

MAILA UPANNE

PROFESSIONAL PARADIGMS OF SUICIDE PREVENTION

Evolving a conceptual model

University of Jyväskylä

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The cover photo shows a work of art by Sakari Kiuru called "1492+1".

In 1991, the number of suicides in Finland was 1493. One of them was a close friend of Sakari Kiuru. The work is dedicated to his memory. The photo is published with the artist's permission.

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Helsinki, October 2001

Maila Upanne

Abstract

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In this four-part study professionals' conceptions of suicide prevention were analysed and interpreted using a theoretical model evolved for the purpose: Testing the feasibility of the model empirically was another aim of the study.

The study was a part of the evaluation of the National Suicide Prevention Project in Finland. The participants of studies I–III were a group of psychologists with long involvement in both the project and in suicide prevention. The data were conceptions of suicide prevention as texts provided prospectively in 1987 before the project was launched, in 1989 after the project investigations and in 1996 when the project ended. The participants in study IV were professionals representing five sectors. The data were operative action plans reported in connection with the intermediate follow-up survey conducted as a part of the project in 1993. A pre-prepared coding frame consisting of descriptive and conceptual criteria based on a theoretical analysis, and of subcategories based on the data were applied in the qualitative data analysis. Also used were computer software tools WP^{index}, the SPSS -program and t-test.

The results showed that before the project began, psychologists' conceptions of suicide prevention were comprehensive. Certain topics, however, came up more often. Acute suicide risk and crisis situations, and the atmosphere, values and attitudes held in society at large were regarded as the most important foci for interventions. Most of the strategies presented related to professional responsibility, the main sector considered responsible being health care. The leading aim was a promotive one focusing on protective factors and, consequently, interventions were timed to take place before the risk- appearing phase. Relevant factors (foci) were located both on the individual level and on the level of circumstances. Theoretically, the ideas expressed by the group contained the application of the process theory and the interactional model of suicidal development.

The results of studies II and III showed a trend toward change. With time and more practical experience, risk factors presupposing individual level interventions, such as acute suicide risk and a serious crisis situation, acquired more relevance. Expressed as approaches combining several criteria, the relative proportions of the care-approach and critical approach increased at the expense of the cultural-educational and the conditions approaches.

The results of study IV indicated that the five sectors shared nearly identical conceptions of suicide prevention. No clear sectoral profiles or patterns of practices appeared. In addition, the ideas for suicide prevention were much the same irrespective of the focus of prevention. Interventions focussed mainly on risk factors, the priorities being life crises, acute risk of suicide, coping of survivors and a suicide attempt. The bulk of the strategies were aimed at developing professional know-how. The main approach applied was the care approach. The conditions approach and cultural-educational approach were also applied, though to a minor extent. Despite the dominance of the care-approach relating to the medical model, the paradigm adopted by the five sectors might be characterised as versatile and comprehensive. As a whole, the activities were multifocussed and all aims of prevention and locations of intervention were included. The adoption of the idea of risk as well as of protective factors can be interpreted as reflecting a process theory of suicide development.

The model proved to be a feasible tool for describing and theoretically interpreting suicide prevention and to scientising the paradigms adopted.

Keywords: suicide, suicide prevention, prevention, conceptual model, conceptions

Abstract in Finnish

Maila Upanne: Professional Paradigms of Suicide Prevention. Evolving a Conceptual Model. [Itsemurhien ehkäisyn ammatilliset paradigmat. Käsitteellisen mallin kehittämiskokeilu.] The National Research and Development Centre for Welfare and Health (STAKES), Research Reports 121, Helsinki 2001. ISBN 951-33-1248-8

Tässä neliosaisessa tutkimuksessa analysoitiin ja tulkittiin ammattilaisten käsityksiä itsemurhien ehkäisystä tarkoitusta varten kehitetyn teoreettisen mallin avulla. Mallin toimivuuden testaaminen empiirisesti oli tutkimuksen toinen tarkoitus.

Tutkimus oli osa valtakunnallisen Itsemurhien ehkäisyprojektin arviointia. Osatutkimusten I–III osanottajat olivat psykologeja, jotka osallistuivat useita vuosia sekä itse projektin toteutukseen että itsemurhien ehkäisyyn käytännössä. Tutkimusmateriaali koostui itsemurhien ehkäisyä koskevista käsityksistä teksteinä, jotka psykologit tuottivat prospektiivisesti ennen projektin alkua vuonna 1987, vuonna 1989 projektin tutkimusvaiheen jälkeen sekä vuonna 1996 projektin päättyessä. Osatutkimuksen IV osanottajat edustivat viiden eri alan ammattilaisia. Tutkimusaineisto koostui toimintasuunnitelmista, jotka raportoitiin projektin vuonna 1993 toteuttamassa välivaiheen seurantakyselyssä. Aineiston laadullisessa analyysissä sovellettiin ennalta suunniteltua koodauskehystä, joka koostui teoreettiseen analyysiin perustuvista deskriptiivisistä ja käsitteellisistä kriteereistä sekä aineiston perusteella muodostetuista alaryhmistä. Analyysissä käytettiin myös WP^{index}- ja SPSS-ohjelmia sekä t-testiä.

