Research in Developmental Disabilities 31 (2010) 1652–1658

Contents lists available at ScienceDirect

Research in Developmental Disabilities

Psychometric evaluation of the Dutch version of the Mood, Interest and Pleasure Questionnaire (MIPQ)

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ARTICLE INFO

Article history:
Received 30 March 2010
Accepted 16 April 2010

Keywords:
People with profound intellectual and multiple disabilities
Quality of life
Psychometric evaluation

ABSTRACT

Recently, several instruments have been developed to measure the subjective component of the quality of life (QOL) of people with profound intellectual and multiple disabilities (PIMD). A next step, however, must be the further validation of these instruments. The present study aimed at evaluating the psychometric properties of one of these instruments, the Dutch version of the Mood, Interest and Pleasure Questionnaire (MIPQ). The MIPQ is a 25-item Likert scale questionnaire with two subscales (Mood and Interest and Pleasure). The MIPQ and the Aberrant Behavior Checklist were completed on 360 participants with severe or profound intellectual disabilities. About 27% of these participants were included in an examination of test–retest of and the inter-rater reliability of the MIPQ. The results suggest that the proposed two-factor structure did not show an adequate fit to our data. An exploratory factor analysis revealed a three-factor structure with positive mood, negative mood and interest as three correlated but distinct subscales. These results are in concurrence with the literature on positive emotions. High internal consistency ($\alpha \geq .80$), high inter-rater ($r \geq .69$) and high test–retest reliability ($r \geq .86$) were found, which indicates the reliable use of the MIPQ in the population of people with PIMD. Strong negative correlations between the MIPQ total score and the Aberant Behavior Checklist's 'lethargy, social withdrawal' subscale provides some evidence of the construct validity of the MIPQ. However, further validation of the MIPQ including other measures of subjective well-being is warranted.

1. Introduction

In the field of intellectual disabilities (ID), the concept of 'quality of life' is increasingly being used as a conceptual framework for assessing quality outcomes, a social construct that guides quality enhancement strategies, and a criterion for assessing the effectiveness of those strategies (Verdugo, Schalock, Keith, & Stancliffe, 2005). With this increased use of the QOL construct as a basis for policies and practices in the field of ID, the importance of a valid assessment of QOL is heightened (Verdugo et al., 2005).

According to Schalock et al. (2002), a valid assessment of QOL must comprise an evaluation of the objective as well as of the subjective component of QOL. The first consists of objective features that can be observed and measured within the public domain; the latter of subjective experiences of the individual. Within subjective well-being, a further differentiation

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doi:10.1016/j.ridd.2010.04.011

can be made between the individual's general satisfaction with several aspects of his/her life ('satisfaction') and the individual's expressions of positive or negative emotions or mood ('happiness') (Cummins, 1998; Diener, 1994; Schalock & Felce, 2004).

People with profound intellectual and multiple disabilities (PIMD) are a group of people for which the valid assessment of QOL is a complex and difficult matter (Petry, Maes, & Vlaskamp, 2005). People with PIMD have such profound intellectual disabilities that hardly any standardised tests are applicable for a valid estimation of their intellectual capacity, and they possess profound neuromotor dysfunctions, like spastic tetraplegia. In addition to profound intellectual and physical disabilities, sensory impairments are also frequently experienced (Nakken & Vlaskamp, 2007). People with PIMD need support in almost every aspect of their daily life (Petry & Maes, 2007). This high level of dependency is reinforced by the fact that they cannot verbally communicate when and how support should be given. The complex interaction and the severity of their disabilities make their lives in large part different from that of other people. As such, the operationalization of QOL needs to be geared to their needs, possibilities and limitations in order to make its assessment valid (Borthwick-Duffy, 1990; Goode & Hogg, 1994; Ouellette-Kuntz & McCreary, 1996; Petry, Maes, & Vlaskamp, 2007). Selecting an appropriate method to assess the QOL of people with PIMD and selecting an appropriate informant is an area of concern because people with PIMD do not have the required skills to speak for themselves (Selai & Rosser, 1993). Frequently, a knowledgeable proxy is asked to respond on the person's behalf, but one can question whether information provided by proxies is a valid and accurate substitute for self-reports (Heal & Sigelman, 1996; McVilly, Burton-Smith, & Davidson, 2000; Rapley, Ridgeway, & Beyer, 1998; Stancliffe, 2000; Verdugo et al., 2005). Given these difficulties, valid and reliable instrument to assess the QOL of people with PIMD were lacking. Consequently, people with PIMD received limited attention in the expanding body of research on QOL and people with ID (Lyons, 2005).

