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Acceptance: What's in a Name? A Content Analysis of Acceptance Instruments in Individuals With Chronic Pain

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Abstract: **Instruments to assess chronic pain acceptance have been developed and used. However, whether and to what extent the content of the items reflects acceptance remain uninvestigated. A content analysis of 13 instruments that aim to measure acceptance of chronic pain was performed. A coding scheme was used that consisted of 3 categories representing the key components of acceptance, that is, disengagement from pain control, pain willingness, and engagement in activities other than pain control. The coding scheme consisted of 5 additional categories in order to code items that do not represent acceptance, that is, controlling pain, pain costs, pain benefits, unclear, and no fit. Two coders rated to what extent the items of acceptance instruments belonged to one or more of these categories. Results indicated that acceptance categories were not equally represented in the acceptance instruments. Of note, some instruments had many items in the category controlling pain. Further analyses revealed that the meaning of acceptance differs among different instruments and among different versions of the same instrument. This study illustrates the importance of content validity when developing and evaluating self-report instruments.**

Perspective: ***This article investigated the content validity of questionnaires designed to measure acceptance in individuals with chronic pain. Knowledge about the content of the instruments will provide further insight into the features of acceptance and how to measure them.***

Key words: *Acceptance, chronic pain, questionnaires, content validity.*

Acceptance has become a popular and successful psychosocial variable in explaining adaptation to pain.[30,34,35,37,38,49,50] Likewise, there has been growing interest in acceptance-based and acceptance-related interventions, such as acceptance and commitment therapy[21] or mindfulness-based stress reduction programs.[25] A recent meta-analysis has shown that these interventions are good alternatives to or may complement traditional therapies in improving the mental and physical health of individuals with chronic pain.[47]

Acceptance is a multifaceted concept that has been defined in various ways. We recognize at least 2 approaches. One approach stems from behaviorism and defines acceptance as "a willingness to remain in contact with and to actively experience particular private experiences."[20] Following this approach, McCracken and colleagues[33] started their research on chronic pain. Research has identified 2 core constituents of acceptance: a willingness to experience pain and the engagement in values-based life activity despite pain.[37,52,53] The other approach originates from self-regulatory theories, in which disengagement from blocked goals and reengagement in new actions is considered as an adaptive way of coping with life dynamics.[1,4,5,24] Within this perspective, acceptance of chronic pain has been reframed as disengagement from the unattainable goal to control pain and reengagement in other valuable goals that are less affected by pain.[10,13,44,46]

Over time, several self-report measures of chronic pain acceptance have been developed. Differences may be noted in how acceptance is measured across instruments,[42] possibly resulting from differences in how acceptance is defined. For example, Viane and colleagues[50] observed only a moderate correlation between

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the Chronic Pain Acceptance Questionnaire (CPAQ)[37] and the Illness Cognition Questionnaire (ICQ),[13] indicating that "acceptance" is not alike in these 2 instruments. As yet, it is unclear which features of acceptance are measured by the available instruments. There is also no research on the similarities or dissimilarities between instruments in their conceptualization of acceptance. What is needed is a critical analysis of the content of the items of these questionnaires and how they map onto the different theoretical perspectives.

To examine the item content of acceptance instruments that have been used in individuals with chronic pain, we developed a heuristic frame that included the above-mentioned accounts of acceptance. We searched for empirical studies that used acceptance instruments in individuals with chronic pain and identified the instruments assessing acceptance. Finally, we identified which features of acceptance were reflected in and across instruments. This was achieved by coding items into the categories of our heuristic frame and by using multidimensional scaling (MDS).

Methods

Search Strategy

Studies were collected through a search of the MEDLINE, PsycINFO, and Web of Science databases using the terms *acceptance* combined with *chronic pain* and *questionnaire* or *assessment* or *self-report*. We considered all articles published since 1980 until the end date of our search, May 10, 2012. An initial set of 688 articles was identified.

Inclusion Criteria

The following inclusion criteria were used:

1. The study was published as a peer-reviewed article in English language.
2. The study described a questionnaire assessing acceptance of chronic pain or chronic illness. Studies describing measures of coping were included only if acceptance was one of the subscales.
3. Participants were child, adolescent, or adult chronic pain sufferers.

Study Selection

The abstracts of the studies as provided in the databases were screened for eligibility. A multiple-stage search strategy was developed, informed by guidance of the Cochrane Collaboration and previous systematic reviews undertaken.[11,12] The identification of individual studies was limited to papers published since 1980. In case these studies used an instrument developed before 1980, this instrument was included. However, this was not the case for any instrument discussed in our review. From the initial set of 688 articles, 409 were recovered after removing duplicates and articles that were published before January 1, 1980. Further, 308 articles were removed because they did not fulfill the inclusion criteria (eg, were either book chapters or conference papers or involved student or healthy populations). After screening the full-text articles, an additional 14 articles were excluded. These were mainly studies that included participants with recurrent pain,[6] used semistructured interview techniques,[29] and measured acceptance of stress but not of chronic pain or chronic illness.[19] Additionally, the reference sections of the full-text articles were screened to identify other eligible studies or instruments for inclusion. Three additional studies were identified but excluded because they did not entail a measure of acceptance of chronic pain or chronic illness. The final number of studies included was 87. A detailed, schematic overview of the different stages in selecting the studies can be found in Fig 1.

Instrument Selection

Among the 87 articles identified, 18 different instruments had been used. Five of those did not measure acceptance of specifically chronic pain or chronic illness and were thus not included in the study (eg, the Acceptance and Action Questionnaire–I).[23] There were some instruments that were adaptations of previous instruments used in the context of chronic pain. We included a modified version of an instrument as a separate measure when the number of items was changed or when the content of one or more items was different. To further validate our search, a number of authors of articles describing the development of an acceptance instrument and key researchers whose work was of relevance to the topic of the study were contacted and asked to identify other instruments suitable for inclusion in the study (see Fig 1). Twelve additional instruments were proposed, none of which were included in the review because they did not meet the inclusion criteria: instruments measuring acceptance of loss, instruments assessing coping in response to stress, and instruments assessing other constructs (ie, mindfulness, cognitive defusion, values). The latter constructs may be conceptualized as related to acceptance but are not considered to be the key constituents.[22] This left us with a final sample of 13 instruments. All instruments and the primary articles reporting their development were collected.

Analysis, Coding System, and Coding Decisions

First, we noted the full name of the instrument, its acronym, basic reference, primary content, relevant subscale(s), and the number of times a measure was used. Second, we examined the sample for which the instruments initially were developed. In particular, we were interested in whether an instrument had been developed for individuals with a chronic illness or chronic pain. Third, we analyzed the content of instruments by coding the selected items of the instruments within the categories of our heuristic frame.