Validation of content and structure of the Return-to-work assessment for post-stroke survivors

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Introduction

Work is not only a job or paid employment but also unpaid or voluntary work, education and training, family responsibilities and caring (Balasooriya-Smeekens et al. 2016; Waddell & Burton 2006). Work usually involves commitment over time and a need to labour or exert oneself. In addition, it connotes the application of physical or mental effort, skills, knowledge or other personal resources (Balasooriya-Smeekens et al. 2016; Ibikunle et al. 2021:9b; Waddell & Burton 2006).

Stroke impacts a survivor’s ability to return to work (RTW), thereby affecting participation in community activities, especially individuals who are still in the working age range (Ibikunle et al. 2021b:9; Saeki, 2000), which creates activity limitation and participation restriction.

Return to work is essential, as through the investments gained from income, it contributes to life satisfaction and social identity. Return to work has been investigated empirically; however, two core concerns have been raised: (1) the need for a comprehensive and multiperspective measurement of the factors that predict RTW and (2) the cited differences in issues related to stroke between developed and developing countries (Ibikunle et al. 2021b:7; Soklaridis, Ammendolia & Cassidy 2010).

Content validity refers to the degree in which the instrument content sufficiently reflects the construct that is being measured (Polit 2015). It evaluates to what extent the items sampled represent in a content domain (Polit & Beck 2011). Functional scales that focus on the measurement
of the impact of disease on performance of everyday tasks are now commonly employed by clinicians and researchers (Ibikunle et al. 2021b; Muller, Roder & Greenough 2006; Sinha, Nijhawan & Grover 2014). They are usually classified as generic or disease specific. General health outcome measures are intended towards recapitulating or summarising details of the outcomes of most health conditions among patients and populations, while disease-specific outcome measures evaluate the impact of specific health conditions on the functional status of patients (Ibikunle et al. 2021b; Kampstra et al. 2018; Partrick 1990). These disease-specific outcome measures are observed to be more responsive to the target population when compared to generic measures (Davidson & Keating 2002; Ibikunle et al. 2021a; Kampstra et al. 2018; Muller et al. 2006).

The return-to-work assessment scale (RAS) was developed by Ibikunle et al. (2021a) as a health-specific scale for the purpose of measuring return to work among post-stroke survivors. The International Classification of Functioning, Disability and Health (ICF) and the Flag model were used for the conceptual mapping, and the theoretical framework adopted for the measure was the modified C-OAR-SE theory (Ibikunle et al. 2021a). C-OAR-SE is an acronym for the six aspects of the theory: ‘C’ stands for construct definition, ‘OAR’ for object representation, attribute classification and rater entity identification, and ‘SE’ for selection of item type and answer scale, as well as enumeration and scoring rules (Diamantopoulos 2005; Ibikunle et al. 2021a; Rossiter 2011a).

The three phases of development of the RAS as described by Ibikunle et al. (2021a) are (1) construct development (initial item generation), (2) face and content validation of the instrument and (3) psychometric testing. Return to work was conceptualised into three views: (1) personal factors that include grooming, independence, psychological and emotional balance; (2) work-related issues such as mobility, employees’ and employers’ attitudes and infrastructures and (3) contextual issues that were limited to support from family, relations, coworkers and society (company or country labour policies were not considered in our study). These three issues gave theoretical definition to RTW, each aspect answering to the capacity of the post-stroke survivor to predict returning to work, which brings independence, self-esteem and improved quality of life – the core values that can be achieved through rehabilitation. The conceptual framework was the ICF saddled with the flag model in developing the instrument using the six stages of thematic analysis after obtaining the in-depth interviews from the participants.