Tulokset osoittivat, että ennen projektin alkua psykologeilla oli laaja käsitys itsemurhien ehkäisystä. Silti eräät aiheet nousivat muita useammin esille. Akuuttia itsemurhariskiä ja kriisitilanteita sekä yhteiskunnan ilmapiiriä, arvoja ja asenteita pidettiin ehkäisevien toimien tärkeimpinä kohdeteemoina (focus). Useimmat esitetyt strategiat liittyivät ammatilliseen vastuuseen, ja tärkeimpänä vastuunkantajana pidettiin terveydenhuoltojärjestelmää. Tärkeimpänä pidettiin promotiivista tavoitetta, jossa keskitytään suojaaviin tekijöihin, ja siksi myös toimenpiteet ajoitettiin (timing) tapahtuviksi ennen riskin ilmaantumista. Oleellisinä pidetyt tekijät sijoittuivat (location) sekä yksilötasolle että olosuhteiden tasolle. Teoreettisesti tarkasteltuna ryhmän ilmaisemissa ideoissa oli kyse pro-

sessiteorian ja vuorovaikutusmallin soveltamisesta suisidaalisen kehityksen hahmottamiseen.

Osatutkimusten II ja III tulokset antoivat viitteitä muutoksesta. Ajan kuluessa ja kokemuksen karttuessa yksilötason väliintuloa edellyttävät riskitekijät, kuten akuutti itsemurhavaara tai vakava kriisitilanne, muodostuivat tärkeämmiksi. Ilmaistuna preventio-otteina (approaches), joissa monta kriteeriä yhdistyy, hoidollisen ja kriittisen otteen osuudet lisääntyivät kulttuuris-kasvatuksellisen ja olosuhdeotteen kustannuksella.

Osatutkimuksen IV tulokset osoittivat, että kaikkien viiden alan edustajien käsitykset itsemurhien ehkäisystä olivat lähes samanlaiset. Kävi ilmi, että eri sektoreilla ei ollut selvää omaa profiilia itsemurhien ehkäisyssä. Lisäksi itsemurhien ehkäisyn ideat olivat pitkälti samoja sisältöteemasta (focus) riippumatta. Toimenpiteet liittyivät pääasiassa riskitekijöihin, erityisesti elämänkriiseihin, välttämään itsemurhavaaraan, omaisten selviytymiseen sekä itsemurhayrityksiin. Suurin osa strategioista tähtäsi ammatillisen taitotiedon kehittämiseen. Tärkein käytetty lähestymistapa oli hoidollinen. Olosuhdeotetta ja kulttuuris-kasvatuksellista otetta sovellettiin myös, joskin vähemmän. Vaikka lääketieteelliseen malliin liittyvä hoidollinen näkökulma olikin vallitseva, sektorien soveltamaa paradigmaa voi luonnehtia monipuoliseksi ja kattavaksi. Yleisesti ottaen toiminnot olivat monikohteisia, ja kaikki prevention tavoitteet ja kohdentamisvaihtoehdot oli huomioitu. Riskinäkökulman ja suojaavien tekijöiden idean omaksumisen voidaan tulkita heijastavan suisidaalisen kehityksen sessiteorian soveltamista.

Malli osoittautui käyttökelpoiseksi työvälineeksi itsemurhien ehkäisyn kuvaamiseen ja teoreettiseen tulkintaan sekä omaksuttujen paradigmojen teollistamiseen.

Avainsanat: itsemurha, itsemurhien ehkäisy, preventio, käsitteellinen malli, käsitykset

Abstract in Swedish

Maila Upanne: Professional Paradigms of Suicide Prevention. Evolving a Conceptual Model. The National Research and Development Centre for Welfare and Health (STAKES), Research Reports 121, Helsinki 2001. ISBN 951-33-1248-8

I denna undersökning i fyra delar analyserades och tolkades yrkesmänniskors uppfattningar om självmordsprevention genom att använda en teoretisk modell som utvecklats speciellt för detta ändamål. Undersökningens andra ändamål var att empiriskt testa modellens tillämplighet.

Undersökningen utgjorde en del av det riksomfattande projektet för självmordsprevention i Finland. De som deltog i undersökningarna I–III var en grupp psykologer som länge varit engagerade i både projektet och självmordsprevention. Datamaterialet bestod av uppfattningar om självmordsprevention i form av texter från år 1987 innan projektet hade inletts, år 1989 efter projektundersökningarna och 1996 då projektet avslutades. Deltagarna i undersökning IV var yrkesmänniskor som representerade fem sektorer. Datamaterialet bestod av åtgärdsplaner som rapporterats i samband med den uppföljningsundersökning som genomfördes 1993 som en del av projektet. I den kvalitativa data-analysen tillämpades en på förhand beredd referensram för kodningen bestående av deskriptiva och konceptuella kriterier som baserar sig på en teoretisk analys och subkategorier som baserar sig på datamaterialet. Därtill utnyttjades datorverktyg i mjukvaran WP^{index}, programmet SPSS och t-testet.

Resultaten visade att psykologernas uppfattningar om självmordsprevention var omfattande innan projektet inleddes. Vissa teman dök dock upp oftare än andra. En akut självmordsrisk och krissituationer samt den atmosfär, de värden och de attityder som upprätthålls i samhället i allmänhet ansågs vara de viktigaste fokusen (focus) för ingripande. De flesta av de presenterade strategierna hade att göra med professionellt ansvar, och hälsovården ansågs vara den huvudsakliga ansvarssektorn. Det viktigaste ändamålet var promotivt och var inriktat på skyddsfaktorerna, och samtidigt skulle ingripandet ske före det stadium där riskerna uppstår (timing). Väsentliga faktorer i fokus kunde hittas både på den individuella nivån och på omständighetsnivån (location). Teore-

tiskt sett innehöll gruppens idéer en tillämpning av processteorin och den interaktiva modellen för att förklara den suicidala utvecklingen.

