

Summary

This thesis discusses the systematic development of the second version of the Health Promotion Effectmanagement Instrument, called Preffi 2.0, and studies to assess its usefulness, reliability and validity. Preffi 2.0 is an effect management instrument intended to help health promotion specialists improve the effectiveness of their interventions by applying the Preffi criteria. These criteria reflect both research findings on effect predictors and practitioners' knowledge about effectiveness, including aspects like context and project management. The instrument can be applied to individual health promotion interventions, projects involving multiple interventions or entire programmes consisting of multiple projects. Preffi is primarily intended to be used by health promotion and prevention practitioners. New versions of the instrument will be periodically produced. The idea is to create a learning system that can shape the dynamic relation between researchers and practitioners.

There are still many opportunities to improve the effectiveness of health promotion interventions. To achieve such improvements, it is necessary not only to develop and disseminate model programmes, but also to stimulate local health promotion specialists to apply general principles and guidelines for effectiveness in their daily routine. The use of Preffi as an effect management instrument should help achieve this. The introductory chapter to this thesis discusses Preffi's status and role as an instrument within the broader concept of quality management, one element of which is effectiveness. Effectiveness is greatly influenced by the operational processes used in an intervention or programme.

The development of a second version of Preffi had to address a number of aspects. It was developed based on a model of the structure of planning processes. This model includes dimensions that contribute to effectiveness: programme development, the programme itself, implementation and evaluation. For each of these dimensions, we identified effect predictors based on considerations of content, project management and context. Together, these became the effect predictors, or criteria, that constitute Preffi 2.0.

The further development of the instrument will try to tie in as closely as possible with new insights about guideline development and the dissemination of innovations. The Preffi development programme has always been based on the users' perspective, which is why health promotion specialists are involved in all

developmental stages and decision moments. The second version of Preffi incorporates a more fully developed scientific rationale and devotes considerable attention to validity and reliability.

A recurrent topic in this thesis is the role and status of Preffi: is it a diagnostic instrument that helps and stimulates practitioners to improve their own projects, or is it intended as a screening instrument to assess the quality of projects for selection purposes? The instrument's developers emphasise Preffi's diagnostic purpose. This has required standards (norms) to be defined, against which users can assess their own work.

Since most of the chapters in this thesis concentrate on specific parts of the research and development programme that has led to Preffi 2.0, the introductory chapter surveys the entire Preffi programme, which started in 1994. As such, it discusses the developmental and implementation activities for Preffi 1.0, the development of Preffi 2.0 and the national and international activities that have been initiated after the launch of Preffi 2.0.

Chapters 2 and 3 discuss the experiences gained with the first version of Preffi over the period from 1995 to 2001. These experiences and the empirical findings of studies examining the 1997 – 1999 implementation programme formed the basis for Preffi 2.0.

Chapter 2 describes the experiences gained with Preffi 1.0. Preffi 1.0 was intended as an instrument to help practitioners apply available research and practical knowledge in their own everyday work routine. Its format was that of a checklist of key points that have to be addressed in developing and implementing health promotion interventions and projects. Practitioners had expressed a preference for a short, clearly structured list, which would serve not only to assess the quality of projects but especially to improve that quality.

The experience gained with Preffi 1.0 and studies examining its use showed that health promotion specialists are very much action-oriented and that they tend to make rapid and pragmatic decisions about the interventions to be used in their projects. They generally find it difficult to motivate their intervention choices on theoretical grounds, frequently lack insight into determinants and often fail to state their objectives in clear terms.

Using Preffi can help them look at their projects in a more systematic way, which implies a greater interest in theory and determinants, more precise descriptions of the objectives that a particular intervention should be able to

achieve for particular sections of the target group, and the setting of more realistic objectives in view of the contextual conditions. Preffi can help them review recent research findings, which is important because the average Dutch health promotion specialist completed his training more than eight years ago.

Studies of the implementation programme showed that users did not always find it easy to apply Preffi. They often wondered whether they had indeed met particular criteria, in other words, they wanted a standard against which they could assess their own work. They also said that using Preffi took a great deal of time, although this comment was made particularly by people who had only just started to work with the instrument.

Repeated studies assessing the use of Preffi in 1997, 1998 and 1999 showed that the health promotion specialists attached great value to an opportunity to analyse the effects of their projects, using a list that would be valid for all health promotion sectors. The practitioners regarded Preffi as an important, supportive and useful instrument. They tended to use it in a flexible manner, in the sense that they applied those parts of Preffi 1.0 that were relevant to their specific context. They used it particularly during the developmental stages of their projects. By the end of 1999, 96% of the Dutch health promotion specialists were aware of the existence of Preffi, and 35 – 40% of them were using it as their standard instrument.

