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An Evaluation of the Social Validity of the Aberrant Behaviour Checklist-Community

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Abstract

This study sought to evaluate the social validity of the Aberrant Behaviour Checklist-Community (ABC-C). 36 participants completed a questionnaire where they identified and commented on each item of the checklist.

Thematic analysis was conducted on the ABC-C as a whole, and for the six individual items that were specifically identified as problematic by over 50% of participants. All participants found issues with the items on the ABC-C, citing subjectivity, and unacceptability as the main concerns. It is recommended that some items should either be reviewed and rephrased to be more socially and ethically acceptable, and respectful of people with intellectual disabilities or a new measure developed.

Keywords: Aberrant Behaviour Checklist, social validity

Introduction

The Aberrant Behaviour Checklist-Community (ABC-C) was designed to rate inappropriate and maladaptive behaviour presented by people (children 5 years and older, adolescents and adults) with intellectual disabilities (Aman, Singh, Stewart and Field 2017). It is a commonly used resource worldwide, having been cited in 2,008 research articles on EBSCO-HOST as of March 2019, and translated into at least 35 different languages. *Clinicaltrials.gov*, one of the largest registries of clinical trials holding 200,000 trials worldwide, indicated that the term “aberrant behaviour checklist” in general, has been used on 213 intervention trials as of March 2019. The measure asks professionals, family members, or anyone with regular contact with the individual and know them well, to complete the questionnaire in regard to the behaviour in the past four weeks. The 58-question checklist seeks to evaluate 5 sub-scales empirically derived from principal component analysis: 1) lethargy; 2) inappropriate speech; 3) hyperactivity; 4) irritability; 5) stereotypic behaviour (Aman and Singh 1986). Each item is assigned to a certain subscale based on factor analyses. Subscale 1 has fifteen items, subscales 2 and 3 comprise sixteen items, subscale 3 seven items, and subscale 5 four items. Each subscale is then summated to their respective totals to provide an accurate picture of the behaviour. The checklist asks the user to rate a behaviour on a Likert scale from 0 “not a problem,” to 3, “severe in degree”. The authors recommend that when rating the behaviour,

to use the general population as a comparison group (Aman and Singh, 2017). The checklist has two versions, a residential and community version. The authors acknowledge that, given the de-institutionalisation movement, the Community version is used predominately. In the latest edition of the manual the authors provide specific descriptions of the behaviour(s) that help to characterise each item (Aman & Singh, 2017). Professionals are asked to familiarise themselves with these before introducing the scale to informants. The checklist is typically administered as a questionnaire and these descriptions are not included on the ABC-C form and no further guidance is provided as to how the descriptions are to aid completion of the questionnaire by informants.

The ABC-C was revised in 1994 to accommodate the shift from institutional to community provision, and the need to ensure that the checklist was still socially valid (Aman and Singh, 2017). The main amendments made were the replacement of certain terms such as "on the ward" and "patients", with "home", and "school" (Brown, Aman and Havercamp, 2002; Aman and Singh, 1994). The ABC-C was revised in the early 1990s to encompass both child and adult populations, with items changed to reflect this wider population, for example 'child' was changed to 'client' (Aman & Singh, 2017). The face sheets have been updated with terminology made more generic, some yes/no items about medical status and sensory impairment replace. In spite of these revisions, the authors appear to have adopted a

conservative approach to revision, stating in the latest manual that they took care not to alter meaning, indeed the authors state that in spite of the publication of a second edition of the manual that the scales remain unaltered 'It has a new look, but it is the same old ABC!' (Aman & Singh, 2017, p. 9).

The ABC-C-C is already considered to have high factor validity, and criterion reliability (Brown, Aman & Haverkamp, 2002; Marshburn & Aman, 1992; Aman, Singh, Stewart & Field, 1985; Rojahn & Helsel, 1991). The main issues that arise relate to inter-rater reliability, as the checklist has been commented to be somewhat subjective (Ono, 1996). In addition some concern has been raised in regard to the acceptability of the language and terminology used in the ABC-C. For example, Ashman (2005) attempted to use the a range of measures including the ABC-C to assess challenging behaviour in a study looking at variables predictive of service user engagement in meaningful activity. The author argued that the use of subjective language and the clinical focus of the questionnaires (including but not restricted to the ABC-C) were incongruent with the everyday language used by staff in community services. This lead to Ashman making modifications to 12 of the 58 items of the ABC-C. In addition, some researchers, in this University department, have reported concerns raised by ethical committees in regard to some of the content of the ABC-C, leading to

difficulties in gaining ethical approval for studies. One such review commented specifically on the ABC-C.