Many outcome measures used for the measuring of various variables among stroke patients include the Gross Motor Rivermead Assessment Scale by Lincoln and Gladman (1962), the Barthel Index by Mahoney and Barthel (1965) and the Nottingham Extended Activities of Daily Living by Finch et al. (2002), to mention but a few. Developing a health-specific outcome measure to assess return to work among stroke survivors will help to assess their readiness, as well as to monitor the RTW stages. With no means of evaluating return to work among post-stroke survivors, they will not be accepted back into their formal employment, which could affect their self-esteem, confidence and social identity (Balasooriya-Smeekers et al. 2016; Ibikunle et al. 2021b:7). Consequently, there is a need to develop an instrument that takes into consideration the contextual issues and the viewpoints of the employers and employees, as well as other important issues peculiar to post-stroke survivors, namely psychosocial and physical issues of the clime and region. Our study, which is the second phase of the research, consists of face and content validation. In this phase, consensus was sought on the items, domains and subdomains included in the RAS, which were used to assess return to work after stroke (Ibikunle et al. 2021b:8). The Delphi survey technique was deemed appropriate, as it addressed face and content validation.

**Methods**

**Procedure**

Phase 1, construct development (initial item generation), utilised in-depth interviews with a set of semistructured questions (Online Appendix 1, Interview guide) to produce transcribed responses to the questions obtained from 18 participants who were the panelists. The 18 participants were invited by the author and interviewed; they included seven post-stroke survivors, five rehabilitation specialists (one occupational therapist, three physiotherapists and one occupational nurse), three caregivers and three employers of labour. Their transcribed responses (see Online Appendix 1, Interviews on return-to-work post-stroke) were analysed using the six steps of the thematic analysis by Braun & Clarke (2006) (familiarisation, coding, generating theme, reviewing theme, defining or naming and writing up), thereby arriving at five themes which emerged from using the ATLAS.ti 7.5.0 software. The transcribed interviews were converted to PDF and uploaded into the qualitative analysis tool. Common concepts were identified, from which codes and quotations were derived, and later themes emerged which were extracted and transcribed. The five themes obtained were (1) impairment and functional limitations resulting from stroke; (2) cognitive and psychological limitations resulting from stroke; (3) barriers to RTW post-stroke; (4) facilitators of RTW post-stroke and (5) stroke as a social responsibility. The five themes were further compressed by the author and the study supervisors, who are experts in instrument development, in a focus group discussion (virtual) which produced 3 domains, 11 subdomains and 85 items. The development of a draft document, referred to as the RAS, was the first phase of the research.

The next phase, referred to as phase 2, utilised the Delphi survey technique to validate the content (items) of the scale. The Delphi technique is a useful research tool that can be used to obtain consensus from a chosen group (Gupta & Clarke 1996). The Delphi technique was selected to obtain expert opinion, as it allows for wide consultation while
eliminating geographical constraints (Gupta & Clarke 1996). Experts in the field of rehabilitation were selected from academics and healthcare practitioners, as well as acute post-stroke survivors who had recovered and had returned to work at the time of this survey. Twenty-five experts and stakeholders were approached to participate in the study, being 10 experts from South Africa, 10 from Nigeria and 5 post-stroke survivors from Nigeria. However, of the 25 approached, only 20 of these experts agreed to participate in our study. Four professionals from South Africa did not respond, and one declined to participate because of inadequacy of required knowledge. The professionals were to have at least between 5 and 10 years of clinical experience in neurological rehabilitation. The group which participated included 10 rehabilitation experts (eight physiotherapists and 2 occupational therapists), 3 psychologists, 2 employers and 5 post-stroke survivors. The employers had at least between 5 and 10 years’ experience of recruiting workers for employment. The psychometrists were experts in the development of instruments and psychometrics. The psychologists, who had health psychometrics backgrounds, assisted with the development and finalisation of a scoring system for the newly developed instrument. Only two African countries were involved, South Africa and Nigeria. This article is the product of a thesis supervised from South Africa and carried out in Nigeria; in our study, contextual factors did not include country, company laws or policies, and this was not part of the scope of our study. Contextual factors were limited to support from family, relations, coworkers and society.