The experiences gained with Preffi 1.0 indicated what improvements could be made to the instrument itself. In terms of its *content*, recent research findings had to be incorporated, and the instrument had to pay more attention to the theoretical underpinning of projects, the motivation of target groups, target group participation, efforts to make projects fit the culture of target groups, implementation strategies, the context and contextual conditions in which projects are implemented and the importance of the project manager as a decisive factor for success. All criteria had to be operationalised and provided with norms. In terms of the *format*, the new version had to reflect the cyclical and iterative nature of health promotion projects. As regards the *status and role* of the instrument, it not only had to target the practitioners themselves, but also had to stimulate support from researchers and institutional management. The new name Health Promotion Effect Management Instrument more clearly reflects Preffi's intention to identify conditions for effectiveness, rather than measuring effectiveness as such, as was sometimes erroneously thought.

Chapter 3 discusses the empirical research into the Preffi 1.0 implementation programme between 1997 and 1999. The Theory of Planned Behaviour was

used as the theoretical model to plan the implementation interventions and structure the research. The objectives of the Preffi 1.0 implementation programme were related to its dissemination, adoption, implementation and maintenance. The determinants of adoption and the transition to the implementation stage were attitude, social norm and self-efficacy, while the determinants of progress in the implementation process were the characteristics of the instrument, the social and political context, the 'sender' and 'receiver' of the innovation and the implementation strategy used.

Nationwide implementation interventions targeting all Dutch health promotion specialists aimed at raising awareness of the existence of Preffi, creating a favourable attitude and providing general assistance for its use. In addition to this general, nationwide strategy, there was also an intensified, five-day support programme, which was offered to a group of 64 health promotion specialists, who intended to use Preffi. The effects of the general, nationwide strategy were assessed in two independent samples of Dutch health promotion specialists (N=120 en 316, respectively) using a written questionnaire, while the effects of the intensified training programme were assessed in a cohort study. The nationwide activities raised the awareness of the existence of Preffi and resulted in a more favourable attitude towards the instrument. However, only those who had participated in the intensified training programme showed a significant increase in the use of Preffi.

The favourable attitude was influenced particularly by opinions about using a systematic approach and about the usefulness of the instrument. A striking finding was that institutional management had generally not stimulated health promotion specialists to use Preffi. In those cases where Preffi had been integrated into a team's quality assurance system (team embeddedness) this was found to be an important predictor of implementation, and in fact the only predictor of the transition from the action stage to the maintenance stage (OR=1.521).

The most important factor for the transition from the preparation stage to the action stage was the attitude scale relating to the 'usefulness of the instrument' (OR=1.989), while team embeddedness (OR=1.646) and self-efficacy (OR=1.328) also played important roles.

Chapter 4 discusses the systematic process used to develop Preffi 2.0, which was used to ensure the instrument's validity. Preffi 2.0 incorporates the recommendations for content, format and status that came out of the Preffi 1.0 programme. We tried to strengthen the scientific legitimacy of Preffi 2.0 by collab-

orating with the Prevention Research Centre at Radboud University Nijmegen and establishing a scientific advisory committee (WAR). In addition, we set up a practitioners' advisory committee (PAR) of Dutch health promotion specialists, that is, the instrument's primary users.

The development process started with an explicit plan for the way the draft version of Preffi 2.0 was produced, after which the content and validity of this version were examined by the WAR and PAR members. Finally, 35 experienced health promotion specialists were asked to assess the usefulness of a draft version. The chapter presents some of the results of this study and the conclusions we drew from them for the use of the instrument. The users taking part in the study generally gave favourable opinions, and the study yielded useful suggestions for adjustments to the instrument's content and lay-out, as well as its possible and preferred uses. These suggestions were incorporated in the definitive version of Preffi 2.0. In this version, Preffi 2.0 consists of a scoring form with 39 criteria, divided into 8 clusters. Each criterion is operationalised and provided with a norm which allows users to rate the degree to which a project meets that criterion as strong, moderate or weak. The assessor is stimulated to note specific suggestions for improving the project being assessed. The Preffi package includes a user manual and an elaborate explanatory guide that justifies the choice of criteria.

The chapter discusses the differences between Preffi 2.0 and the 1.0 version and gives some suggestions for using the instrument, such as the recommendation to assess projects together with colleagues and the recommendation not to assess a project purely on the basis of documents but to consult with the project manager. The study showed that users prefer to use Preffi for diagnostic purposes.

Chapter 5 reports on the study assessing the usefulness and reliability of a draft version of Preffi 2.0 among 35 health promotion specialists, each of whom was asked to assess two projects. The respondents also commented on the operationalisations and completed a questionnaire asking their opinion about the instrument. Supplementary interviews were held with 10 of them. The Preffi-based assessments of projects based on the various criteria were found to differentiate sufficiently between projects, as well as between the various criteria for a particular project. The assessors frequently made use of the 'not assessable' answering option, especially for the criteria newly introduced in Preffi 2.0 and for criteria from the clusters on contextual conditions and feasibility, implementation and evaluation. It was clear that it is difficult to assess projects merely on the basis of written project descriptions; it is useful to include in the

assessment procedure a consultation with the project manager, to obtain supplementary information.