'The Committee drew your attention to the interview schedule for staff, which asks them to rate an individual's behaviour over the last four weeks and commented that they thought some of the questions were very personal and would be difficult to answer.'

This study aimed to evaluate the social validity of the ABC-C using data from experts and caregivers of those with intellectual disabilities and challenging behaviour, and people with disabilities in the United Kingdom. Social validity refers to the acceptability of and satisfaction with procedures, usually assessed by soliciting opinions from the people who receive and implement them (Luiselli and Reed, 2011). Although the ABC-C had been shown to have high factor validity and criterion reliability, without social validity, it may be measuring aspects of behaviour that do not pertain to a contemporary conceptualisation of challenging behaviour.

Methodology

Participants

Participants were recruited through the University of Kent Tizard Centre teaching faculty, postgraduate students in the Tizard Centre, an NHS Trust, and a family carer charity. A total of 36 questionnaires were returned.

Respondents include: postgraduate students (27.77%), doctors (22.22%), PhD (11.11%), professors/teachers (8.33%), clinical psychologists (5.55%), nondisclosed (5.55%), charity employees (2.77%), support worker (2.77%), Board Certified Behaviour Analyst (2.77%), research assistant (2.77%), PhD student (2.77%), trainee clinical psychologist (2.77%), and behaviour support advisor (2.77%).

Procedure

This study was approved by the University of Kent, Tizard Centre Ethics Committee. Participants were contacted via email with an information sheet as well as a link to the on-line questionnaire. All participants were anonymous, except for their position title, and offered implicit consent through the completion of the questionnaire. They were asked to review all 58-items of the ABC-C-C, mark any items they deemed problematic and had an option of explaining why and/or, how they would advise revision. All items were listed on a form with a checkbox next to them and an optional text box underneath. They were also given a brief history of the ABC-C, a description of its subscales, and a copy of the rating scale.

Results were also formatted into an Excel sheet which demonstrated the percentage of participants that had marked and or commented on an item. All results were then combined and imported into NVivo to be thematically analysed as a whole. Items that were identified by 50% or more of the participants were also imported into a separate NVivo document to be

thematically analysed individually. For both sets, the data was read and re-read several times independently during the process of “repeated reading” (Braun & Clarke, 2006). The whole data set was given equal attention to ensure that patterns were relevant for all items, and consistent throughout the questionnaire. Codes identified were features in the data that were repetitive and prominent throughout the data set. Themes were then created by collapsing and renaming codes into more extensive groups that embodied mutually shared aspects. Codes that did not have enough data were discarded. Afterwards, a revision of the themes took place in two parts: revisiting the data once again to ensure there were no overlooked codes, and how the themes worked together to create a comprehensive analysis. Suggested by Braun and Clarke (2006), this was done to ensure reflexivity, and internal validity. Finally themes and subthemes were named in concise terms to effectively translate its essence, and was then summarised in a final report.

Results

The distribution of participant responses to items that were identified as problematic are shown in Figure 1.

Insert Fig 1 about here

A total of 55 items out of 58 were marked at least once, with only three items on the checklist (Q32, Q46, and Q49) being seen as non-problematic by all participants. The item marked most frequently was Q6, identified by 26 participants, (72.22%).

Thematic Analysis of the ABC-C as a whole

Confusion/Ambiguity

Participants noted that many items were ambiguous and would have benefited from more context.

“Unsure of the definition of excessively”

“More clear and short definitions/ concepts with less broader meaning”

“When, where, in what situations”

Or just lack of understanding in the question generally.

“I don’t actually understand what is meant by this comment.”

It was reported that the significance of the questions was unclear or unnecessary, provoking response fatigue.