Data collection and stimulus prompt
The draft instrument was used as the stimulus prompt in the Delphi process. The RTW outcome measure consisted of two sections. Section A involved general sociodemographic issues, while section B contained the three main domains. In section A, the participants were requested, on the Delphi form, to state how relevant each question in the general section was to their respective subheadings. They were requested to answer yes or no – yes, if relevant, and no, if not. In addition, they were invited to suggest any other question that they deemed relevant, if not already included in the scale.

Delphi survey technique – Rounds 1 – 3
A three-round e-Delphi technique was employed. The objectives of these rounds were to establish face and content validity, obtain consensus regarding items to be included in the outcome measure, assess return to work among post-stroke survivors and develop the overall scoring system. The draft measure was revised during the Delphi rounds. The revised measure was used in phase 3 to establish the psychometric properties.

Delphi technique round 1
This was the first round; the preliminary instrument which was developed was e-mailed to experts and participants for three weeks, with e-mails sent at intervals to monitor compliance to request.

Delphi technique round 2
Item reduction was the purpose of this second stage. Any item that did not obtain a consensus of 100% from experts and participants was resent for the purpose of complete consensus.

Delphi technique round 3
In this third and last round, the third draft with all corrections effected was sent to the experts and participants. The health psychologists were involved from the start, especially regarding issues related to the scoring system. All participants accepted the scoring system as presented by the authors and perceived no need for any change. The new instrument had to cover the domains that constitute return to work among post-stroke survivors. The level of consensus reached on the suitability and appropriateness of each item included in the scale at the end of the Delphi study was 100%.

There is no consistent reference available to determine the standard level of consensus. The three rounds of the Delphi technique were hence used to facilitate reaching consensus; the percentage set for consensus was 100%. (Ibikunle et al. 2021b:48)

Time requirements
Two weeks were given as the minimum time for the experts and participants to respond; we adopted 6 weeks as the maximum time for each round of the Delphi process.

Ethical considerations
Ethics approval and project registration were sought and obtained from the Senate Research Committee of the University of the Western Cape (reference number: 15/2/20). In Nigeria, ethics approval was also sought from the Faculty of Health Sciences and Technology Ethics Committee of Nnamdi Azikiwe University (reference number: ERC/FHST/NAU/2018/028).

Results
Sociodemographic distribution of participants
Table 1 reveals 20 participants who consented: 15 from Nigeria and 5 from South Africa, specifically the University of the Western Cape (4 participants) and North-West University (1 participant). The response rate was 80%.

Results of round 1
Section A of the return-to-work scale
This section is made up of five subsections, including demographic information; type, area and severity; impairments or defects; post-stroke management and nature of employment (see Online Appendix 1, Return-to-work assessment scale).
Section B of the return-to-work scale
This section contains the 3 domains, 11 subdomains and 86 items that were endorsed to assess return to work among post-stroke survivors. These, along with their scoring patterns, are presented in Tables 2–7.

Domain 1: Personal: This domain is made up of five subdomains: 1.1, instrumental activities of daily living; 1.2, cognition; 1.3, communication; 1.4, coping; and 1.5, motivation.

Domain 2: Work: This domain is made up of three subdomains: subdomain 2.1, employees’ motivation; subdomain 2.2, reasonable accommodation; and subdomain 2.3, employers’ motivation.

Domain 3: Contextual factors: This domain is made up of three subdomains: subdomain 3.1, social support; subdomain 3.2, local transport; and subdomain 3.3, attitudes of communities.

Results of round 2
Because of the high consensus level in round 1, round 2 merely served to reach total consensus in areas where 100% agreement was not obtained. This was resent to the participants to ensure total consensus.

Section A of return-to-work scale
This section contains the result of section A of the RAS after round 2 of the Delphi Study, here the consensus among participants is now 100% (see Table 6).