Resultaten från undersökningarna II och III antydde en trend mot en förändring. Med tiden och mer praktisk erfarenhet blev de riskfaktorer som förutsätter ingripande på den individuella nivån, t.ex. akut självmordsrisk och allvarlig krissituation, av större betydelse. Som angreppssätt (approach), vilka kombinerar flera kriterier, ökade vårdapproachens och den kritiska approachens relativa proportioner på bekostnad av den kulturella-edukativa approachen och den approach, som betonar levnadsförhållandena (omständighetsapproach).

Resultaten från undersökningen IV tydde på att de fem sektorerna delade nästan identiska uppfattningar om självmordsprevention. Inga klara profiler eller modeller sektorvis uppstod. Dessutom var idéerna om självmordsprevention rätt så likadana oberoende av preventionsåtgärdernas fokus. Ingripandet fokuserades huvudsakligen på riskfaktorer, där prioriteringarna var livskris, akut självmordsrisk, återhämtning av de anhöriga och självmordsförsök. Största delen av strategierna var riktade på utveckling av professionell know-how. Det främsta tillämpade sättet att nalkas problemet var vårdapproach. Omständighetsapproachen och den kulturella-edukativa approachen tillämpades också, men i mindre omfattning. Trots dominansen hos vårdapproachen i anslutning till den medicinska modellen kunde det paradigm som de fem sektorerna antog karakteriseras som varierande och omfattande. Allt som allt multifokuserades åtgärderna inklusive alla ändamål för prevention och nivåer för ingripandet. Tillägandet av idén om såväl en risk som skyddsfaktorer kan tolkas att återspegla självmordutvecklingens processteori.

Modellen visade sig vara ett tillämpningsbart verktyg för att beskriva och teoretiskt tolka förebyggande av självmord och för att vetenskapligt utreda de tillägnade paradigmerna.

Nyckelord: självmord, självmordsprevention, uppfattningsmodell, uppfattningar

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List of original publications

- I Upanne Maila (1999). A Model for the Description and Interpretation of Suicide Prevention. *Suicide and Life-Threatening Behavior*, 29(3), 241–255.
- II Upanne Maila (in review). Real-life Experiences and Professional Conceptions of Suicide Prevention – using a conceptual model.
- III Upanne Maila (2000). A Model for Analysing Suicide Prevention. *Crisis. The Journal of Crisis Intervention and Suicide Prevention*, 21/2, 80–89.
- IV Upanne Maila (2001). A Model-based Analysis of Professional Practices in Suicide Prevention. *Scandinavian Journal of Public Health*, 29, 1–5.

This dissertation also includes some data not presented in the articles

1 Introduction

Annually some 1 300 persons die of suicide in Finland. In 1990 the total number of suicides was 1 552 (30.3/100 000), in 1995 1 388 (27.2) and in 1999 1 207 (23.4). In addition, suicide committed by a close person usually implies a serious psycho-social trauma, possibly lifelong, for 5–10 people (Prevention of suicide 1996).

Suicide is the culmination of an insurmountable life situation with exacerbated suicidal behaviour. Suicidal behaviour is usually considered to include suicidal ideation, suicide attempts and completed suicides (Hughes & Neumeyer, 1990). Definitions of suicide often include three components: suicide is a result of self-inflicted and intentionally inflicted injury the outcome of which is death. Nevertheless, no single, unanimously accepted definition of suicide exists (Heilä, 1999). The ambiguity of the criteria governing the concept of suicide and different procedures in different countries in classifying a death as a suicide has an impact on the reliability of the epidemiological data on suicide (O'Carroll et al., 1996). In Finland determination of the causes of death is considered reliable due to the high overall autopsy and medico-legal autopsy rates compared to those of many other countries (Öhberg, 1998; Karkola, 1990). In the National Suicide Prevention Project in Finland, the operational definition of suicide was based on the Finnish statute providing for the determination of the causes of death: all cases classified as suicides in forensic examination were considered as suicides (Lönnqvist, Louhivuori, Palonen, & Tuomaala, 1988). In this study, neither the specific cases investigated in the project nor the epidemiology of suicide are considered.

Suicide as a phenomenon of utmost seriousness in human life and society has always been difficult to understand and even accept. Efforts to understand and explain suicide were originally made in the fields of philosophy and theology. The first idea, according to Schneidman (1989) was to find the “locus of blame”.

Personal sin (the early Christians), society (Rousseau and Durkheim) and the unconscious mind (particularly Freud) have been considered, among other things, to be the main “cause” of suicide. Differences between suicidal situations and the variety of patterns of life behind them have been described e.g. by Maris (1989). Essential for the development of suicidology was the transition from moralistic judgment to psychological explanation in the early 20th century (Ellis, 2000). Sociology has utilised and is continuing to evolve the historical contribution of Durkheim (1987) (Bille-Brahe, 2000; Rogers, 2000). In psychology, in addition to the historical contribution of Freud, cognitive behavioral perspective (especially by Beck), social learning view (by Bandura) and multidimensional view (by Schneidman) have been applied to conceptualise suicidal behaviour (Leenaars, 1990; Rogers, 2000; Williams & Pollock, 2000). Today, theoretical understanding and empirical data on the pathways of suicidal behaviour are provided from several disciplines including e.g. genetics and biology (Hawton & van Heeringen, 2000).

