Reliability of an assessment used in formal accommodation services: Implications for adults with an intellectual disability*

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Abstract

Background The Revised Irrabeena Core Skills Assessment (RICSA) is used in formal accommodation services and evaluates the functional skills of adults with an intellectual disability. The assessment is used to inform training for skills development. This study focused on establishing evidence for interrater reliability of the RICSA.

Method The RICSA was completed by 101 staff members on 30 adults living in group homes. Interviews were conducted with 9 staff members in order to identify potential issues that may affect the reliability of the assessment. Interrater reliability was analysed using the intraclass correlation coefficient (ICC), and thematic analysis was conducted from the interview data.

Results The ICC values ranged from .63 to .73 across the 5 main domains of the RICSA.

Conclusions The agreement found may be regarded as unsatisfactory given that the use of the RICSA is to inform skills training for people with an intellectual disability.

Keywords: accommodation services, assessment tool, community living, functional skills, intellectual disability, reliability
Assessment for adults with an intellectual disability

Introduction

For adults with an intellectual disability, increasing independence and functional skills have important implications for successful community living (Ashman, Suttie, & Bramley, 1994; Dixon, 2007; Matson, Carlisle, & Bamburg, 1998). Increasing independence can be achieved through skills training (Matson et al., 1998), which can be guided by a thorough assessment of the individual’s strengths and weaknesses of functional skills (Dixon, 2007). Skill development can support engagement in everyday tasks and activities, and can contribute to an enhanced quality of life and opportunities to express self-determination for people with an intellectual disability (Miller & Chan, 2008; Nankervis & Stancliffe, 2006). Research has also demonstrated that increased opportunities to express self-determination and choice-making can lead to further development of new skills, thus increasing adaptive behaviour and supporting social inclusion (Heller, Miller, & Factor, 1999; Nota, Ferrari, Soresi, & Weymeyer, 2007; Stancliffe, Abery, & Smith, 2000). Miller and Chan (2008) explored contributors to life satisfaction and found life skills of interpersonal, instrumental, and leisure skills to be significant influencing factors. These life skills have important implications for quality of life and successful management of community living.

Service provision, including government spending and access to specialist services, is becoming increasingly limited for people with an intellectual disability (Stancliffe, 2006). As a result, there is a reliance on direct care staff to perform and obtain data from assessments needed for intervention planning and implementation (Iacono, West, Bloomberg, & Johnson, 2009). Furthermore, due to the limited communication skills of many adults with an intellectual disability, assessments are commonly completed by proxy respondents, creating a dependence on these proxy respondents to produce reliable and valid data (Dixon, 2007).

Studies have been conducted which investigate the reliability between proxy respondents and people with an intellectual disability (Schmidt et al., 2010; Schwartz &
Rabinovitz, 2003; Stancliffe, 1999). The results of the studies demonstrated satisfactory agreement between proxy respondents and persons with an intellectual disability. Stancliffe (1999) suggested that differences in responses may be attributed to the different perceptions of staff and individuals with an intellectual disability. Although proxy responses are not a substitute for first-hand information, it is useful for individuals with more severe intellectual disability who are unable to respond for themselves.

The time period of working directly with an individual and knowing them well has been an important factor in some studies. Ball et al. (2004) reported on the psychometric properties of a tool used for the diagnosis of dementia in people with Down syndrome, which is conducted in the form of an informant interview. The authors suggested that the diagnosis of dementia must involve interviews with carers or relatives as they have known or worked with the person over an extended period and therefore were able to determine if there has been a change in performance or behaviour. Iacono et al. (2009) assessed the interrater reliability of an assessment used to measure communication skills of adults with severe disabilities. An inclusion criterion for participating support workers was that they had a minimum of six months’ experience working directly with the individual. Similarly, a study by Dychawy-Rosner and Isacsson (1996) required participating informants to have a minimum of 12 months’ experience working with the person; however, the reasons for the time period chosen was not discussed in these studies.

