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# Enhancing a Delphi study on family-focused prevention

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## Abstract

This article discusses how additional inquiries can enhance Delphi findings. We argue that inquiries aimed at supporting and refining Delphi findings is both theoretically and practically meaningful. We illustrate our argument on the basis of a framework for family-focused prevention that was developed through a Delphi study. The results of individual and group interviews conducted as a follow-up to the implementation of the framework provided us with effective ways to support and refine it. We draw the conclusion that adequate follow-up inquiries can enhance Delphi findings, from theoretical and application perspectives.

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## 1. Introduction

The results of Delphi studies are generally considered to be reliable and valid end products. However, in many research programs the nature of the results actually makes it difficult to test this assumption. In experimental research programs, long-term forecasts have therefore been replaced by short-term forecasts or almanac items that can be assessed more rapidly [1]. Other research programs implement Delphi studies for a variety of goals, such as the development of guidelines, the formulation of priorities, the specification of educational content, or the identification of promising technologies. These research programs have the potential to investigate the findings further, via parallel and/or follow-up research. Yet, few authors capitalize on this potential and therefore miss an opportunity to enhance and support

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their Delphi findings [2,3]. Based on our own use of Delphi in applied research programs [3,4], we will argue that further inquiry of Delphi findings is both theoretically and practically meaningful and can substantially improve the quality of the end product.

We shall first present a conceptual and theoretical rationale for the refinement of Delphi findings via a multiple-method, multiple-informant approach. We shall then discuss some published examples of Delphi studies that involved additional inquiry. Next, we shall detail our program of research in family-focused prevention and present a comparison of the findings of the initial Delphi study with follow-up research findings. Finally, we shall draw some conclusions regarding the benefits of further research focusing on enhancing the credibility of Delphi results.

## 2. A rationale for further research

In this paragraph we discuss the reliability and the validity of the Delphi method within different research paradigms. We will then present appropriate criteria for judging Delphi results.

### 2.1. Reliability and validity in Delphi research

Any program of research fundamentally hinges on the reliability and validity of its findings. The Delphi method has been severely criticized by some for a lack of proven reliability and validity [5–7]. However, the literature is unclear as to how the reliability and validity of Delphi results should best be established. Experimental researchers have investigated the processes involved in Delphi studies [8,9]. Other researchers, however, call for the results of Delphi studies to be checked and/or improved through follow-up research. A well-known example is the study by Ono and Wedemeyer [10]. They established the validity of a classic Delphi forecasting exercise by investigating the state of the art fifteen years later. Some cite this study as proof of the validity of Delphi exercises [11,12]; whereas others claim that the results offer obviously no evidence of the validity of the Delphi technique [1]. These divergent interpretations remind us of the fierce discussions surrounding Delphi in the 1970s [6,13,14]. As was clarified at the time [15], divergent world views and inquiry systems that fundamentally direct the actual research undertaken tacitly underlie these discussions.

The dominant epistemological approach applied within academia is based on logic and scientific rationality through analysis and/or observation. Underpinning this approach are, respectively, the Leibnizian and the Lockean inquiry systems [16]. The Delphi builds on the Lockean notion of human experience as the basis for truth. Although most of its applications fit into this tradition, the method can also be used to investigate research questions that are conceptualized within the Singerian inquiry system [15,17]. Research within this paradigm does not assume the existence of objective truth that can be investigated out of its natural context. Rather, valid propositions are holistic and take into account the context-dependent nature of knowledge [18]. Therefore, ‘truth’ is always a construction that is the result of communication among humans embedded in this context [19]. As we discuss below, the Delphi method is conceived within this constructionist paradigm and is therefore a potential method of naturalistic or Singerian inquiry.

Linstone and Turoff [20] define Delphi as “a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem” (p. 3). This definition emphasizes the process of the method as much as the potential outcome.

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