The beginning of a conscious idea of doing something about the problem dates as far back as the early years of the previous century, from the meeting on suicide held in Vienna in 1910. The starting point for the suicidology of today was the founding of a suicide prevention center in Los Angeles in 1958 by Farberow and Shneidman. The American Association of Suicidology was founded in 1968. According to Wallace (2000), contributing factors for the development of this “suicide prevention movement” were e.g. many socio-cultural and political changes, the growth of community psychology and community mental health ideology and the growth of the voluntary movement – the Samaritans in London, founded by Varah in particular – etc. (Wallace, 2000; Choron, 1972). A corresponding development was kindled in Finland as well. The suicide prevention center, the SOS-service, was founded in 1970 by a voluntary organisation, The Finnish Association for Mental Health (Suomen Mielenterveysseura). The national committee for developing suicide prevention published its report in 1974. As a sign of an active “prevention movement” an abundance of training was organised and research reports and training materials were published. (Achté et al., 1973; Achté, Lindfors, Lönnqvist, & Salokari, 1989; Upanne, Hakanen, & Rautava, 1999a). In 1985 the planning of the national suicide prevention project began. Today, suicide prevention is a global challenge (Prevention of suicide, 1996; Ramsay, & Tanney, 1996).

This study aims to contribute to deeper understanding of and improved know-how in relation to suicide prevention by utilising the key theoretical developments in suicidology in order to construct an operative model for analysing, interpreting and developing suicide prevention in practice.

1.1 Theoretical approaches to suicide

The main contemporary approaches to suicide can be condensed into the *multifactorial* and *multidisciplinary* approaches both of which combine contributions from fields like psychology, psychiatry, sociology and neurobiology (Maris, 1981; Bloom, 1981; Albee, Goldston, Lamb, & Zusman, 1983; Cowen, 1983; Albee, 1986; Schneidman, 1989; Sameroff & Fiese, 1990; Lester, 1994; Maris & Silverman, 1995; Silverman & Felner, 1995; Winett, 1997; Hosman, 2001; van Heeringen, Hawton, & Williams, 2000; Bonner, 2000). The basic idea behind these approaches is that no single fact is adequate to explain the phenomenon of suicide or predict suicide in an individual case (Brown & Sheran, 1972; Hawton, 1987; Bonner, 2000; Greenberg, Domitrovich, & Bumbarger 2001). Instead, suicide must be conceived as a part of a complicated configuration of several factors belonging to many different contexts. Possible patterns of these essential factors have been conceptualised in various theoretical models.

An *ecological systems model of human development* provides a framework for understanding the etiology of suicidal behaviour as well as potentially identifying opportunities for intervention. The key idea combines the interaction between the individual and the environment. This interaction includes exposure to environmental stressors, the perceived meaning of these stressors, and the behavioural reaction to them. Studies in the epidemiological, clinical, biological, sociological and psychological areas have indicated the role of both environmental (e.g. social characteristics and precipitating life events) and individual (e.g. genetic susceptibility and psychological characteristics) influences on the occurrence of suicidal behaviour (van Heeringen, Hawton & Williams 2000). A simplified version of this model has the individual existing and developing within the context of close interpersonal relationships. Individual, family and peers exist and develop in the context of their community, and all of these exist within a broader social, cultural, economic and macrosystem. Each

level influences and is influenced by other levels. The model implies the direct influence of environmental factors (familial, social and physical) on behaviour. It also explicitly acknowledges the multilevel determinants of behaviour (Bronfenbrenner, 1979; Potter, 2000). A corresponding approach e.g. is the “transactional world view” presented by Altman (1987).

Results of the National Suicide Prevention Project in Finland (The NSPP) also showed the variety of factors – psychiatric, psychological, social and societal – needed when describing life course ending in suicide (Lönnqvist, Aro, & Marttunen, 1993; Heikkinen, 1994; Marttunen, 1994; Järventie, Perä-Rouhu, Palonen, & Lönnqvist, 1990; Saarinen, 1995; Hintikka, 1998; Pirkola, 1999). The same conclusion concerns the description of mental health and mental disorders in general (Korkeila, 2000). Studies focusing at the relevance of psychiatric factors stressed the meaning of serious psychiatric disturbances, depression in particular, in suicide (Henriksson, 1996; Heilä, 1999; Suominen, 1998) and for that reason, the necessity of medication as suicide prevention (Isometsä, 1994; Isaksson, 2000).

The pathway to suicide is often presented in the form of a *process-model* or *antecedent conditions model*. The pathway is conceived a process including many phases combining life circumstances, life events and individual characteristics and behaviour. In unlucky circumstances suicidal behaviour can be kindled by combination of many factors. Unfavourable development can accumulate and further increase the risk for suicidal behaviour. In the process, individual vulnerability plays an essential role. However, even that is regarded as a combination of individual prerequisites and experiences in unfavourable circumstances (Felner, Farber, & Primavera, 1983; Bloom, 1986; Schneidman, 1989; Report of the APA task force, 1990; O’Carroll, 1993; Lönnqvist et al., 1993; Coie et al., 1993; Gunnell, 1994; Silverman & Felner, 1995; Antonovski, 1996; Maris, 1981). The process is usually divided into three phases of development with three types of factors present: factors that promote well-being and offer protection from suicidal development, factors that predispose the individual to that development and factors that precipitate suicide (Figure 1).

Protective factors in individuals and in circumstances or as life events promote the preconditions for resilience and coping and, in the same time, decrease the probability of the development of problems and hence the risk of suicidal behavior. Protective factors are targets for *promotive interventions*. Nonspecific predisposing factors refer to experiences or circumstances which

decrease options for healthy psycho-social development and create psychologically demanding experiences and coping problems. Examples of these are socially and psychologically deprived living conditions and traumatic experiences. *Precipitating factors* refer to conditions or experiences which can act as triggers for suicidal acts, like serious traumatic life events, mental disorders or substance abuse. A suicide attempt is considered a most serious antecedent condition. Precipitating and predisposing factors are targets for *preventive interventions*. The model makes discernible “complex developmental pathways”: a gradual cumulative, multifactorial trend in the development of the suicidal process. Further, the model illustrates the concepts of stress and crisis as components of suicidal development (Maris & Silverman, 1995; Saari, 1997; Hawton, 2000; Greenberg et al., 2001). Inclusion of promotive interventions in the model is decisive from the viewpoint of prevention theory.