“Make a distinction between [question 11] and question 6”

“Why is this an ‘aberrant behaviour’?”

“See my response for the self-injury question”

Some items combined two distinct concepts.

“Whiny does not always go hand in hand with irritable”

“Verbal and physical aggression are different actions with different outcomes.”

Judgemental/derogatory language

Concerns were raised about language that judgemental/derogatory towards the person.

“Listless isn't a commonly used word, perhaps a more common synonym could be replaced”

“Never moves spontaneously. Is this literal? If so hardly anybody would achieve this”

“Blaming the person”

“Whiny is a very negative. Could replace with: Irritable and makes complaints.”

Separation of Children and Adults

The ABC is used for children and adults but infantilizing vocabulary was frequently used.

“Tantrums are associated with children.”

“I think separate versions for children and adults are necessary”

Subjectivity

Subjectivity was a principle concern of participants.

“Could be rephrased as vague and subjective”

“Not an operational definition and open to interpretation to be lazy!”

Assumption of function of behaviour

Many cited disregard for the intentionality of the behaviour or its function for the individual.

“It would be hard to know if self-harm is with or without intent.”

“I don't like the term 'meaningless' as it's likely these behaviours may serve a function for the person”

Repetition

It was commented that repetition rendered some items on the checklist unnecessary. However it is important to note that repetition was a deliberate design feature of the ABC.

“Remove question entirely”

“Not useful”

Thematic Analysis of Individual Items

The following items were specifically identified by 50% or more of the participants as being problematic

Q2. Injures self on purpose

This item was deemed to be problematic as it is difficult to ascertain whether someone is attempting to harm themselves with intent.

“Intentionality is subjective.”

“Implies some sort of deliberate action. Someone may injure them self as a result of an action”

Q6. Meaningless, recurring body movements

This item was deemed problematic and subjective as “meaningless” holds no constructive value. It requires assumption of the intention and function of a behaviour, while disregarding the importance it may play in a person’s life. It may be substituted with words such as “repetitive” or “automatically-reinforced”, or simply removed.

“We don't know if they are "meaningless"; unlikely to be”

“The movement may have as yet undiscovered meaning”

Utilisation of the words “meaningless” were criticized as subjective and a poor choice.

“Repetitive would be better”

“‘Meaningless’ is problematic”

Q10. *Temper tantrums/outbursts*

The term “temper tantrum” was seen to be outdated, infantilizing, and demeaning to adult populations. “Outbursts” would also require more environmental and situational context into how one should evaluate it more accurately.

“‘Meltdowns’ or ‘outbursts’ are much more popular phrases and less pejorative”

“Needs elaboration as to what would be included in temper tantrums or outbursts”

Participants noted that the terms were inappropriate for adults.

“It may actually be quite difficult to keep the same questions for adults and children.”

Q14. *Irritable and Whiny*

This item was strongly responded to as it was seen as negative and infantile in its wording.

Whiny” was seen to be condescending and judgemental. “Irritable” was considered vague and subjective. Wording should be appropriate for all ages, provides context, and can objectively describe what the rater should be assessing in a positive perspective.

“Whiny” is a meaningless and derogatory term and should not be used”

The wording was also met with concerns over subjectivity and lack of contextual information.

“Define ‘irritable. ”

Q17. *Odd, bizarre in Behaviour*

This item was deemed to be problematic as there is no clear operational definition or criteria for “odd/bizarre” and is therefore left to interpretation in a multi-cultural context. Although Aman and Singh (2017) recommend comparing the person being rated to a neurotypical individual of a similar age, cultural differences may affect how a person perceives the behaviour.

“Change to ‘unusual behaviour’”

“Remove question entirely”

“By whose definition? Seems very subjective, especially in a multicultural context.”

Q18. *Disobedient; difficult to control*

This item implies a power dynamic where the rater has dominant control over the client raising concerns in regard to autonomy, dignity and infantilisation.

“This implies that people we work with should be "obedient" and willing to being controlled.”

“Difficult to apply to adults - why should they be obeying and be controlled?”

A common suggestion was to rephrase using ‘noncompliance’ as it may be more generalisable.