The importance of training in the use of the assessment tool has been recognised in previous studies (Iacono et al., 2009; Moss et al., 1998; Prosser et al., 1998). Iacono et al. (2009) stated that training of some degree was necessary as care staff come from a variety of different backgrounds and may have limited education. In addition, a moderate to high level of agreement between raters was found in their study, which the authors suggested to be the result of staff receiving training in the use of the tool. Moss et al. (1998) tested the reliability
and validity of the Psychiatric Assessment Schedule for Adults with Developmental Disabilities (PAS-ADD) Checklist. The results of interrater reliability were reported to be low, which the authors proposed was the result of not using trained raters and not providing information on the definitions of symptoms to assist with the ratings. As a result, the Mini PAS-ADD was developed, which required training in its use and provided informants with a glossary of symptoms (Prosser et al., 1998). The authors acknowledged that reliability was enhanced when training and information were provided, and that rater agreement would increase with the use of trained raters who have become accustomed and experienced with the tool over time.

Dixon (2007) identified that the assessment of functional skills should take into consideration the different contexts in which people with an intellectual disability engage, as different skills are required across different settings. Although an issue for reliability, differences in agreement among proxy respondents may reflect the way in which the individual functions across different situations. Similarly, staff members supporting people with an intellectual disability may have different perspectives of the people they work with that relate to the individual’s level of functioning. The issue of a person’s level of disability and its impact on interrater reliability has not been evident in previous studies (Ball et al., 2004; Dychawy-Rosner & Isacsson, 1996; Iacono et al., 2009; Moss et al., 1998; Prosser et al., 1998; Stancliffe, 1999). However, it is important to consider as goal setting and skills training provided to the person may be compromised.

The Revised Irrabeena Core Skills Assessment (RICSA; McGregor, 2007) is a tool used within some accommodation service providers in Australia to evaluate the functional skills of adults with an intellectual disability. The results from the assessment identify areas in need of skills training and are used for annual planning and review for the individual. Since its development in 1982, the assessment has undergone systematic revision to
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accommodate for the changing paradigms in disability (Nirje, 1985; Wolfensberger, 2000), to be more focused on community skills and technological advances (Eshet-Alkalai, 2004); for example, money handling skills at an ATM. Due to the revisions, the RICSA is considered by its developers (McGregor, 2007) to have content validity (Anastasi & Urbina, 1997; Portney & Watkins, 2009), and, as such, further research into the reliability of the tool is required. The RICSAs are completed by direct care staff, and it is often the case that an individual may be assessed by different staff members at different times. Therefore this study focused on measuring the interrater reliability of the RICSA.

Aims

The aims of the current study were to determine whether the RICSA can be reliably administered by staff members (proxy respondents) to (a) measure the functional skills of adults with an intellectual disability living in group homes; (b) determine any variability in interrater reliability across context, time working, experience, training, and level of disability (i.e., mild, moderate, severe, or profound); and (c) to identify any potential assessor characteristic issues that may affect the reliability.

Method

Ethics

Approval for this research project was obtained from the Curtin University Human Research Ethics Committee, Perth, Western Australia.

Participants

Two sample groups were required for this study. The first group consisted of 101 staff members from selected group homes across the accommodation service provider. Accommodation services were defined as small groups of people living together in community-based settings (Mansell & Beadle-Brown, 2010) within a group home. The
second group consisted of 40 adults with intellectual disability whom the staff assessed using the RICSA.

The inclusion criteria for 101 staff members were that they have their nationally recognised qualification in disability work, based on 18–24 months of study and training. Their age distribution is shown in Figure 1.