Rogers (2000) emphasizes the nonlinear nature of the development of the suicidal process and presents theories which may be able to explain suicide as a result of a pattern of known risk factors: “unpredictable behaviour can occur within predictable systems”. Possible models are, e.g., the existential-constructivist model, chaos and complexity theories (“systems in chaos are determined, but not by linear methods”) (Rogers, 2000, 39) and self-organized criticality (how large interactive systems can evolve or self-organize toward a critical state in which a minor incident can lead to a catastrophic event).

The comprehensive view presented above refers to a variety of approaches and options in suicide prevention. These can be universal interventions targeted at communities, selective interventions targeted at high-risk groups or indicative interventions involving identification, treatment and skill building among individuals and families (Potter, 2000; Väisänen et al., 1998). So far most interest in suicidology has been shown in individual level analysis and individual suicide risk assessment.

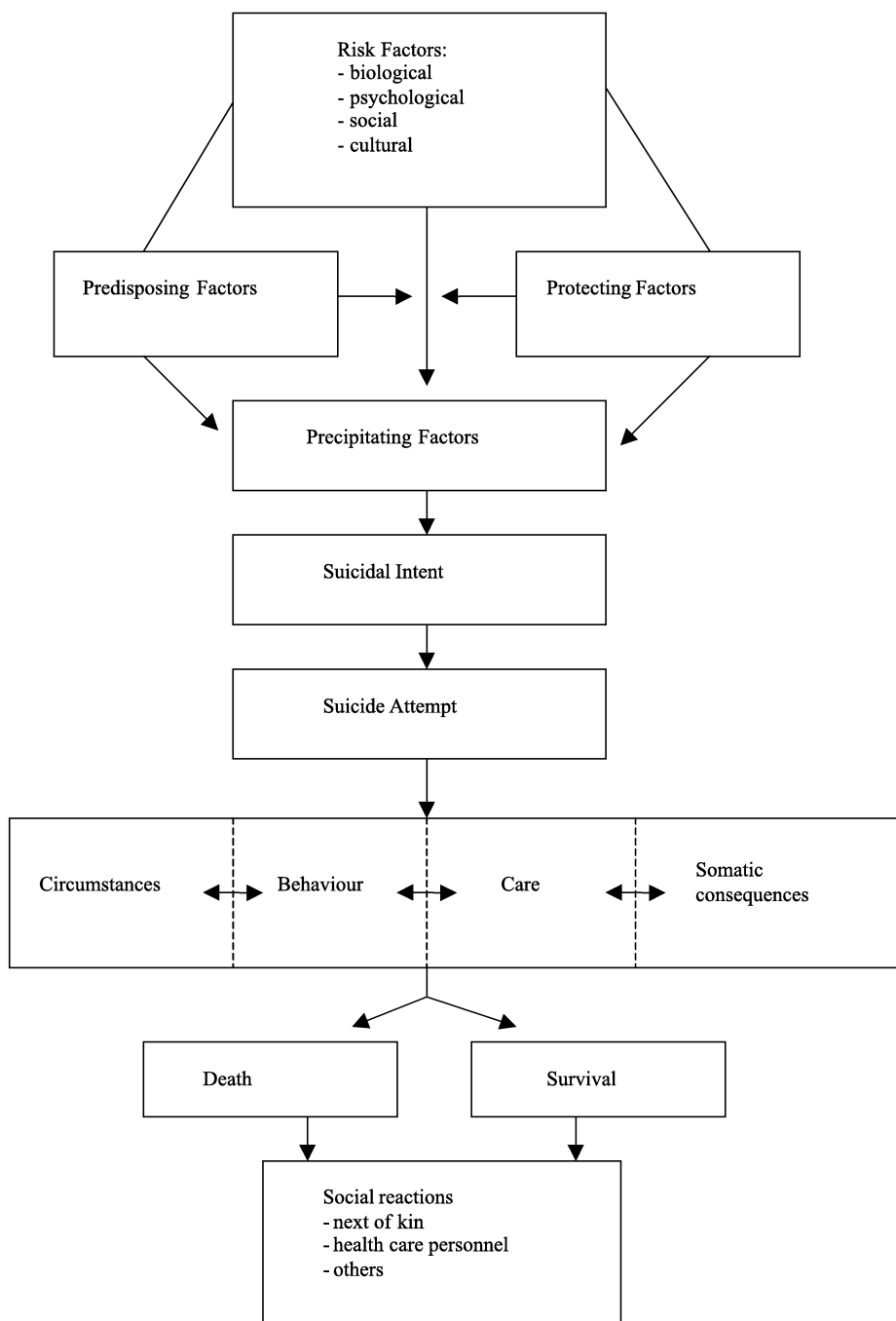


Figure 1. The process-model

Adapted from Lönnqvist ym. (toim.): Itsemurhat Suomessa 1987 -projekti, Toteutus, aineisto ja tutkimustuloksia. (1993)

The suicidal process is an intra-individual process in reaction to a person's environment, starting with feelings of despair, then fleeting suicidal thoughts, then evolving through more concrete plans and suicide attempts to completed suicide (Hawton, van Heeringen, & Williams, 2000). According to Bonner (2000) recent theoretical work has developed multifactorial models to integrate individual-level risk factors into an organised framework.

