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An evaluation of the social validity of the **Aberrant Behavior Checklist - Community**

Brittany Chan and Peter Baker

Abstract

Purpose - This paper aims to evaluate the social validity of the Aberrant Behavior Checklist - Communit y (ABC-C).

Design/methodology/approach - Thirty-six participants completed a questionnaire in which they identified and commented on items of the ABC-C they saw as problematic. Thematic analysis was conducted on the comments made.

Findings - All participants identified at least one item of the ABC-C as problematic with six items being so identified by over half the participants. A number of themes were identified in participant comments including ambiguity, judgemental language, child-focussed language, lack of attention to behavioural function and repetition.

Research limitations/implications - More research is required using empirically based methodologies on measures used to assess people with learning disabilities. This should involve ascertaining the social validity of such measures by soliciting the views of both those being assessed and those assessing.

Originality/value - This study is the first of its kind to evaluate the social validity of one of the most widely used measures of challenging behaviour for people with learning disabilities.

Keywords Learning disabilities, Challenging behaviour, Intellectual disability, Outcome measures, Aberrant Behavior Checklist, Social validity

Paper type Research paper

Introduction

The Aberrant Behavior Checklist (ABC) was designed to rate inappropriate and maladaptive behaviour presented by people (children who were five years and older, adolescents and adults) with learning disabilities (Aman et al., 1985a). 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 phrase "aberrant behavior checklist" had been used in 213 intervention trials as of March 2019. The measure asks professionals, family members or anyone having regular contact with the individual and knowing them well, to complete the questionnaire in regard to the individual's behaviour in the previous four weeks. The 58-question checklist reflects five sub-scales empirically derived from principal component analysis:

- 1. lethargy;
- 2. inappropriate speech;
- 3. hyperactivity;
- 4. irritability; and
- 5. stereotypic behaviour.

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Subscale 1 has 15 items, Subscales 2 and 3 each comprise 16 items, Subscale 3 comprises 7 items and Subscale 5 comprises 4 items. Each item is rated on a Likert scale from 0 = "not a problem," to 3 = "severe in degree". Total scores can be calculated for each subscale as well as the overall checklist. In the recent manual (Aman and Singh, 2017), the authors make clear recommendations in regard to the instructions given to informants including defining severity and giving a clear indication of who the comparison (reference) group should be. They also clearly state that the form should not be simply handed to informants with a request that they rate the individual to be assessed. The checklist has two versions - residential and community. The authors acknowledge that, given the de-institutionalisation movement, the community version is now predominantly used. In the latest edition of the manual, the authors provide specific descriptions of the behaviour(s) that characterise each item (Aman and 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 form. No further guidance is provided as to how the descriptions are to aid completion of the questionnaire by informants.

The ABC 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 and Singh, 2017). In addition, revisions were made 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 were the replacement of certain terms such as "on the ward" and "patients", with "home" and "school" (Brown et al., 2002; Aman and Singh, 1994), creating the Aberrant Behavior Checklist - Community (ABC-C). The face sheets have been updated with more generic terminology and some yes/no items about medical status and sensory impairment replaced. However, the authors have adopted a deliberately conservative approach to revision, stating in the latest manual that they took care not to alter the meaning of items. Indeed the authors stress the ABC's continuity in the publication of a second edition of the manual:

It has a new look, but it is the same old ABC! (Aman and Singh, 2017, p. 9).

The ABC has high factor validity, and criterion reliability (Brown et al., 2002; Marshburn and Aman, 1992; Aman et al., 1985b; Rojahn & Helsel, 1991). The main issues reported 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. For example, Ashman (2005) attempted to use 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 led to Ashman proposing modifications to the wording of 12 of the 58 ABC-C items. In addition, researchers in the authors' University department, have reported concerns raised by Ethics committees in regard to some of the content of the ABC-C, leading to difficulties in gaining ethical approval for its use. One such review commented:

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.

The current study aimed to evaluate the social validity of the ABC-C using data from experts and caregivers of people with learning disabilities and challenging behaviour in the UK. Social validity refers to the acceptability of and satisfaction with procedures, usually assessed by directly soliciting opinions from the people who receive and implement them (Luiselli and Reed, 2011). In regard to checklists, this would specifically involve scrutiny that

the language is consistent with current terminology and values. Although the ABC-C has been shown to have high factor validity and criterion reliability, without social validity, the risk is that it may be measuring aspects of behaviour that do not completely reflect contemporary conceptualisations of challenging behaviour.