Section B of return-to-work scale
This section contains the three domains of the RTW scale. Two domains reached 100% consensus from the experts and patients. However, in domain 2, subdomains 2.1 and 2.3 were resent after the changes were effected to ensure 100% consensus.

Domain 2: Work
This section refers to Domain 2, here final consensus and agreement was reached by the participants (see Table 7).

Results of round 3
The third round of Delphi was conducted to achieve final consensus, which materialised when every participant...
agreed to all the sections, as well as the various domains, after the suggested changes were implemented. The scoring system was assessed along with the study and agreed upon by the 20 experts. A consensus of 100\% was obtained in all items, domains and subdomains.

### Discussion

The aim of our study was to report the process followed in establishing the face and content validity of the RAS while adopting the Delphi survey technique. A draft document referred to as RAS was developed by Ibikunle et al. (2021a); its face and content validity were determined and its psychometric properties were also established. The scale was found to be reliable and structurally valid. The result of the face and content validity as reported here revealed a consensus of 100\% for all items, domains and subdomains that made up the RAS among the participants of the Delphi survey, indicating good face and content validity. This is in agreement with the works of Glassel et al. (2011); Sullivan et al. (2012) and Yu et al. (2013), which also adopted the use of a Delphi survey study in establishing face and content validity as suitable and sufficient to declare validity of a newly developed instrument.

| TABLE 3: Items included in domain 1. | Number of responses (n) | Level of consensus (%) | Comments of experts |
|------------------------------------|-------------------------|------------------------|---------------------|
| **1.1: Instrumental activities of daily living** | | | |
| 1. I can bathe myself. | 20/20 | 100 | None |
| 2. I can groom myself (shave or put on make-up). | 20/20 | 100 | None |
| 3. I can dress myself. | 20/20 | 100 | None |
| 4. I can feed myself. | 20/20 | 100 | None |
| 5. I can use the bathroom. | 20/20 | 100 | None |
| 6. I can exercise bowel control. | 20/20 | 100 | None |
| 7. I can exercise bladder control. | 20/20 | 100 | None |
| 8. I can work unaided. | 20/20 | 100 | None |
| 9. I can use public transport. | 20/20 | 100 | None |
| 10. I can drive myself. | 20/20 | 100 | None |
| 11. I can travel from home to required destination. | 20/20 | 100 | None |
| **1.2: Cognition** | | | |
| 1. Loss of interest in activities. | 20/20 | 100 | None |
| 2. Difficulty in remembering events. | 20/20 | 100 | None |
| 3. Difficulty in remembering people. | 20/20 | 100 | None |
| 4. Difficulty in articulating words. | 20/20 | 100 | None |
| 5. Talking excessively. | 20/20 | 100 | None |
| 6. Restless and agitated. | 20/20 | 100 | None |
| 7. Difficulty in remembering places. | 20/20 | 100 | None |
| **Psychosocial factors** | | | |
| 8. Becoming sad, depressed and unnecessarily emotional. | 20/20 | 100 | None |
| 9. Becoming anxious and worried. | 20/20 | 100 | None |
| 10. Becoming angry. | 20/20 | 100 | None |
| 11. Becoming hostile. | 20/20 | 100 | None |
| **1.3: Communication (Psychosocial factors)** | | | |
| 1. I can follow discussions. | 20/20 | 100 | None |
| 2. I can articulate or express my thoughts clearly to others. | 20/20 | 100 | None |
| 3. I can interact with others without difficulty. | 20/20 | 100 | None |
| **1.4: Coping** | | | |
| 1. I can work with instruments in my former workstation. | 20/20 | 100 | None |
| 2. I can feel objects when handling them. | 20/20 | 100 | None |
| 3. I can do my normal duties. | 20/20 | 100 | None |
| 4. I can work at full capacity. | 20/20 | 100 | None |
| 5. I can withstand the pressure and stress of my former duties. | 20/20 | 100 | None |
| 6. I can withstand the rational challenges of my job. | 20/20 | 100 | None |
| 7. I can withstand the expressive challenges of my former duties. | 20/20 | 100 | None |
| **1.5: Motivation (My motivation for returning to work is...)** | | | |
| 1. Fear of impact on career development. | 20/20 | 100 | None |
| 2. Fear of loss of employment. | 20/20 | 100 | None |
| 3. Financial. | 20/20 | 100 | None |
| 4. Social isolation. | 20/20 | 100 | None |
| 5. Negative impact of absence on work. | 20/20 | 100 | None |
| 6. Negative impact of absence on perceptions of others. | 20/20 | 100 | None |
| 7. Negative impact of absence on my mood. | 20/20 | 100 | None |
| 8. Improved physical health. | 20/20 | 100 | None |
| 9. Improved participation. | 20/20 | 100 | None |
| 10. Improved ability to function independently. | 20/20 | 100 | None |
| 11. Concerns about being perceived as disabled. | 20/20 | 100 | None |
placed their emphasis on the high content validity (100%) of the items and answer scale or answer scales; these arguments and definitions posit content validity as necessary for reliability, reversing the usual psychometric argument that reliability is necessary for validity (Rossiter 2012). There are some RTW studies among stroke survivors carried out in South Africa, Nigeria, United Kingdom and United States of America; none of them set out to develop an instrument for assessing return to work for post-stroke survivors (Alaszewski et al. 2007; Black-Schaffer & Osberg 1990; Busch 2009; Gilworth et al. 2009; Kauranen et al. 2013; Lock et al. 2005; Obembe et al. 2010; Schaffer & Osberg 1990; Busch 2009; Gilworth et al. 2009; Kauranen et al. 2013; Lock et al. 2005; Obembe et al. 2010;)