The transactional model of suicide risk development (King, 1998) regards psycache (Schneidman, 1993) as the final common pathway to suicide risk, which develops over time from the dynamic interplay of various risk vulnerabilities and significant life events. Individual differences in genetic and constitutional vulnerabilities, caregiving environments, life experiences, and social stressors are hypothesised to result in multiple pathways of coping. The further existence of other suicide related factors such as mental illness, substance abuse, social isolation, and a host of psychological vulnerabilities can move a person in a variety of directions across the lifespan. Difficulties in one area can affect or exacerbate those in other areas, while strengths and coping resources can minimize or protect an individual from other risk factors (moving an individual away from suicide risk). Suicide risk within this model is viewed as an individual determinant that ultimately arises when a person's threshold for suffering or psycache is overloaded. The implications of this model are that there are many possible pathways to suicide risk, and risk assessment must be driven by the developmental/life-course theory. The same idea has been described as *the psychosocial developmental model* and *the paradigm of the iceberg* (Michel, 2000) and *the suicide career or development towards suicide* (Maris, 1981; Williams, 1997). Breton (1999) discusses the paradigm shift in science that contributed to the emergence of the transactional model which advocates multiple causes and dynamic transactions between the individual and the environment.

On the basis of these kind of views, several methods and scales for assessment of individual suicide risk have been developed, most of all by Beck and associates (Roy, 1992) but also e.g. by Motto (1985), Yufit (1991) and Schneidman (1991).

The theoretical views presented above and, at the same time, the proposed basis for suicide prevention provide one answer to the ethical dilemma concerning the right to intervene in the suicidal situation (Trickett & Levin 1990). Szasz (1989, 445) writes that he "objects to our present policies of suicide

prevention because they downgrade the individual's liberty and responsibility for the conduct of his own life and death". What he is referring to is a "coercive suicide prevention" where the aim is to oppose the individual's choice to take his/her own life. Maris (1989, 456) too presents the idea that suicide is based sometimes "on the needs of the helper" and notes the close connection between mental illness and suicidality and, consequently, the need of care.

The common conception of suicide prevention today does not focus on and is not limited to the act and moment of committing suicide. The developmental point of view aims to intervene before that critical moment. Activities are based on the conception that nobody willingly and on purpose seeks this kind of ending to life, but instead has drifted into the process without much personal control over it. In addition, in part prevention activities do not concern individual persons, but processes and conditions. However, the deep moral dilemma concerning the basic rights of human beings always remains. As a sign of this, much work is being done all over the world fighting against suicidal development on the one hand while on the other, associations for the freedom to committing suicide have been founded and e.g. assisted suicides have been made more accessible in certain countries.

1.2 Concept of suicide prevention

The prevention of psychological problems and disturbances is a demanding human, social, political and economic challenge and is linked to many difficult problems in society (Klein & Goldston, 1976). The challenges of prevention has made the field a distinct scientific domain, "a possible science" (Bloom, 1981) and "a prevention science" (Felner, Silverman, & Felner, 1995). From a theoretical point of view, prevention can, indeed, be defined using the same concepts irrespective of the specific content.

The concept or paradigm of prevention is connected with the conception of the problem – in this case ideas for explaining suicide. The concept of the paradigm (Kuhn 1967) is used here to characterise the totality of implicit or explicit theoretical underpinnings and practical choices the respondent has in mind with reference to suicide prevention. Paradigms are described using the model elaborated here. Regardless of the common trend described above, divergent ideas are common. For example, the specific etiology model and the

idea of discovering “a causative agent” of a disorder presupposes specific disorder prevention. “Without knowing the cause of an illness or an disorder, prevention programs can be only shots in the dark.” “For mental disorders there are no protective factors.” These famous statements by Lamb and Zusman (1979) culminate in principles embedded in medical and public health paradigms (Barter & Talbot, 1986; Dorwart & Chartock, 1989; Potter, Powell, & Kachur, 1995; Tudor, 1996) whereas multifactorial, systemic, developmental process-model leads to the interactional (man – environment) paradigm of prevention. In addition, prevention means “an intervention continuum” where the intervention concerns the preconditions of the disorder, not the disorder itself. Intervention can target factors that relate to the ultimate emergence of suicide and associated actions/thoughts only in a probalistic and nonspecific way (Silverman & Felner, 1995; Greenberg et al., 2001).

Different conceptions of the problem and of prevention can be characterised using the paradigms of *the medical model* and *the interactional model* (Table 1, Study I) (Upanne, 1996; Upanne et al., 1999a), or the disease model and the health model as Tudor (1996) terms them. Most of the current literature seems to prefer the process-model and interactional intervention paradigm. Nevertheless, many scholars consider activities following the medical model the most effective method (Engel, 1977; Blumenthal & Kupfer, 1986, 1987; Gunnel & Frankel, 1994; Maris & Silverman, 1995; Wilkinson, 1994; Isaksson, 2000). The same question about the “right paradigm” is embedded in the questions set for this study. Differences in views culminate in the concept of primary prevention (Albee, 1980; Perlmutter, 1982; Kessler & Goldston, 1989; Breton, 1999; Hosman, unpublished).

The most well-known definition of prevention was originally based on the general public health model later adopted by mental health practitioners, notably by Caplan (1964) (Tudor, 1996). The concepts have been interpreted in several ways depending on the context:

Primary prevention seeks to reduce rates of illness, to reduce the incidence of new cases of disorder. It aims to prevent an illness from occurring, to act before any signs/symptoms appear. In suicide prevention it aims at preventing suicidal tendencies in the individual. According to Silverman and Felner (1995), only this category can be called “*prevention*”. According to contemporary views, the category of primary prevention needs to be redefined. Within the interactional (health) model, both *prevention* and *promotion* must be included but separated.