We used generalisability theory to assess the reliability and accuracy of Preffi as an instrument. The study did not produce any conclusive evidence about reliability, as there was insufficient variance between the projects assessed. As regards accuracy, we concluded that sufficiently accurate assessments on the basis of criteria scores required about 4 assessors for the individual clusters and 2 for the project as a whole. A sufficiently accurate and reliable assessment of a project based on the overall marks for the various clusters and for the project as a whole would require between 25 and 40 assessors. The study provided valuable suggestions for further research that would allow the instrument's reliability to be more accurately established, as well as suggestions to increase the instrument's reliability, such as using fewer answering options, training users in the application of Preffi and clarifying the descriptions and instructions.

The respondents gave the draft version of Preffi 2.0 an overall rating of 7.7 out of 10. Most of them reported that Preffi was a valuable, complete, clear, well-structured and innovative instrument, but they also said it was not easy to apply. The respondents expected that applying the instrument to their own projects would enable them to be more critical of their own work, to systematically assess all aspects of their projects and to rapidly draw up a list of points that could be improved.

The team that developed Preffi 2.0 emphasises its role as a quality assurance instrument, intended to stimulate improvements. The instrument in its present form is not suitable as a screening tool, although it does provide a standard that specific health promotion projects should ideally be able to meet. The respondents agreed with this view and expressed a certain fear that third parties might use Preffi in an uncontrolled fashion as a screening instrument to assess projects.

Chapter 6 reports on a study to test the reliability of the definitive version of Preffi 2.0. It compared Preffi-based assessments of 20 projects by three practitioners with the intuitive assessments of the same projects they had given earlier and with assessments by three experts serving as an external criterion. The intuitive assessments involved assigning marks for eight general aspects of the projects, which corresponded to the clusters used in Preffi. The main hypothesis of the study was that the intuitive assessments by the practitioners would be less reliable and accurate than their Preffi-based assessments and than experts' assessments. This hypothesis was, on the whole, not confirmed. The assess-

ments by the experts turned out to be less reliable and accurate than the intuitive and Preffi-based assessments by the practitioners, and differed too much to be used as an external criterion. The practitioners' intuitive assessments and Preffi-based assessments did achieve acceptable reliability. Based on the criterion scores, sufficiently reliable and accurate assessments at the level of projects as a whole would require 2 assessors, while 3 would be needed at the level of individual clusters. This study also found that the overall marks given to individual clusters were less reliable and accurate.

The reliability and accuracy of the Preffi scores were better than those found in the earlier study of the draft version of Preffi 2.0. The changes introduced on the basis of the findings of that earlier study resulted in fewer assessors being required for accurate and reliable assessments of all criteria that had been adjusted.

The experts' assessments of the projects were on average the most critical. There was no difference in strictness between the practitioners' intuitive and Preffi-based assessments, although the respondents themselves had the impression that Preffi forced them to be more critical. The practitioners in this study also reported that they found it hard to assess many of the projects purely on the basis of written project descriptions and would prefer to have a consultation with the project manager included in the assessment procedure.

The study showed that different assessors had different perspectives and included different aspects in their assessments. The assessors themselves regarded this as inevitable and even as valuable. They thought that a consensus meeting between different assessors should be a standard element in the assessment procedure. The consensus meeting that was held as part of the study proved that consensus about individual projects was quickly achieved, based mostly on theoretical arguments about the quality of the projects.

Chapter 7 summarises and critically reviews the findings of the various studies reported on in this thesis. The overall conclusion is that Preffi 2.0 is a valid instrument using evidence-based principles and providing guidelines on effect management. The new version represents an improvement over the first version, while still remaining useful and feasible for practitioners. There is general agreement about the good content validity of the instrument. Our studies have shown how Preffi can best be used to reliably assess a project. Preffi allows the strong and weak points of projects and programmes to be adequately diagnosed. It also contributes to a synthesis of new research findings and practical experience, making them accessible to practitioners.

The Preffi team hopes to be able to produce a new version (Preffi 3.0) by 2007. To this end, the instrument's content and format would need to be further adjusted, incorporating new insights into ways of increasing its reliability and the steps required to further integrate a consistent use of Preffi in existing operational processes.

We would also recommend the inclusion of cost-effectiveness aspects in the new version. Preffi 3.0 should in any case have a digital, Internet-supported format. This might further increase the instrument's reliability, as it would allow more specific explanations and suggestions to be provided for each criterion, which may help users achieve more objective assessments. It will be necessary to continue to collect empirical data that could allow the use of Preffi to be further improved.

The consistent use of the instrument can be further stimulated by incorporating Preffi or its principles in the quality assurance system for health promotion which is being developed by the Foundation for the Harmonisation of External Quality Review in Health Care (HKZ) and is to start in 2006, as well as by integrating them into the operational processes and the various knowledge products provided by the NIGZ Centre for Knowledge and Quality Management.

The insights gained with Preffi are making important contributions to the current attempts to develop a European guideline for health promotion. Collaboration with colleagues from various European countries should improve the chances of success. All of these plans indicate that the further development of Preffi and efforts to improve the effectiveness of health promotion in the Netherlands require a permanent investment effort.