In total, 100 of the staff members reported on how long they had been working with their residents that were assessed. Most staff had worked for 0–5 years (76%); 13% had worked 6–10 years with them. The remaining 11% had even longer work-based relations with the 40 adults with an intellectual disability. Twenty eight of the 101 staff members reported to have received formal training in the use of the RICSA tool. There was no correlation between the number of completed RICSAs and how long they had been working with their residents (rho = .011, p = .91), nor were there any differences in the number of RICSAs performed by those 28 with formal training compared with the others (Z = 1.010, p = .31).

A sample of 40 adults with an intellectual disability was sought with agreement to be measured between four raters to add strength to the results. A total of 30 adults with an intellectual disability (21 men, 9 women) were included in the data analysis, aged from 23 to 78 years (M = 47). Level of disability (mild, moderate, severe, or profound) of each individual was identified by the supervisor of the group home, based on the person’s medical records.

Tools
The RICSA was developed to be used by direct care staff who know the individual well or by a staff member who has access to others who know the person well. Staff members are strongly encouraged to seek information from other sources, in order to gain the most
comprehensive picture of a person’s skill ability. The RICSA, containing 265 individual items, assesses functional skills of adults with an intellectual disability in the domains of: (a) personal care and self-help (90 items); (b) household operations (36 items); (c) money and numeracy skills (32 items); (d) language and communication (37 items); and (e) living in the community (70 items). Individual items under each domain are rated using a 7-point ordinal scale (code keys) of prompts, from full physical prompt to no assistance required. Examples of items include: requires help to maintain all aspects of personal hygiene (Item 1.0); is physically able to participate in household chores (Item 2.0); states or recognises current day (Item 3.25). There are no data on the tool’s validity or reliability.

Procedures

This study incorporated both quantitative and qualitative methods, with the purpose of the qualitative data to add supportive evidence and strength to the study (Plano Clark, Creswell, O’Neil Green, & Shope, 2008).

Two sets of data collection packages were compiled: one for group home supervisors and the other for staff members. The supervisor package contained an information/instruction sheet, a demographic information sheet (for the chosen adult with an intellectual disability), and four packages to be distributed to four staff members. The staff member package contained an information and instruction sheet outlining the purpose of the research and procedures for completion of the RICSA, a background questionnaire, consent form, and a blank RICSA form. All packages were numerically coded. The coded packages were provided to the director of the accommodation service provider, who randomly allocated the packages to supervisors of 40 group homes. The supervisors then allocated the participant packages at random to four staff members working in the group home, who then completed the RICSA on the person who was next due on the annual cycle of completion. Monitored by their supervisors, staff were asked to complete the RICSA after gathering information from
other sources, independently from the other three staff members. Returned packages were mailed to the researcher and were monitored through the use of a coded record sheet. Regular monthly contact was made with the director over the 3-month data collection period, and all follow-up and courtesy reminders to the supervisors and participating staff members were overseen by the director.

Data analysis

Differences between groups were tested with Mann–Whitney U tests, since the data were either ordinal or found not to be normally distributed with the use of Kolmogorov–Smirnov test. Possible correlations were tested with Spearman’s rho. Interrater reliability was measured using the intraclass correlation coefficient (ICC; Portney & Watkins, 2009). For two or more raters, the sample acquired was considered to be of adequate size (Walter, Eliasziw, & Donner, 1998). The RICSA is composed of five main domains, with 35 subdomains. Missing data were noted when an item was not answered using the 1–7 ordinal scale, and that item was excluded from the analysis.

Regression analyses were completed to determine if any variables were associated with the agreement between staff members. A random effects regression model (Armitage & Berry, 1987) was used in order to take into account the correlation between measurements taken on the same individuals (by different staff members). All analyses used the critical α value of .05.

Interviews with staff members

The purpose of conducting interviews was to gain insight into factors that may potentially affect the reliability of the RICSA. Interviews were conducted by the first author following a semistructured format that focused on general information regarding the RICSA. Nine staff members were available to be interviewed, and interviews took between 10 and 30 minutes.
All interviews were tape-recorded and were transcribed in the form of rephrasing and condensing statements (Kvale, 1996). Thematic analysis was conducted to categorise common themes that emerged from the interviews using a modified cut-and-paste technique (Green & Thorogood, 2009). To reduce bias, the coding of themes was performed by the researcher and two colleagues.