“'Noncompliant' would be more appropriate for an adult population.”

Discussion

The purpose of this study was to determine the social validity of items on the ABC. Many items were rated as either ambiguous, subjective, derogatory, infantilising or repetitive. With concern in regard to the assumed motivation of the individual to engage in the behaviour. There was also some evidence of response fatigue, with detailed responses made only for

early items on the checklist. An overarching concern with the ABC was the lack of specificity of many of the scenarios proposed, leading to confusion and subjectivity. Subjectivity has been previously noted as an issue with the ABC, with the suggestion that this may account for the reported low inter-rater reliability (Aman and Singh, 2017; Ono, 1996). As behaviours are complex and multi-faceted it is important to encompass all aspects of the behaviour and context when addressing these items in order that respondents are able to make socially valid responses (Kennedy, 1992). Use of more precise and more structured language would assist in decreasing subjectivity and hence validity. Absolute terms such as “never” or “always” were used and it was not clear if these were meant to be interpreted literally. Replacement of these terms might specify where, when, why, and how long a behaviour may occur. As the checklist is used with both children and adults, the use of age-neutral terminology might be considered more respectful of the individuals, thus increasing the ABC-C’s social acceptability.

Some wording within the ABC was found by the respondents to be inappropriate and/or outdated. Words such as “temper tantrum” were deemed problematic, whereas “outbursts” was suggested as being more meaningful to respondents. Various items were identified as being judgemental, and disrespectful. Others noted that the checklist asked

respondents to rate two separate behaviours or concepts that were combined into a single item, making it difficult to answer.

Conclusion

The ABC-C has thus far been considered by many researchers to be the measure of choice in group studies where challenging behaviour is the dependant variable. There are obvious advantages to researchers, given the measures wide usage, in terms of bench marking and making cross study comparisons. However, given that 94.8% of items on the ABC were marked as problematic, with 10.3% of the items identified by over 50% of participants, this should raise some concerns in regard to the continued use of the measure in its current form.

The ABC-C manual does include examples and descriptions of specific behaviors that could help characterize its items. Some issues presented by participants were addressed in these examples, such as using the word "meltdown" instead of temper tantrums. However, it is not clear how these descriptions would be made available to informants and no studies which used the ABC-C could be found that referred to informants utilising these descriptions. If the ABC-C form included these descriptions, it is possible that social validity would increase.

"Test developers should strive to identify and eliminate language, symbols, words, phrases, and content that are generally regarded as offensive by members of racial, ethnic, gender, or other groups, except when judged to

be necessary for adequate representation of the domain.” (American Educational Research Association, American Psychological Association and National Council on Measurement in Education, 1999, p.82). Furthermore, Tassé and Craig (1999) argued the need for adaptation to contend with differing cultural expectations when the language of the scale is unchanged has also been acknowledged.

In the light of the above, the addition of environmental, time, or multicultural context to any measure of challenging behaviour is recommended to add objectivity. Items can also benefit from identification of function, rather than assumed intentionality as measurement of the behaviour itself increases social validity. Most importantly, items need to be phrased in a positive and respectful manner that does not place blame on an individual. Many of the items of the ABC-C hold connotations that the client is engaging in behaviour deliberately if not maliciously.

Limitations

There were several limitations in the current study. There was a potential prompt within the instructions of the questionnaire, as participants were asked to mark any items they deemed problematic or unacceptable, perhaps predisposing participants to specifically and solely look for faults within the items. This was done for ethical reasons, as participants must be made

aware that the items may be considered problematic. There was also an initial misspelling of Question 38 that required its partial removal from this study. The original questionnaire had stated "set" rather than "seat", causing initial responses to the question to query its meaning. Data on this original item was thus considered inadmissible, and only recorded responses from the when the questionnaire was corrected were noted. Response fatigue was a major issue within this study, as most participants started offering detailed feedback in the beginning, while providing lesser and shorter answers towards the end. Thus, future researchers may opt to present the items in a random order.

Leaving the limitations in the conduct of this study aside this study raises concerns in regard to the continued use of the ABC and the perhaps the changes recommended are so widespread that perhaps the development of completely new measure is required.