### TABLE 4: Items included in domain 2.

| Item | No. of responses (n) | Level of consensus (%) | Comments of experts |
|------|----------------------|-------------------------|---------------------|
| Do you agree or disagree with the following statements? (2.1: Employees’ motivation) | | | |
| 1. I am recognised by my employer as important at work, irrespective of my disability. | 20/20 | 100 | None |
| 2. There are opportunities for personal growth at work, irrespective of my disability. | 20/20 | 100 | None |
| 3. I will get promoted when due, irrespective of my disability. | 20/20 | 100 | None |
| 4. I feel in control and empowered as I discharge my duties, irrespective of my disability. | 19/20 | 95 | Replace ‘Discharge’ with ‘Perform’ |
| 5. I feel secure about my job and position, irrespective of my disability. | 20/20 | 100 | None |
| 6. I am happy with my work, and I enjoy doing it irrespective of my disability. | 20/20 | 100 | None |
| 7. I achieve my set goals at work, irrespective of my disability. | 20/20 | 100 | None |
| 8. I have the opportunity to organise my approach to work, irrespective of my disability. | 20/20 | 100 | None |

| Do you agree or disagree with these statements? (2.2: Reasonable accommodation) | | | |
| 1. I don’t need a staircase. | 20/20 | 100 | None |
| 2. I don’t need modifications to the staircase. | 20/20 | 100 | None |
| 3. I don’t need an elevator to ascend to my office. | 20/20 | 100 | None |
| 4. I don’t need access to a bathroom close to my office. | 20/20 | 100 | None |
| 5. I don’t need a change of job description. | 20/20 | 100 | None |
| 6. I don’t need a shift of duty to enable me to cope. | 20/20 | 100 | None |
| 7. I can only work normal hours despite my disability. | 20/20 | 100 | None |
| 8. I can comfortably work from home and still meet my quota. | 20/20 | 100 | None |

