television 37%, travel 9%, visit friends/relatives 8%, outdoor activities 7%). Sixty-nine percent of activities participated in with friends fell into one of four categories: going for coffee, exercising, outdoor activities, and going to restaurants. The main activities participated in with acquaintances were going to clubs, church events and exercising.

Social Activity Locations

Figure 4 outlines the proportion of activities that took place at home and outside of the home.

Insert Figure 3 here

Figure 4. Percentage of activities undertaken at home and outside of home as recorded in the diaries

Just over half of all activities took place outside the home (56%), and 44% of activities took place at home. Of the activities participated in home, 11 types of activities were recorded, with 83% of activities at home falling onto one of four categories: watching TV, reading, communication via technology, and playing indoor games.

The activities that occurred outside of the home represent a wider range of social activities, with 19 types of activities recorded, and the activity most frequently engaged in outside of home, exercise, accounted for 19% of all outside activities. Taking part in outdoor activities accounted for 16% of all activities outside of home, followed by going to restaurants (10%), going for coffee (9%) and travel and tours (9%).

Discussion

Social activities undertaken by older adults in this study and recorded in both the SOCACT-2 interview and the diaries indicate that neurologically healthy adults were engaged in a wide variety of social activities, with a range of activity partners. Two items currently included in the SOCACT-2 were not recorded in the diaries, and several new social activities were identified.

The item "go to political activities or occasions" was not engaged in by any participant in the 28-day diary. This finding is consistent with results from a similar study in the United Kingdom (Cruice et al., 2014). The item "go to professional events" also did not appear in the diaries, which is consistent with the responses recorded in the SOCACT-2 interview. Of the

cohort of ten participants, six were retired. The impact of changed daily routines associated with retirement is likely to have affected the type and frequency of items documented in the diaries. Further information regarding the category "go to professional events" in other age groups is needed to determine the relevance of this particular item, and the relationship between types of activities and employment status could be examined in the larger study with participants from wider age range.

All other SOCACT-2 items were represented in the activities recorded in the diaries, indicating that their inclusion is relevant and appropriate. However, results from this study suggest rewording of certain SOCACT-2 items is indicated in a future revision of the SOCACT, which will be lead by the SOCACT author and based on a larger neurologically healthy sample, to be more inclusive of a wider range of activities. For example, "go to family festivities or parties" could be reworded to additionally incorporate festive gatherings with *friends*, which was engaged in by seven participants. Likewise, "visit friends/relatives" excludes *receiving* visitors at *home*, an activity engaged in by four participants.

In addition to rephrasing some existing SOCACT-2 items, results of this study point to new categories that could be added to the SOCACT tool. "Going for coffee in a café" was recorded as a stand-alone social activity. Likewise, "communication via technology" was a new category not represented in the SOCACT-2, and was the fifth most frequent activity recorded in the diaries. Both of these new activities was recorded by the majority of participants, and thus are relevant categories to be added to the SOCACT-2. Overall, these preliminary findings suggest that the SOCACT-2 could be used in clinical practice with older clients as part of initial information gathering with a client and to identify social activities as authentic contexts for

communication and/or other goals. Broader psychometric testing indicates the SOCACT is not yet appropriate to evaluate outcomes of therapy (Aujla et al., 2015).

The most frequently recorded activities highlight the importance of communication skills and physical fitness in healthy ageing. The two most frequently recorded activities, watching television and reading, require good communication skills, and results from this study indicate the importance of these activities in a person's daily life. Likewise, exercising and taking part in outdoor activities were the next most frequently recorded activities. Individuals with a physical disability may experience reduced participation in these areas. These findings highlight the importance of a holistic view of participation barriers/facilitators when addressing social participation clinically, since both physical changes and communication changes may affect social participation in different ways.

More than half of all social activities took place outside of the home, specifically, while exercising, taking part in outdoor activities, or in restaurants and cafes. This has implications for service provision for older people in the public community. In order to allow social participation in the community, environments need to be inclusive for both typical older people as well as older people with disabilities. Raymond, Grenier, and Hanley (2014) found that for older people with a disability, access to community settings often required special planning, such as moving the location of a meeting to a wheelchair-accessible site. Making these special requests was found to be time-consuming, unwelcome and potentially humiliating, and thus became a barrier to social participation (Raymond et al., 2014). The responsibility of ensuring public places are inclusive to all is an important consideration to ensure older people are able to engage socially outside the home.

The current study found that the majority of social activities occurred either alone or with a partner/family member. This is consistent with the findings that older people are more likely to spend time alone or in the presence of close friends and relatives (Kahn & Antonucci, 1980; Marcum, 2013). However, even occasionally spending time with less familiar individuals has been found to be important for maintaining well-being and reducing isolation (Cattan, White, Bond, & Learmouth, 2005; Findlay, 2003; Fingerman, 2009; Morgan, Neal, & Carder, 1997; Shaw, Krause, Jersey, & Bennett, 2007). Thus an important clinical consideration is to maximise participation in activities that involve acquaintances. The main activities participated in with acquaintances in this study were going to clubs, attending church events, exercising or playing sports, and going to classes or lectures. These types of activities could be targeted to increase an individual's social networks.