Methodology

Participants

Participants representing potential/typical users of the ABC-C were recruited through the University of Kent Tizard Centre teaching faculty, postgraduate students in the Tizard Centre and clinical staff within an NHS Trust. In addition, a charity working with families who have a member with learning disabilities presenting challenging behaviour were approached to obtain the participation of both the charity's staff and family carers of individuals who could be potentially assessed using the ABC-C. A total of 36 questionnaires were returned from MA/MSc students (10), medical doctors (8), PhD students (5), academic staff (3), clinical psychologists (2), not disclosed (2), charity employee (1), support worker (1), behaviour analyst (1), research worker (1), trainee clinical psychologist (1) and behaviour support advisor (1).

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. Using an online questionnaire, the participants were asked to read and consider each of the 58 items of the ABC-C and mark any items they deemed problematic, with the option of explaining why and/or how they would advise revision. 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 formatted into a Microsoft Excel sheet to calculate the percentage of participants that had marked and/or commented on each item. All comments were imported into NVivo to be thematically analysed as a whole by the first author. Comments on items that were identified as problematic by 50% or more of the participants were also imported into a separate NVivo document to be thematically analysed individually. In both cases, the comments made by participants were reviewed using the process of "repeated reading" (Braun et al., 2019). Attention was given to the relevance and consistency of comments made across all items. Codes identified were features 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 supporting 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 looking at 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 their essence and summarised in a final report.

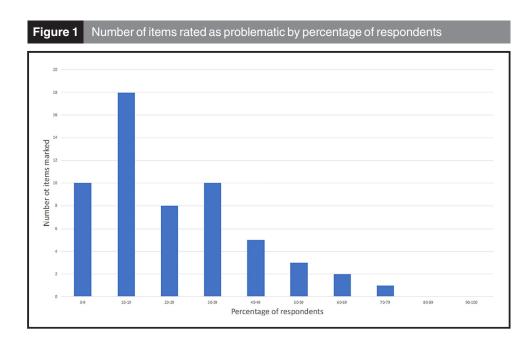
Results

Quantitative analysis

Items that were identified as problematic by over 50% of participants are shown in Table 1.

Only three items on the checklist (32, 46 and 49) were not identified as problematic by at least one participant. The distribution of the number of items found problematic by the percentage of participants is given in Figure 1.

Table 1 Items that were identified as problematic by over 50% of participants		
Item	ltem text	(%) Identifying as problematic
2	Injures self on purpose	50
6	Meaningless, recurring body movements	72.2
10	Temper tantrums/ outbursts	55.6
14	Irritable and whiny	69.4
17	Odd, bizarre in behaviour	58.3
18	Disobedient; difficult to control	61.1



Thematic analysis of the Aberrant Behavior Checklist - Community as a whole

A number of themes were identified.

Participants noted *Confusion/Ambiguity* regarding many items. For example, some items seemed to require more context:

Unsure of the definition of excessively.

More clear and short definitions/concepts with less broader meaning.

When, where, in what situations.

Some items were seen as difficult to understand:

I don't actually understand what is meant by this item.

Participants reported that it was not always easy to see why some items were significant or necessary and that this could provoke response fatigue in those completing the ABC-C:

Make a distinction between [item 11] and item 6

Why is this an 'aberrant behaviour'?

See my response for the self-injury question.

Some items were seen as combining two distinct concepts:

Whiny does not always go hand in hand with irritable.

Verbal and physical aggression are different actions with different outcomes.

Participants noted *Judgemental/derogatory language* as being problematic in a number of items, especially with respect to the individual about whom the ABC-C was being completed:

Blaming the person (e.g. item 18 Disobedient; difficult to control).

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

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

It was suggested that *Separation of Children and Adults* might require separate versions with better-matched language:

Tantrums are associated with children.

I think separate versions for children and adults are necessary (e.g. item 10 Temper tantrums/outbursts)

The apparent *Subjectivity* of items concerned many participants:

Could be rephrased as vague and subjective (e.g. item 14 Irritable and whiny).

Not an operational definition and open to interpretation to be lazy! (e.g. item 23 Does nothing but sit and watch others).

Many participants cited disregard for the *Intentionality of the behaviour or its function* for the individual being assessed:

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.

It was suggested that Repetition rendered some items on the checklist unnecessary:

Remove question entirely

Not useful (e.g. items 38 Does not stay in seat (e.g, during lessons or training periods, meals, etc) and item 39 Will not sit for any length of time).

However, it is important to note that repetition was a deliberate design feature of the ABC-C.