As compared to risk-oriented prevention, promotion tends to create conditions which enhance the well-being of individuals, groups and communities and enable optimal psychological and psychophysiological development and a reduction in mental health problems (Lavikainen, Lahtinen, & Lehtinen, 2000; Kovess & Beaudet, 2001). As individual level factors for promotion Tudor (1996, 63) names coping, tension and stress management, self-concept and identity, self-esteem, self-development, autonomy, change and social support (Clark, 1967; Albee, 1980; Swift, 1980; Silverman & Felner, 1985; Bloom, 1986; Kessler & Goldston, 1986; Upanne, 1996; Downie, Fyfe, & Tannahill, 1990; Winett, 1997; Hosman, unpublished; van Heeringen et al., 2000; Public health action framework on mental health 2000).

Secondary prevention aims at reducing the prevalence of disorders. It targets persons showing early signs of a disorder with the goal of reducing the intensity, severity and duration of the symptoms. It aims to detect the illness at an early stage, to prevent the illness from worsening, to lessen the duration of established cases of mental disorder. In suicide prevention the aim is early intervention in cases of persons who are on the verge of suicide. According to Silverman & Felner (1995), this category is not prevention but rather “*early intervention*”.

Tertiary prevention aims to reduce the rates of residual disability. It focuses on individuals who are already displaying a serious disorder. It aims to reduce the severity, duration and complications of illnesses already diagnosed and treated. In suicide prevention the aim is prevention of the recurrence of suicide attempt in those who already been suicidal. According to Silverman & Felner (1995), this category is “*treatment*” rather than prevention (Tudor, 1996; Cowen, 1983; Lester, 1994; Caplan & Caplan, 2000).

In some countries the concepts presented above have been substituted for the concepts *prevention* (to limit or avoid future disturbance, interference or damage) and *intervention* (reducing or abolishing existing disturbance) (Hurrelman, Kaufman, & Lösel, 1987).

In the Finnish project suicide prevention was defined operating at three phases of the process: 1) to remove or alleviate factors which directly increase the likelihood of suicide (*specific prevention*), 2) to remove or alleviate problems and life crises which in adverse conditions will lead to a cul de sac (*non-specific prevention*) and 3) to provide conditions and experiences which will enhance people’s psychological resources and coping (*promotion*) (Upanne et al., 1990).

Silverman and Felner (1995) suggest new concepts to be adopted for prevention. They divide interventions into four categories: promotion, prevention, early intervention and treatment. The categories of promotion and prevention concern two views: those both of individuals and of conditions (see I, p. 253).

Henceforth the concept of “prevention theory” refers to the theoretical views presented above.

1.3 Suicide prevention as a target of research

Suicidology has largely been concerned with rates of suicide in populations or in defined groups and with connections between the incidence of suicide and demographic and clinical factors. This implies a rich detailed knowledge about the epidemiology of suicide in different countries and the connection between suicide and specific diagnose, in particular depression and schizophrenia. This epidemiological and basic clinical research creates a map of factors and patterns of factors essential in developing prevention. Nevertheless, because it is easier to conduct, most of the etiological research into suicidal behaviour occurs at only one level of analysis (Potter, 2000).

Studies focused on prevention mostly focus on methods of intervention. A common approach is to evaluate the effectiveness of specific methods in selected groups (e.g. young people) or contexts (e.g. school).

Studies of intervention have been evaluated e.g. by Shaffer and Bacon (1989), Diekstra (1992), Gunnell and Frankel (1994) and Gunnell (1994). In addition, a few meta-analyses have been conducted, e.g. Baker, Swisher, Nadenichek and Popowicz (1984) and Lewis, Hawton and Jones (1997). Characteristic of the field of prevention is a constant need to evolve the theoretical frame and, at the same time, to argue for the most fruitful avenues in developing research and intervention. The same interest can also be seen in other difficult or new fields such as the prevention of AIDS (Becker, Guenter-Gray et al. 1998). Discussions along the lines of “Toward a framework for primary prevention research” (Seidman, 1987) have been engaged in during the 1990s in both the fields of psychiatry (Report of the APA task force, 1990; Muehrer & Koretz, 1992) and psychology (Coie et al., 1993, Silverman & Felner,

1995). These reports regard systemic and developmental process models and a comprehensive conception of prevention a necessary frame for all kinds of agendas.

1.4 Previous studies in terms of professional conceptions

In practice conceptions of suicide prevention are various. The conceptions of professionals are presumably combinations of cognitive views learned by training, personal and emotional views dependant on personal life history and ideological views reflecting personal views of humankind. In addition, presumed role expectations in special professional contexts such as the present project, undoubtedly matter. Professional conceptions have also been called socially shared cognitions (Resnick, Levine, & Teasley 1991) and collective comprehension (Hatano & Inagak, 1991). The theoretical views described above are embedded in every conception, but only in an implicit way.

Searches of the literature with the Psycinfo, Medline and PubMed databases using several combinations of terms confirm that topics related to this study have not been a popular focus of research interest. Studies with some interest in common concern attitudes towards suicide or the suicide know-how of various professional groups. It is this fact that attitudes form an interesting focus for research activities that the special nature of suicide as a phenomenon and the involvement of personal feelings with professional work is probably manifested. The attitudes studied concern, however, suicide as a phenomenon or as an event, not its prevention.