Limitations

The types of activities most frequently engaged in may have been affected by the demographics of the participants, and compounded by the small sample size. A large proportion of participants were recruited from a running group, which may account for the high levels of sport and outdoor activities recorded. Likewise, the majority of the participants were retired, which also may have affected the type and frequency of social activities recorded.

The concept of social activity is subjective, and as a result specific activities recorded by some participants may not have been noted by other participants in this study, due to differing notions of what constitutes social activity. For example, the new item "communication via technology" was noted by some participants but not all; the actual frequency count may be higher than recorded in this study.

Activities engaged in less than monthly may not have occurred in the 28-day diary period, resulting in a discrepancy between answers recorded in the SOCACT-2 and activities recorded in the diaries. Likewise, there may have been a seasonal effect on the type and frequency of activities engaged in. The current study recorded activities during the winter months; outdoor activities or festivities might be expected to occur more frequently in the summer months of December and January, and there may have been higher recorded frequency of indoor activities during this season. This effect needs to be considered when interpreting the findings.

Implications for Future Research

The data from this study will contribute to a larger study involving a broader sample of adults across the age span, in a variety of seasons and climates, in two geographical locations (Australia and the UK), with participants drawn from a wide range of socio-demographic backgrounds. The larger data set of this future study will allow for statistical analyses to investigate the relationship between gender, age, physical fitness level, educational level, and social activity.

Conclusion

This preliminary study has established a methodology for investigation of social activities, and provided preliminary data in the investigation of the relevance of the SOCACT-2. Information recorded from the SOCACT-2 interview was consistent with activities recorded in the 28-day diaries, and included the majority of SOCACT activity items, thus supporting the tool as a measure of typical social activities of older adults. Watching television and reading were the most frequently recorded activities in the diaries, and the majority of activities took place either alone or with a partner. Minor revisions to the SOCACT-2 may be indicated. The categories "go

to professional events" and "go to political events" were not recorded in either the SOCACT-2 responses or the diaries. Two new categories of activity were recorded: going for coffee in a café, and communication via technology, which may warrant inclusion in a future version of the SOCACT-2, and another two SOCACT-2 items ("go to family festivities/parties" and "visit friends/relatives") could be rephrased to more accurately reflect social activities.

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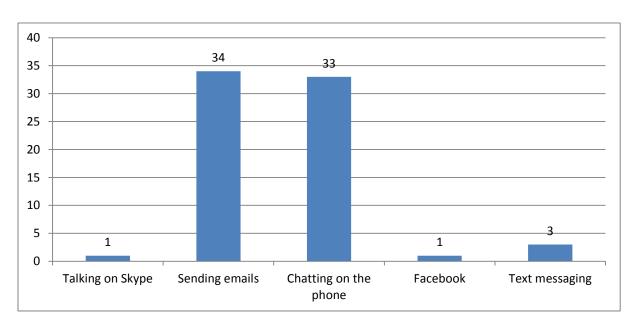


Figure 1. Frequency count for items included within the new item 'communication via technology'.

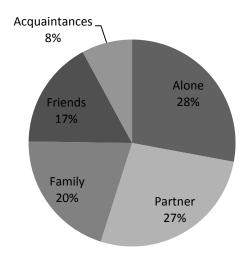


Figure 2. Percentage of activities undertaken alone and with others

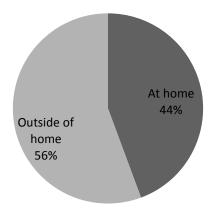


Figure 3. Percentage of activities undertaken at home and outside of home as recorded in the diaries

Table 1
Frequency Count and Number of Participants for SOCACT-2 Categories Recorded in Diaries

SOCACT-2 ITEMS	Total	No. of
	frequency	participants
	recorded in	
	diaries	
1. Visit exhibitions, museums, libraries	3	2
2. Go to the movies, theatres, concerts, plays	8	5
3. Go to restaurants	62	10
4. Go shopping	31	8
5. Watch television	146	9
6. Read	115	7
7. Exercise or play sports	110	8
8. Take part in outdoor activities	110	10
9. Travel or go on tours	51	8
10. Play cards or other indoor game	45	8
11. Work on hobbies	28	5
12. Play with or help children/ grandchildren	31	5
13. Visit or help friends/relatives	51	9
14. Go to family festivities or parties	13	8
15. Go to church events or religious community events	21	5
16. Go to meetings of community voluntary organizations or	14	4
charitable societies		
17. Go to professional events or union meetings	0	0
18. Go to classes or lectures	9	2
19. Go to clubs	37	7
20. Go to political activities or occasions	0	0

Table 2
Frequency Count and Number of Participants for new items

New activities	Total frequency	No. of
	recorded in diaries	participants
Communication via technology (total)	72	7
Going for a coffee in a café	54	10
Other	42	5
Dinner/drinks (not in a restaurant)	31	7
Receiving visitors at home	16	4
Festivities/celebrations with friends	2	2