**Results**

**Quantitative data**

From the 160 packages distributed to the staff members (including the RICSA), 109 were returned, of which 101 (63.1%) assessments were included in the data analysis. Eight assessments were not included due to missing data. All assessments were entered into a single ICC calculation, as shown in Table 1.

> <Please insert Table 1 about here>

ICCs were calculated for both the main domains and subdomains of the RICSA, and are shown in Table 2. ICC values above .75 indicate good reliability, and those below .75 suggest moderate to poor reliability (Portney & Watkins, 2009). Results from the present study indicate moderate agreement, ranging from .63 to .73 across the five main domains of the RICSA. The lowest score of agreement was .37 for the subdomain “finances,” whereas the highest level of agreement score was .84 for the subdomain “time skills.” ICCs were also calculated for the five domains according to disability category (mild/moderate and severe/profound) and are shown in Table 2. Disability categories were collapsed to “mild/moderate” and “severe/profound” due to the small sample distribution across the disability levels (mild = 3, moderate = 12, severe = 12, profound = 2).

> <Please insert Table 2 about here>
A significant difference was found in RICSA scores according to level of disability \((p = .014)\), as shown in Table 3. There were no significant differences according to assessor characteristics of experience in using the RICSA \((p = .62)\), training \((p = .090)\), or length of time working with the individual \((p = .85)\).

**Qualitative data**

Nine interviews were conducted with consenting staff members to explore potential issues regarding the RICSA and its reliability. Examples of the questions include: “Can you describe your thoughts about the training?” and “Can you tell me how you gather your information when completing the RICSA?” Thematic analyses (Green & Thorogood, 2009) identified six themes, as shown in Table 4. The strongest themes that emerged were related to attributes of the assessment form (31.6%), and training and exposure to the assessment (23.7%).

**Discussion**

The results of the study demonstrated moderate levels of interrater reliability (Portney & Watkins 2009) of the RICSA, with a wide variance in ICC values across the 265 items measured. Although there is a range of possible explanations for this, the implications of the results need to be considered carefully in relation to the population of interest.

The importance of interrater reliability is heightened when working with people with an intellectual disability, particularly for those who may not be in a position to advocate and speak for themselves (Dixon, 2007). As identified, many assessments for people with an intellectual disability need to be completed by proxy respondents (Ball et al., 2004; Cummins, 2002; Dixon, 2007; Iacono et al., 2009; Stancliffe, 1999). This may pose as an
issue for interrater reliability given the potential impact of variables that have previously been identified, including knowing the person well (Ball et al., 2004; Schmidt et al., 2010) and training in the assessment tool (Iacono et al., 2009; Moss et al., 1998; Prosser et al., 1998). It is well recognised that people with an intellectual disability experience greater vulnerabilities than their peers without a disability (Annison, 1996). Therefore, formal service providers need to be ready to respond to the changing needs as people develop. When such a response is based on data from formal assessments, the reliability of that assessment becomes critical. Given that the purpose of the RICSA is to accurately evaluate the functional performance of people with an intellectual disability living in group homes, the moderate levels of agreement found between staff members could potentially be considered unsatisfactory. Consequently, this could impact on decisions made about the capacities of people with an intellectual disability, affecting quality of life and engagement in everyday activities (Kozma, Mansell, & Beadle-Brown, 2009; Lachapelle et al., 2005; Miller & Chan, 2008; Nankervis & Stancliffe, 2006).

A number of important issues were identified that may be influencing the reliability. A major issue that emerged was related to the attributes of the assessment form, which may have potentially contributed to the significant variations in ICC values. Staff members commented on the ambiguity and wording of items, along with the difficulty of applying the code keys to the items. Staff indicated that some of the individual items were asked in a way that would elicit a yes/no response; however, staff members are required to answer using the 7-point scale of prompts. This could also potentially explain the number of items that were unanswered.

