The multidimensional peer victimization scale: A systematic review

Stephen Joseph⁎, Hannah Stockton

School of Education, University of Nottingham, UK

ARTICLE INFO

Keywords:
Peer victimization
Bullying
Multidimensional Peer Victimization Scale
Systematic review
Psychometric properties

ABSTRACT

Developing bullying interventions and testing their success depends on the valid and reliable measurement of peer victimization. The objective of this study was to examine the psychometric properties of the Multidimensional Peer Victimization Scale (MPVS, Mynard & Joseph, 2000). This systematic review examined 34 published studies demonstrating that the MPVS is a reliable, valid, and psychometrically sound measure for capturing multiple facets of peer victimization across a variety of samples. Results also highlighted that there are relatively stable sex differences in the rates and pattern of peer victimization, with males experiencing more direct forms of victimization and females experiencing more indirect forms of victimization. Recommendations for further research are discussed, alongside new ways to further advance the assessment of peer victimization.

1. Introduction

Peer victimization involves the repeated and systematic abuse of power by one or more peers over a period of time in purposeful attempts to injure or inflict discomfort (Olweus, 1993). Peer victimization is a relatively frequent experience among young people: estimates vary depending on age and gender, but research has suggested that between 5% and 30% of children and adolescents are victims (Eslea et al., 2004; Berger, 2007). Other estimates have suggested that rates of victimization may reach as high as 32% in high-income countries and 60% in low- to middle-income countries (Fleming & Jacobsen, 2009; Currie et al., 2012).

Peer victimization experiences are associated with a range of physical, emotional, academic and behavioural problems. Several systematic reviews and meta-analyses have demonstrated that victims generally have a lower quality of life and experience poor self-esteem (Hawker & Boulton, 2000); experience loneliness and isolation (Storch & Masia-Warner, 2004); increased psychosomatic complaints (Gini & Pozzoli, 2009); greater anxiety and depression (Hawker & Boulton, 2000); are at greater risk for suicidal ideation and behaviours (van Geel, Vedder, & Tanilon, 2014); greater externalizing problems such as aggression, delinquency and misconduct (Reijnjes et al., 2011); and perform less well academically (Nakamoto & Schwartz, 2009) than those who are not victimized. The psychological difficulties experienced through peer victimization in childhood and adolescence may produce negative outcomes well into adulthood (see McDougall & Vaillancourt, 2015). As such, peer-victimization and how to provide helpful interventions for young people is a topic of much interest to educationalists and other professionals (Crothers & Levinson, 2004).

In order to develop interventions and assess their success it is necessary to accurately, reliably, and comprehensively assess the construct of peer-victimization. As such, researchers have developed numerous self-report measures. A recent review identified 41 unique measures of peer victimization (Vivolo-Kantor et al., 2014). While this number has the advantage of permitting choice over instrument selection, it has simultaneously resulted in significant inconsistencies in measurement that can contribute to conflicting prevalence estimates and research results (Vivolo-Kantor et al., 2014). No one measure is universally recognised as the instrument of choice, although some measures are used more frequently than others.

One commonly used measure is the Multidimensional Peer-Victimization Scale (MPVS; Mynard & Joseph, 2000). The MPVS is a 16-item self-report instrument that contains four subscales: physical victimization, comprising items examining how often the child has been subject to physical harm such as being punched or kicked; verbal victimization, comprising items examining behaviours such as name calling or being made fun of; social manipulation, comprising items concerned with negative social behaviours by some children to turn others against the child; and attacks on property, comprising items relating to the damage or theft of possessions. Each item is scored on a three point Likert-scale of 0 = not at all, 1 = once and 2 = more than once, with participants indicating how often during the school year they had experienced each of the 16 victimization experiences. Total victimization scores range from a possible 0 to 32, with subscale scores ranging from 0 to 8. Higher scores indicate that a child has been subjected to more incidents of peer victimization.

⁎ Corresponding author at: Room B2 Dearing Building, Jubilee Campus, Wollaton Road, Nottingham NG8 1BB, UK.
E-mail address: Stephen.joseph@nottingham.ac.uk (S. Joseph).

https://doi.org/10.1016/j.avb.2018.07.009
Received 14 August 2017; Received in revised form 3 July 2018; Accepted 24 July 2018
Available online 25 July 2018
1359-1789/ © 2018 Published by Elsevier Ltd.
The MPVS was developed with a sample of 812 children aged 11–16 years who completed an initial survey of 45 items, reduced using factor analysis to the final 16 items representing the four distinct factors. When developed, the MPVS provided a new, empirically derived, and broader conceptualisation of peer victimization than instruments available at the time, and uniquely provided convergent validity with self-reports of being bullied (Vivolo-Kantor et al., 2014).

Although two relatively recent reviews of bullying scales have been conducted (Vessey, Strout, DiFazio, & Walker, 2014; Vivolo-Kantor et al., 2014), these reviews focused on the range of measures available and commented on the psychometric properties of each measure as reported in their original development and validation studies. As such, the psychometric data on the MPVS presented in both of these reviews was limited to the original study. In the 18 years since its publication the MPVS has become a popular measure and the evidence concerning its psychometric properties has accumulated. Despite the widespread application of the MPVS in the bullying literature, and the relevance of this literature in the wider context of child and adolescent well-being, a comprehensive literature review regarding its use has not been conducted.