Thematic analysis of individual items

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

Item 2: Injures self on purpose. This item was deemed to be problematic because of difficulty in ascertaining whether someone's self-injury was with intent:

Intentionality is subjective. Just self-injury is sufficient

Implies function and deliberate act which is misleading

Item 6: Meaningless, recurring body movements. This item was deemed problematic as the word "meaningless" both makes an assumption about the intention and function of a behaviour and disregards the importance it may play in a person's life. It was suggested that it might be replaced 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.

Repetitive would be better.

"Meaningless" is problematic.

Item 10: Temper tantrums/outbursts. The term "temper tantrum" was seen to be outdated and, because of its association with childhood, demeaning in an adult context. Even the term "Outbursts" would seem to require more situational context for an accurate judgement to be made:

"Meltdowns" or "outbursts" are much more popular phrases and less pejorative.

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

Item 14: Irritable and whiny. "Whiny" was thought to be condescending and judgemental. "Irritable" was considered vague and subjective and needing additional context:

"Whiny" is a meaningless and derogatory term and should not be used.

Define "irritable".

Item 17: Odd, bizarre in behaviour. This item was deemed to be problematic as there was no clear operational definition or criteria for "odd/bizarre", making the rating very much a matter of interpretation:

Change to "unusual behaviour."

Remove question entirely.

Although Aman and Singh (2017) recommend comparing the person being rated to a neurotypical individual of a similar age, this may be insufficient:

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

Item 18: Disobedient; difficult to control. This item raised concerns in regard to autonomy, dignity and the application of child-related concepts to adults:

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

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

A common suggestion was to rephrase:

"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-C. Many items were rated as ambiguous, subjective, derogatory, child-focussed, lacking in specificity/context or repetitive. There was also concern that the phrasing of some items seemed to attribute particular motivations to the individual engaging in the behaviour. Subjectivity has been

previously noted as an issue with the ABC-C, 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. This might suggest the reduced use of absolute terms such as "never" or "always" whose literal interpretation would usually be problematic. Such terms might be replaced by more specification of where, when, why and how long a behaviour may occur. As the checklist is used with both children and adults, the use of ageneutral terminology might be considered more respectful of the individuals, thus increasing the ABC-C's social acceptability.

Some wording within the ABC-C 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.

There were several limitations in the current study. The questionnaire instructions asked participants 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, so that participants would be aware that at least some items (which previous experience suggested they might otherwise find offensive) may be considered problematic. There was also an initial misspelling of Item 38 that required its partial removal from this study. The original questionnaire had stated "set" rather than "seat", causing initial responses to query its meaning. Data on this original item was thus considered inadmissible, and only recorded responses following the questionnaire's correction were used. 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 so that items are more equally likely to receive comments.

The number of participants was small. This, coupled with the rather mixed backgrounds of participants, raises some doubt about the representativeness of the opinions expressed. It is perfectly possible that social validity issues will be differently identified by, for example, families and professionals. Some of the issues raised by the participants could well be a function of cultural and linguistic differences between the USA and the UK. In addition, it is unclear how other measures (of behaviour or psychological characteristics) would fare subject to similar scrutiny. This makes it difficult to judge how significant was the large number of items identified as problematic – it may be that similar levels of concern would also be raised about other measures.

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 dependent variable. There are obvious advantages to researchers, given the measure's wide usage in terms of cross study comparisons and bench marking. These advantages strongly argue for its continued usage. However, given the number of its items identified as problematic, including 10.3% by over 50% of participants, the current study raises some concerns about the acceptability and meaningfulness of the measure to both those whose behaviour is being assessed and those completing the assessment.

The ABC-C manual includes descriptions of specific behaviours that could help characterise 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 using these descriptions. If the ABC-C form included these descriptions, it is possible that social validity would increase, though of course this might also increase the amount of time taken with consequent impact on response rates.

Tassé and Craig (1999) have argued the need for adaptation of behavioural measures to cope with differing and changing cultural expectations. This expectation has been endorsed more widely:

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, National Council on Measurement in Education, 1999, p. 82).

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. Most importantly, items need to be phrased in a positive and respectful manner that does not seem to place blame on an individual. Some of the ABC-C items currently do seem to attribute intent or deliberateness to the person engaging in the behaviour.

While this study raises some concern in regard to the continued use of the ABC-C, we are certainly not recommending its abandonment or the immediate enacting of widespread changes, especially given its widespread usage in studies where there is a requirement to have an easily administered measure of challenging behaviour. We do, however, recommend further research using empirically based methodologies, both with the ABC-C and with other measures used to assess people with learning disabilities, where similar issues may well arise. Such research should include a focus on the social validity of such measures through obtaining the views of both those being assessed and those completing the measures.

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