The results of this study suggest that a person’s level of disability influences the reliability of the assessment, which has not been reported in previous studies. It was thought that staff members may have different perspectives of the people they work with in relation to
their level of disability. The results from the study showed greater levels of agreement
between staff members for individuals with mild/moderate intellectual disability, than those
with severe/profound disability. Staff members commented on the limited applicability of the
RICSA to the adults with high support needs, stating that the items in the assessment can only
be applied to those who are not completely dependent on staff for support. It was also
mentioned that the RICSA is not used at all in some group homes due to its irrelevance to the
people with a more severe disability. This suggests individuals with high support needs may
potentially be denied opportunities to be included in appropriate planning and
implementation of skills training as a result of poor assessment approaches. This then creates
more dependence due to a lack of skills and could, therefore, affect quality of life and
opportunities to participate in everyday activities (Radler, 1996).

The length of time knowing the person, training, and experience in the use of the
assessment were found not to influence interrater reliability, which is not consistent with
previous research. Staff members, however, did indicate the importance of knowing the
person well before being able to appropriately assess their functional abilities. Staff members
who were new to the group home commented on the difficulty they had in completing the
RICSA as they did not know the person they were assessing very well. Although the
importance of knowing a person well has been established, both in the present study and
previous studies (Ball et al., 2004; Schmidt et al., 2010), staff members also indicated that
there was the potential for bias if a person was known too well as they may underestimate the
abilities of a person, especially if they had not been given opportunities to try activities.

The feelings of subjectivity expressed by staff may reflect the issue of training and the
use of untrained staff (i.e., non-professionals) in identifying behaviours. It can be assumed
that direct care staff have very little background training and in-depth understanding of the
foundations that comprise functional performance; for example, motor abilities, visual-
perceptual skills, and cognitive processing. Consequently, the reliance on direct care staff to make informed decisions runs the risk of producing unreliable assessments (Iacono et al., 2005). It has been suggested that collaboration between direct care staff and trained professionals can increase caregiver knowledge and competencies (Iacono et al., 2005; van der Gaag, 1989).

The use of direct care staff in performing assessments required for intervention planning highlights the importance of receiving training in the use of the tool. Staff indicated that they had a lack of exposure to the assessment and were unclear regarding formal training received in the use of the RICSA. Seventy-two percent of participating staff members indicated that they had only filled out up to five RICSA's in their time working in the group homes. Previous studies have acknowledged the association between training in assessment tools and levels of agreement (Iacono et al., 2009; Moss et al., 1998; Prosser et al., 1998) and that some degree of training is necessary given the diverse backgrounds, and often limited education, of many support staff. Although not explored in depth, it is possible that attitudes to the assessment and training need to be considered. When asked about training, some staff responded that training would not necessarily be beneficial as the RICSA appears to be “self-explanatory.” It could be considered that the effective implementation of any assessment should be based on the understanding of its use and outcome. That is, not only knowing how to correctly complete the assessment, but also reinforcing staff members’ awareness that they are acting as proxy respondents and that the results they gain have major implications for the lives of the people for whom they work with. Responses from staff members revealed uncertainty around the purpose of the RICSA and a lack of positive feeling regarding the importance and usefulness of the assessment in the practice setting. It appears that this may impact on the motivation and desire of staff to complete the RICSA, thus potentially influencing interrater reliability.
Clinical/research implications