| Do you agree or disagree with these statements? (2.3: Employers motivation) | | | |
| 1. My employer will retain me irrespective of my disability if I return to work. | 20/20 | 100 | None |
| 2. My employer will transfer me to another unit if I cannot perform my formal duties. | 20/20 | 100 | None |
| 3. My employer will not sack me if I cannot perform my formal duties. | 20/20 | 100 | None |
| 4. My employer takes cordial relationship with colleagues seriously. | 20/20 | 100 | None |
| 5. My employer does not prioritise cosmetics and physical appearance. | 19/20 | 95 | Remove this item. It looks redundant. |
| 6. My employer is willing to give fewer duties if I cannot perform my previous duties. | 20/20 | 100 | None |
| 7. My employers is emphatic and sympathetic with me because of my disability. | 20/20 | 100 | None |
| 8. My employer does not think less of me because of my disability. | 20/20 | 100 | None |

### TABLE 5: Items included in domain 3.

| Item | No. of responses (n) | Level of consensus (%) | Comments of experts |
|------|----------------------|-------------------------|---------------------|
| Do you agree or disagree with the following statements? (3.1: Social transport) | | | |
| 1. It’s really easy for me to talk about my problems with my family and friends. | 20/20 | 100 | None |
| 2. My spouse and children are really very supportive during difficult times. | 20/20 | 100 | None |
| 3. My family and extended family assist me when making difficult decisions. | 20/20 | 100 | None |
| 4. Sharing my pains and joy with my spouse and children gives me comfort and relief. | 20/20 | 100 | None |
| 5. Sharing my pains and joys with my coworkers, friends and neighbours brings relief to me. | 20/20 | 100 | None |
| 6. I get moral and emotional help from my spouse and children. | 20/20 | 100 | None |
| 7. I get help from my family and friends when making important decisions that affects my work and health. | 20/20 | 100 | None |
| 8. I get enough assistance from people around me whenever I need help. | 20/20 | 100 | None |

| Do you agree or disagree with the following statements? (3.2: Local transport) | | | |
| 1. I don’t need someone to accompany me when going outdoor because of my disability. | 20/20 | 100 | None |
| 2. My condition allows me to board, ride or disembark from a public mode of transportation (cars, bus, train). | 20/20 | 100 | None |
| 3. I can drive a motorcycle or car to work without assistance. | 20/20 | 100 | None |
| 4. My condition does not prevent me from travelling to my work or to disembark at my destination. | 20/20 | 100 | None |

| Do you agree or disagree with the following statements? (3.3: Attitude of communities) | | | |
| 1. I would not be asked to stay away from work, religious and social groups. | 20/20 | 100 | None |
| 2. I would not be avoided by the community members because of my condition. | 20/20 | 100 | None |
| 3. My condition doesn’t make people to despise me and think less of me. | 20/20 | 100 | None |
| 4. My condition doesn’t cause me shame and embarrassment in my community. | 20/20 | 100 | None |
| 5. People won’t avoid me because of my disability. | 20/20 | 100 | None |
| 6. Returning to work and getting a new job is not difficult. | 20/20 | 100 | None |
| 7. My neighbours, friends, colleague and others show love to me despite my condition. | 20/20 | 100 | None |
| Number | Subsections                  | Consensus (%) | Number of responses | Comment                                                                 |
|--------|------------------------------|---------------|---------------------|-------------------------------------------------------------------------|
| 1.     | Demographic information     | 100           | 20/20               | The consensus reached 100%, after age was included, resulting in three items. |
| 2.     | Types, area and severity    | 100           | 20/20               | Consensus already reached in round 1.                                   |
| 3.     | Impairments or defects      | 100           | 20/20               | Suggestions were made to break down the questions and simplify defects. The suggestion was implemented by breaking defects down to speech and walking impediments, and after this inclusion, consensus reached 100%. |
| 4.     | Post-stroke management      | 100           | 20/20               | There was a suggestion to break down the level of hospitalisation for improved understanding. The suggestion was implemented by including level and length in hospitalisation, after which consensus level reached 100%. |
| 5.     | Nature of employment        | 100           | 20/20               | Suggestions were made to redefine the type of employment. The suggestion was implemented by elaborating employment into temporary, casual, contract or permanent, and the consensus level reached 100%. |

