Abstract

It is important to assess the effectiveness of hearing conservation programmes. However, direct questioning is unreliable: people cannot respond accurately if they lack understanding of good hearing conservation, and responses may also be influenced by social-desirability biases; at the same time, measurements of knowledge are not predictive of good behaviour. On the other hand, people are aware of and willing to report their own perceptions of supports and barriers to their personal hearing-conservation behaviour: and these do translate into behaviour. A questionnaire was developed based on barriers and supports identified in interviews, and administered to 555 manufacturing workers. Internal consistency was high, and factor analyses revealed informative sub-structure. The questionnaire may be useful for research and evaluation which aims to measure or improve hearing conservation behaviour.

Phase 2: Questionnaire Design

The themes and key points raised in interviews were used to develop a list of questions.

The Questions were tested in small numbers of workers in two workplaces.

Development of the HPA-2

The Hearing Protection Assessment (2-scales) questionnaire was developed.

Nine Barriers and nine Supports to hearing protection behaviour were listed.

‘Other’ options were included for both scales.

Respondents could endorse as many as they wished.

Basic demographic questions were included.

The whole questionnaire was on two pages.

Exploatory factor analysis revealed a substructure:

- Barriers: knowledge, attitude, risk justification, HPD limitation, safety culture, behaviour motivation
- Supports: safety culture, HPD constraints, hazard recognition, safety culture

Reliability of the Barriers (α=0.74) and Supports (α=0.77) scales was high

Final Questionnaire: HPA-5

The Dangerous Decibels group had developed a questionnaire about Knowledge, Attitudes, and Behaviour around hearing protection. This used a set of multiple-choice questions and respondents’ scores provided the measures.

The HPA-2 was combined with versions of these questions adapted for the adult workforce.

This produced the HPA-5, a short, general-purpose, measure for use in the evaluation of interventions aimed at improving hearing protection behaviour.

References