The results suggest the need to re-examine the use, design, and validity of the RICSA. Validity testing is required as guidelines proposed by Portney and Watkins (2009) indicate that reliability should exceed an ICC value of .90 to ensure reasonable validity. This study has raised the issue of the importance of ensuring that a tool has established reliability and validity, and may also have relevance to other accommodation service providers who are using assessments with apparent content and face validity, but without any reliability testing. Although the results of the current study cannot be generalised to other assessments, it should be an alert regarding the ethical implications of using unreliable assessments. This is particularly important when working with vulnerable populations. In the case of the RICSA, the implication of poor reliability may influence the planning of community living for adults with an intellectual disability. Given the evidence between functional skills and quality of life and engagement in activities, this is a critical issue. As indicated within previous research, it would be worthwhile considering an alternative approach to assessment of functional skills required for community living, which incorporates elements of the personal characteristics as well as environmental barriers and enablers. Barriers and enablers that may be important to consider include organisational policy, availability of resources, and staff behaviours (attitudes and values). The International Classification of Functioning, Disability and Health (ICF; World Health Organization, 2001) could be used as a framework to improve and guide the redesign of the RICSA, as the ICF integrates all factors of the person, environment, and engagement in activities. It may also be beneficial to employ a person-centred planning approach to ensure individuals with an intellectual disability are included in the planning and decision process so that they are able to have more control and individualised support (Beadle-Brown, 2006; Dukes & Sweeney, 2009). Given the perceived limited applicability of the RICSA to all persons with an intellectual disability living in the group homes, other
approaches to skills development are suggested, such as staff members employing an “active support” approach (Mansell, Elliot, Beadle-Brown, Ashman, & Macdonald, 2002), thus supporting community integration.

**Limitations**

This reliability study had no preset hypothesis. Instead, it set out to determine the reliability of the RICSA and to explore possible potential issues that may affect that reliability. Sampling was done in accordance with this design. Although staff members were asked to complete the RICSA independently, it is unknown if this occurred. The unanswered items in the RICSA were excluded from the data analysis and thus may have influenced the reliability of results. Furthermore, the inability of the regression analyses to detect potential influencing variables may be due to there being too many items in the RICSA form, and that there was too much variability in the scores. Another limitation of the study is the structure of the background questionnaires staff members were asked to fill out. Responses to the questions regarding length of time working with the individual and the overall amount of RICSAs staff members have completed were structured into 5-yearly time periods and number intervals, respectively. There was a lack of sample distribution across the categories (time working with the person and number of RICSAs completed), which could have potentially affected the regression results to some degree. It may have been more beneficial to further collapse the time period/number categories.
Author note

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Acknowledgements

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References


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FIGURE CAPTION

[NB: Figure to be uploaded to Manuscript Central separately from main manuscript.]

Figure 1. Age distribution among 99 of the 101 staff members (two did not report their age).
<table>
<thead>
<tr>
<th>Activity</th>
<th>Two or more assessors</th>
<th>Number of assessed forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal care and self-help</td>
<td>.70</td>
<td>101</td>
</tr>
<tr>
<td>Bathing/showering</td>
<td>.76</td>
<td>101</td>
</tr>
<tr>
<td>Control of body/foot odour</td>
<td>.71</td>
<td>100</td>
</tr>
<tr>
<td>Teeth cleaning</td>
<td>.70</td>
<td>97</td>
</tr>
<tr>
<td>Toileting</td>
<td>.78</td>
<td>100</td>
</tr>
<tr>
<td>Handwashing</td>
<td>.70</td>
<td>98</td>
</tr>
<tr>
<td>Hairstyle</td>
<td>.60</td>
<td>98</td>
</tr>
<tr>
<td>Dressing</td>
<td>.72</td>
<td>99</td>
</tr>
<tr>
<td>Meals</td>
<td>.61</td>
<td>97</td>
</tr>
<tr>
<td>Medical care</td>
<td>.58</td>
<td>99</td>
</tr>
<tr>
<td>First aid and safety</td>
<td>.71</td>
<td>99</td>
</tr>
<tr>
<td>Household operations</td>
<td>.73</td>
<td>98</td>
</tr>
<tr>
<td>Household chores</td>
<td>.76</td>
<td>97</td>
</tr>
<tr>
<td>Food preparation and cooking</td>
<td>.67</td>
<td>91</td>
</tr>
<tr>
<td>Washing and ironing</td>
<td>.75</td>
<td>97</td>
</tr>
<tr>
<td>Money and numeracy</td>
<td>.71</td>
<td>95</td>
</tr>
<tr>
<td>Money use</td>
<td>.81</td>
<td>91</td>
</tr>
<tr>
<td>Finances</td>
<td>.37</td>
<td>84</td>
</tr>
<tr>
<td>Writing/printing</td>
<td>.68</td>
<td>87</td>
</tr>
<tr>
<td>Time skills</td>
<td>.84</td>
<td>85</td>
</tr>
<tr>
<td>Calendar skills</td>
<td>.77</td>
<td>88</td>
</tr>
<tr>
<td>Use of telephone</td>
<td>.70</td>
<td>86</td>
</tr>
<tr>
<td>Language and communication</td>
<td>.67</td>
<td>98</td>
</tr>
<tr>
<td>Receptive</td>
<td>.59</td>
<td>97</td>
</tr>
</tbody>
</table>
Assessment for adults with an intellectual disability