Recently, however, some progress has been made in the assessment of the QOL of people with PIMD. With regard to the measurement of the objective component of QOL, the QOL-PMD (Petry, Maes, & Vlaskamp, 2009) has been developed which is a questionnaire containing 55 items on the domains of physical well-being, material well-being, social well-being, activities, communication & influence and development. A first evaluation of the psychometric properties of the questionnaire was encouraging (Petry et al., 2009). Another questionnaire aimed at measuring the objective component of QOL of persons with PIMD is a questionnaire by Seifert, Fornefeld, and Koenig (2001). However, the purpose of this questionnaire is, according to its developers, to serve as a checklist in the process of drawing up a support plan for a person with PIMD and not to be used as a 'stand-alone' questionnaire. Consequently, the authors did not check the psychometric properties of the questionnaire.

Progress has also been made with regard to the measurement of the subjective component of QOL of people with PIMD. Lyons (2003, 2005), for instance, developed the Life Satisfaction Matrix (LSM), an instrument and procedure that is designed for measuring the subjective QOL of people with PIMD. Nevertheless, the author indicates that further research is required to develop and fully evaluate the LSM as an instrument capable of measuring changes in subjective well-being. Using a psychophysiological approach, Vos, De Cock, Petry, Van den Noortgate, and Maes (2010) made a first attempt in using physiological parameters to investigate subjective well-being in people with PIMD. It is however too early to evaluate the effectiveness of this approach, as their group was restricted to three participants. A third instrument that can be used to measure the subjective well-being of persons with PIMD is the Mood, Interest and Pleasure Questionnaire (MIPQ) developed by Ross and Oliver (2003). The MIPQ is a 25-item questionnaire with two subscales (Mood and Interest and Pleasure) designed to measure affect in adults with severe and profound ID. According to its developers, the MIPQ can offer valuable information on the subjective component of QOL of persons with severe or profound ID, given that satisfaction might be reflected in the kinds of behaviors addressed in the MIPQ (Ross & Oliver, 2003). A preliminary analysis by Ross and Oliver (2003) showed promising psychometric properties of the MIPQ in a sample of 53 participants with severe or profound intellectual disabilities, who were partly or non-verbal. Thee reliability of the MIPQ was good for subscales and total score: test–retest and inter-rater reliability coefficients for the total score were .87 and .76, respectively. Internal consistency was high (α = .94). A significant negative correlation between the MIPQ total score and the Aberrant Behavior Checklist's (Aman & Singh, 1986) 'lethargy, social withdrawal' subscale provided preliminary evidence of construct validity ($r = -.59$, $p < .001$). An examination of the factor structure was not included in the preliminary analysis. Nevertheless, further validation of the measure is warranted according to the developers.

Concluding, we can state that progress has been made in tackling the difficulty of measuring the QOL of people with PIMD. Several new instruments and procedures have been developed to measure the objective as well as the subjective component of QOL. A next step, however, must be the further validation of these instruments. As such, the present study aimed at evaluating the psychometric properties of the Dutch version of the MIPQ in a larger sample of adults with severe and profound intellectual disabilities. Three research questions were addressed. First, in order to examine the validity of the theoretical framework underlying the construction of the MIPQ for people with severe and profound intellectual disabilities, the proposed two-factor structure of the MIPQ was tested. Items for the MIPQ were constructed on definitions of low mood and anhedonia outlined under 'Criteria for Major Depressive Episode' in DSM-IV and on operationally defined 'symptomatic behaviors' proposed by Lowry (1998). The items are divided into two subscales: the 'mood' subscale (12 items) and the 'interest & pleasure' subscale (13 items). Second, several reliability indices were investigated. In line with previous research (Ross and Oliver (2003), adequate internal consistency, test–retest reliability, and inter-rater reliability were expected to emerge. Third, construct validity of the MIPQ was tested by examining associations among subscales. As subscales pertain to related constructs, strong associations were hypothesized. In line with previous research (Ross & Oliver, 2003), the Aberrant