Declaration of Conflicting Interests

The Authors declares that there is no conflict of interest.

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| Item | Item Description | Percentage of Respondents |
|-------------|---|--|
| Q1 | Excessively active at home, school, work, or elsewhere | 38.88% |
| Q2 | Injures self on purpose | 50% |
| Q3 | Listless, sluggish, inactive | 44.44% |
| Q4 | Aggressive to other children or adults (verbally or physically) | 30.55% |
| Q5 | Seeks isolation from others | 30.55% |
| Q6 | Meaningless, recurring body movements | 72.22% |
| Q7 | Boisterous (inappropriately noisy and rough) | 44.44% |
| Q8 | Screams inappropriately | 36.11% |
| Q9 | Talks excessively | 30.55% |
| Q10 | Temper tantrums/ outbursts | 55.55% |
| Q11 | Stereotyped behaviour; abnormal, repetitive movements | 38.88% |
| Q12 | Preoccupied; stares into space | 16.66% |
| Q13 | Impulsive (acts without thinking) | 16.66% |
| Q14 | Irritable and whiny | 69.44% |
| Q15 | Restless, unable to sit still | 13.88% |

| | | |
|-----|---|--------|
| Q16 | Withdrawn; prefers solitary activities | 11.11% |
| Q17 | Odd, bizarre in behaviour | 58.33% |
| Q18 | Disobedient; difficult to control | 61.11% |
| Q19 | Yells at inappropriate times | 27.77% |
| Q20 | Fixed facial expression; lacks emotional responsiveness | 19.44% |
| Q21 | Disturbs others | 41.66% |
| Q22 | Repetitive speech | 5.55% |
| Q23 | Does nothing but sit and watch others | 41.66% |
| Q24 | Uncooperative | 25% |
| Q25 | Depressed mood | 22.22% |
| Q26 | Resists any form of physical contact | 5.55% |
| Q27 | Moves or rolls head back and forth repetitively | 2.77% |
| Q28 | Does not pay attention to instructions | 27.77% |
| Q29 | Demands must be met immediately | 30.55% |
| Q30 | Isolates himself/herself from other children or adults | 16.66% |
| Q31 | Disrupts group activities | 13.88% |
| Q32 | Sits or stands in one position for a long time | 0% |
| Q33 | Talks to self loudly | 5.55% |

| | | |
|-----|---|--------|
| Q34 | Cried over minor annoyances and hurts | 33.33% |
| Q35 | Repetitive hand, body, or head movements | 5.55% |
| Q36 | Mood changes quickly | 13.88% |
| Q37 | Unresponsive to structured activities (does not react) | 13.88% |
| Q38 | Does not stay in a seat (e.g.: during lesson or training periods, meals, etc) | 8.33%* |
| Q39 | Will not sit still for any length of time | 16.66% |
| Q40 | Is difficult to reach, contact, or get through to | 19.44% |
| Q41 | Cries and screams inappropriately | 25% |
| Q42 | Prefers to be alone | 13.88% |
| Q43 | Does not try to communicate by words or gestures | 13.88% |
| Q44 | Easily distractible | 2.77% |
| Q45 | Waves or shakes the extremities repeatedly | 22.22% |
| Q46 | Repeats a word or phrase over and over | 0% |
| Q47 | Stamps feet or bangs objects or slams door | 11.11% |
| Q48 | Constantly runs or jumps around the room | 11.11% |
| Q49 | Rocks body back and forth repeatedly | 0% |
| Q50 | Deliberately hurts himself/herself | 30.55% |

| | | |
|-----|--|--------|
| Q51 | Pays no attention when spoken to | 13.88% |
| Q52 | Does physical violence to self | 25% |
| Q53 | Inactive, never moves spontaneously | 19.44% |
| Q54 | Tends to be excessively active | 22.22% |
| Q55 | Responds negatively to affection | 19.44% |
| Q56 | Deliberately ignores directions | 38.88% |
| Q57 | Has temper outbursts or tantrums when he/she does not get own way | 36.11% |
| Q58 | Shows few social reactions to others | 16.66% |