<table>
<thead>
<tr>
<th>Domain</th>
<th>Number of Assessments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressive</td>
<td>.66</td>
<td>92</td>
</tr>
<tr>
<td>Context—time</td>
<td>.75</td>
<td>84</td>
</tr>
<tr>
<td>Context—people</td>
<td>.73</td>
<td>85</td>
</tr>
<tr>
<td>Context—communication</td>
<td>.62</td>
<td>88</td>
</tr>
<tr>
<td>Structure of language</td>
<td>.65</td>
<td>89</td>
</tr>
<tr>
<td>Living in the community</td>
<td>.63</td>
<td>98</td>
</tr>
<tr>
<td>Shopping</td>
<td>.77</td>
<td>92</td>
</tr>
<tr>
<td>Use of leisure time</td>
<td>.54</td>
<td>92</td>
</tr>
<tr>
<td>Day occupation</td>
<td>.61</td>
<td>77</td>
</tr>
<tr>
<td>Use of public transport</td>
<td>.55</td>
<td>80</td>
</tr>
<tr>
<td>Road safety</td>
<td>.72</td>
<td>84</td>
</tr>
<tr>
<td>Attitude toward skills training</td>
<td>.64</td>
<td>91</td>
</tr>
<tr>
<td>Personal responsibility</td>
<td>.63</td>
<td>89</td>
</tr>
<tr>
<td>Group decision-making</td>
<td>.71</td>
<td>95</td>
</tr>
<tr>
<td>Responsibility for own actions</td>
<td>.49</td>
<td>82</td>
</tr>
<tr>
<td>Social interactions</td>
<td>.60</td>
<td>92</td>
</tr>
</tbody>
</table>

N = 30 (adults with disability)

Total of 101 assessments

Note. The column “number of assessed forms” indicates the number of assessment forms used in the calculation for that particular domain/subdomain.
### Table 2. Interrater reliability: ICC calculations of main domains by disability level

<table>
<thead>
<tr>
<th></th>
<th>Two or more assessors</th>
<th>Number of assessed forms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mild/Moderate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal care and self-help</td>
<td>.72</td>
<td>47</td>
</tr>
<tr>
<td>Household operations</td>
<td>.71</td>
<td>46</td>
</tr>
<tr>
<td>Money and numeracy</td>
<td>.66</td>
<td>42</td>
</tr>
<tr>
<td>Language and communication</td>
<td>.76</td>
<td>46</td>
</tr>
<tr>
<td>Living in the community</td>
<td>.61</td>
<td>44</td>
</tr>
<tr>
<td><strong>n = 15 (adults with disability)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total of 47 assessments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Severe/Profound</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal care and self-help</td>
<td>.56</td>
<td>50</td>
</tr>
<tr>
<td>Household operations</td>
<td>.57</td>
<td>49</td>
</tr>
<tr>
<td>Money and numeracy</td>
<td>.55</td>
<td>49</td>
</tr>
<tr>
<td>Language and communication</td>
<td>.50</td>
<td>48</td>
</tr>
<tr>
<td>Living in the community</td>
<td>.47</td>
<td>50</td>
</tr>
<tr>
<td><strong>n = 14 (adults with disability)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total of 50 assessments</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3. Regression analysis: Results from the independent variable “disability level”