**Table 7: Items included in subdomains 2.1 and 2.3.**

| Item                                                                 | Number of responses (n) | Level of consensus (%) | Comments of experts |
|----------------------------------------------------------------------|-------------------------|------------------------|---------------------|
| 1. I am recognised by my employer as important at work, irrespective of my disability. | 20/20                   | 100                    | None                |
| 2. There are opportunities for personal growth at work, irrespective of my disability. | 20/20                   | 100                    | None                |
| 3. I will get promoted when due, irrespective of my disability. | 20/20                   | 100                    | None                |
| 4. I feel in control and empowered as I perform my duties irrespective of my disability. | 20/20                   | 100                    | None                |
| 5. I feel secure about my job and position, irrespective of my disability. | 20/20                   | 100                    | None                |
| 6. I am happy with my work and I enjoy doing it, irrespective of my disability. | 20/20                   | 100                    | None                |
| 7. I achieve my set goals at work, irrespective of my disability. | 20/20                   | 100                    | None                |
| 8. I have the opportunity to organise my approach to work, irrespective of my disability. | 20/20                   | 100                    | None                |

| Item                                                                 | Number of responses (n) | Level of consensus (%) | Comments of experts |
|----------------------------------------------------------------------|-------------------------|------------------------|---------------------|
| 1. My employer will retain me irrespective of my disability if I return to work. | 20/20                   | 100                    | None                |
| 2. My employer will transfer me to another unit if I cannot perform my formal duties. | 20/20                   | 100                    | None                |
| 3. My employer will not sack me if I cannot perform my formal duties. | 20/20                   | 100                    | None                |
| 4. My employer takes cordial relationship with colleagues seriously. | 20/20                   | 100                    | None                |
| 5. My employer is willing to give less duties if I cannot perform my previous duties. | 20/20                   | 100                    | None                |
| 6. My employers is emphatic and sympathetic with me due to my disability. | 20/20                   | 100                    | None                |
| 7. My employer does not think less of me because of my disability. | 20/20                   | 100                    | None                |

Olajoye, Soeker & Rhoda 2021; Peters et al. 2012; Soeker & Olajoye 2017; Wolfenden & Grace 2009). Most of the studies focused on experiences of rehabilitated stroke survivors, predictors of RTW among stroke survivors and community reintegration among stroke survivors. These studies are very different from our study, and our’s is a novel attempt to assess return to work on a scale among stroke survivors, which has not been attempted before now. Our study highlights the vacuum or lack of an outcome measure or instrument designed specifically to measure or assess RTW in all these studies. This, however, was the gap which the authors filled. However, the work of Usten et al. (2010), WHODAS 2.0, is similar to the RAS, although the WHODAS 2.0 was developed as a generic health scale for measuring functioning and disability in accordance with the ICF items. The RAS is a health-specific instrument for post-stroke survivors. No Delphi survey was conducted in the development of the WHODAS 2.0; the extensive and rigorous international research involved in developing WHODAS 2.0 included (1) a critical review of the literature on conceptualisation and measurement of functioning and disability and of related instruments; (2) a systematic cross-cultural applicability study; and (3) a series of empirical field studies to develop and refine the instrument. This suggests the RAS is an instrument with very good face and content validity, suitable, easy to understand and easy to use both in the clinical and academic environment.

**Limitation**

Country and company policies and laws were not part of the contextual factors studied in this study.

**Conclusion**

It can be concluded from the result of the study that the RAS has good face and content validity.

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**Competing interests**

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

**Authors’ contributions**

P.O.I., A.R. and M.R.S. all contributed in conceptualising, the literature review, data collection and report writing. E.U. was involved with editing and report writing.