Given this gap in the literature, we undertook a systematic review of studies that have employed the MPVS and reported data on its psychometric properties, including findings relating to its factor structure, internal consistency reliability, construct validity and associations with outcome variables. The aims of this paper were to review and summarise the use of the MPVS in peer-reviewed published studies and to evaluate the available evidence for its psychometric properties and applicability to a range of sample types and age groups.

2. Method

2.1. Search and selection strategy

During July 2017, four electronic databases (ISI Web of Science, PsycINFO, Wiley Online and GoogleScholar) were searched for empirical papers citing the original MPVS paper (Mynard & Joseph, 2000). These databases were also searched using the search term ‘Multidimensional Peer Victimization Scale’. Reference lists from relevant studies were also reviewed to ensure that we had identified all eligible studies that presented empirical results for the MPVS. Studies were selected for inclusion in the review if the authors: (1) published the paper in English; (2) published the paper in a peer-reviewed scientific journal; (3) reported that the full 16-item MPVS had been administered; (4) used the correct scoring procedure for the MPVS items (0 = not at all; 1 = once; 2 = more than once); (5) provided information regarding psychometric properties such as factor analysis, internal consistency, construct validity, and/or provided mean total scores. Studies were excluded if they were qualitative studies, meta-analyses, literature reviews or did not present original empirical results (e.g. if they provided a summary of ongoing research or studies still in progress).

2.2. Review strategy

There were three main steps to the review. In Step One, all citations generated by the database searches were reviewed. After eliminating duplicates, a comprehensive abstract screening was conducted whereby information relating to inclusion and exclusion criteria was extracted. This information included basic descriptive data such as the nature of the paper (i.e. empirical study, literature review, book chapter, conference paper, doctoral thesis), the language it was written in, and whether or not the MPVS had been used. Papers that did not meet these criteria were excluded. In cases where it was not discernible from the abstract, the paper was retained for step two.

In Step Two, a list of eligible studies was compiled and full-text articles extracted. Each article was subjected to a thorough review and further descriptive data was documented, including the size and general characteristics of the sample, whether or not the full 16-item MPVS had been used, the scoring system that had been adopted, and whether or not data regarding psychometric properties of the MPVS had been reported. This list was used to finalise the studies to be included in the review.

In Step Three, for the studies that met the inclusion criteria, abstraction of results focused on indicators of scale reliability and validity; results of factor analytic procedures; and key study findings such as correlational and longitudinal relationships with other variables of interest.

3. Results

3.1. Search results

The search strategy identified 324 original articles published between the initial publication of the MPVS in April 2000 and July 2017. Screening resulted in the exclusion of 290 papers. The flow diagram (Fig. 1) details the study selection procedure. The main reasons for exclusion were that the paper was a book chapter, doctoral dissertation or conference paper (99 papers); the paper was not published in English (61 papers); the paper was a review of existing research or summarised results of other published studies (21 papers); the paper was a qualitative study (2 papers); the original MPVS article was cited but the MPVS was not administered (65 papers); the studies used a modified version of the MPVS that did not include all 16 items (10 papers); the studies used the MPVS but did not use the original scoring system (10 papers), or studies modified the MPVS by adding new items to produce an idiosyncratic modified form of the MPVS making comparisons and generalisations about the reliability and validity of the original MPVS impossible (14 papers). Studies were however included if they added new items to produce additional subscales alongside the original MPVS subscales. Morrow, Hubbard, and Swift (2014) added four items to assess social rebuff. Betts, Houston, and Steer (2015) added four items to assess electronic victimization. In these two studies, results for the original MPVS were reported alongside the new subscales. Finally, an additional 8 papers could not be located despite requests to authors and extensive searches. Therefore, of the 324 papers identified, 34 fulfilled the strict inclusion and exclusion criteria and were included in the final review (see Table 1 for a summary of each paper).

3.2. Description of studies included

The majority of studies included in this review involved either primary school students (Andreou et al., 2005; Azeredo et al., 2017; Balogun & Olapegba, 2007; Balogun et al., 2006; Defeyter et al., 2015; Litman et al., 2015; Morrow, Hubbard, & Swift, 2014; Morrow, Hubbard, Barhight, & Thomson, 2014; Pick et al., 2005), secondary school students (Akrak & Munawar, 2016; Anderson et al., 2016; Betts et al., 2015; Betts et al., 2017; Betts & Spenser, 2017; Biebl et al., 2011; Bird et al., 2017; Candel & Iacob, 2015; Fontaine et al., 2018; Kaiser & Malik, 2015; McFarlane et al., 2017; Murphy et al., 2015; Mynard et al., 2000; Popoola, 2005; Rao & Kishore, 2013; Scarpa et al., 2012; Shakoor et al., 2014; Waytowich et al., 2011), or both primary and secondary school students (Fung & Raine, 2012; Law & Fung, 2013; Raine et al., 2011). Three studies included samples of university students (Cosgrove et al., 2011).