<table>
<thead>
<tr>
<th></th>
<th>Mild/Moderate (least squares mean score)</th>
<th>Severe/Profound (least squares mean score)</th>
<th>Change in mean score</th>
<th>95% Confidence interval for difference</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RICSA (all items)</td>
<td>969</td>
<td>556</td>
<td>413</td>
<td>[86.4, 738.5]</td>
<td>.014</td>
</tr>
<tr>
<td>Personal care and self-help</td>
<td>298.3</td>
<td>122.9</td>
<td>173.3</td>
<td>[51.7, 294.8]</td>
<td>.006</td>
</tr>
<tr>
<td>Household operations</td>
<td>122.0</td>
<td>61.7</td>
<td>60.3</td>
<td>[11.2, 109.5]</td>
<td>.017</td>
</tr>
<tr>
<td>Money and numeracy</td>
<td>79.2</td>
<td>41.6</td>
<td>37.6</td>
<td>[2.7, 72.6]</td>
<td>.035</td>
</tr>
<tr>
<td>Language and communication</td>
<td>185.6</td>
<td>121.8</td>
<td>63.8</td>
<td>[15.5, 112.2]</td>
<td>.010</td>
</tr>
<tr>
<td>Living in the community</td>
<td>206.8</td>
<td>121.8</td>
<td>84.9</td>
<td>[1.5, 168.4]</td>
<td>.046</td>
</tr>
</tbody>
</table>
Table 4. Qualitative analysis: Themes from interviews with participating staff members

<table>
<thead>
<tr>
<th>Theme</th>
<th>Number of items</th>
<th>Total percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Attributes of the assessment form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issues with the assessment form were identified by participants. Subthemes that emerged include format and wording of questions, the application of code keys, repetition of questions, and the length of assessment.</td>
<td>48</td>
<td>31.6%</td>
</tr>
<tr>
<td>(2) Training and exposure to assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants reported a lack of exposure and training to the assessment; some had completed the assessment a few times only, and others had never completed one at all. Ambiguity of training was identified, with some participants reporting they had received formal training, and others reporting they had not.</td>
<td>36</td>
<td>23.7%</td>
</tr>
<tr>
<td>(3) Awareness of use and importance of assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It was identified that participants had differing perceptions of what the assessment measures, its relevance, its significance, and purpose to practice.</td>
<td>21</td>
<td>13.8%</td>
</tr>
<tr>
<td>(4) Knowing the person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants acknowledged the need to know a person well in order to complete the assessment. Subthemes of subjectivity versus objectivity emerged as participants identified the potential for bias if a person was known too well (potential overestimation of abilities), and not being able to appropriately assess if the person was not known well enough.</td>
<td>21</td>
<td>13.8%</td>
</tr>
<tr>
<td>(5) Time to complete assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to busy work schedules and length of assessment, participants found it difficult to complete the assessment while at work, with some completing the assessment at home.</td>
<td>15</td>
<td>9.7%</td>
</tr>
<tr>
<td>(6) Relevance of assessment to differing levels of disability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>7.2%</td>
</tr>
</tbody>
</table>
Participants identified the difficulty in applying the assessment to differing levels of disability, in particular, those with high support needs; questions were not suitable or relevant for individuals with low levels of functioning.

| Total | 152 |

*Note.* The “number of items” represent the number of times that particular theme was discussed by staff members.