Attitudes towards suicide have been studied mostly via questionnaires among professionals such as physicians or medical students (Souris, 1982; Michel & Valach, 1990; Reimer, 1986, Temesvary, 1996; Etzersdorfer, Vijayakumar, Schoeny, Grausgruber, & Sonneck, 1998) and nurses or other staff (Lester, 1971; Ketola, 1991; Anderson, 1997; Morgan, 1994; Yu & Ye, 1996; Cessna, 1997; Wastell & Shaw, 1999; Yang, Xiao, Dong, & Yang, 1999; Jenner & Niesing, 2000). Baker (1999) studied psychologists' attitudes towards the assessment of patients' mental competency for assisted suicide and Csikai (1999) social workers' attitudes toward euthanasia and assisted suicide.

Know-how about suicidal behaviour has been studied among general practitioners (Pfaff, Acres, & McKelvey, 2001), nurses or other health professionals (King, Price, Telljohann, & Wahl, 1999; Grosskopf, 2000; Appleby, Morris, Gask, & Roland, 2000) and others such as students, correction officers, school counselors, and teachers (MacDonald, 1999; Lawrence & Ureda, 1990; Hazell, Hazell, Waring, & Sly, 1999; Sovronsky & Shapiro, 1989; King & Smith, 2000). Webster (1998) studied nurses' and patients' perceptions of nursing behaviors utilised in suicide prevention. Albright (1995), using a national random sample (n=185) of counseling psychologists, studied their attitudes and knowledge towards suicide in regard to the likelihood of a client's suicide. The results indicated that psychologists who had experienced a suicide in their case load or personal life identified risk factors at a significantly higher rate than those who had not. Kellys' study (1984) on the attitudes of mental health professionals to prevention is taken up in the Discussion section.

Perlmutter, Vayda and Woodburn (1982) developed an instrument for differentiating communal programmes in prevention by delineating the critical dimensions underlying these programs as revealed by the validation process. Programmes were differentiated on three levels by Caplan according to target group, technique and goal of the programme. It turned out that the unique context of each programme was crucial in defining the goals appropriate to the different levels of prevention activity.

This gap in research makes comparison of and reflection on the results of this study difficult if not impossible. On the other hand, it underlines the fact that this is the first study addressing the topic of professional conceptions on suicide prevention.

1.5 The National Suicide Prevention Project in Finland 1986–1996 (NSPP)

Since the challenge laid down by WHO (1985) suicide prevention has become a special focus for development activities all over the world. As a result, numerous countries have prepared national programmes. The first country to prepare and implement a national suicide prevention strategy was Finland from 1987 to 1996. The aim of The National Suicide Prevention Project (the NSPP) was to comprehensively study different aspects of suicide, to develop strategies

for prevention, implement those strategies, and thereby decrease suicide mortality across the country by 20 %.

The project was based on an empirical study *Suicides in Finland 1987*, in which each suicide committed during one year was investigated by using the psychological autopsy method via interviews and other measures. The investigation was organised by provincial groups of experts. The case studies were conducted by local mental health professionals as invited investigators. Common program of training was organised and instructions were provided for the case studies. The case reports prepared by the investigators were discussed by the groups of experts and recommendations for prevention were formulated. The local data were analysed and published as local reports (Lönnqvist et al., 1997).

Utilising research findings and recommendations provided by some 300 professionals, a national strategy was developed (Itsemurhan voi ehkäistä, 1992; *Suicide can be prevented*, 1993). It was based on a content analysis using a preliminary form of the conceptual frame evolved later in this study. The strategy included a model for suicide prevention, detailed descriptions of practical challenges, and recommendations for developing practices in various fields (Upanne, Arinperä, & Lönnqvist, 1990). The strategy booklet was delivered on a large scale to all human interest sectors. The project was carried out as a country-wide collaborative programme through many service sectors and key domains during the 1992–1996 period. The author of this study was responsible for the preparation of the national strategy and acted as the leader of the implementation phase of the project.

Implementation of the programme incorporated over 40 subprogrammes and, in addition, spontaneous development work was carried out in several fields. In implementing the programme process-oriented and collaborative working models were applied. An internal evaluation of the implementation stage has been presented in two reports (Upanne et al., 1999a, b; Hakanen & Upanne, 1999). External evaluation reports concern the entire project (*Suicide prevention in Finland*, 1999; Taylor, Kingdon, & Jenkins, 1997; Singh, 2000) (Figure 2).

In addition to studies on suicide and related factors, the project also created options for this study: investigating conceptions of suicide prevention in real-life conditions and as real-life activities.

<i>Phases of the Project</i>	<i>Timetable (overlapping)</i>	<i>Data gathering for this study</i>
Research phase Suicides in Finland -87	1987–1989	Data for Study I (1987) Data for Study II (1989)
Evolving a nationwide strategy	1989–1992	
Implementation of the strategy	1992–1996	
Intermediate follow-up survey	1993	Psychologists involved with the first data gathering in 1987 and still involved with the project were identified from among the respondents (1993) Data for Study IV (1993)
Internal evaluation and report on implementation	1996–1997	Data for Study III (1996)
External evaluation of the project	1998–1999	

Figure 2. Progress of the National Suicide Prevention Project (NSPP)

1.6 Qualitative research as a background paradigm

The present study programme followed most of the characteristic criteria of the methodology of qualitative research. Qualitative research studies things in their natural settings, attempting to make sense of narrative or textual data, or interpret phenomena in terms of the meanings people bring to them. It applies an inductive strategy that seeks the meaning of experience rather than sheer facts and social constructions and meanings rather than social structures and social facts. A qualitative study provides contextual information, an insight into human behaviour. It deals with tacit information and an emic (insider) point of view instead of an etic (outsider) point of view. The aim of the analysis is to discover meanings that are not immediately evident in the data. Topics are described on a more abstract level. Qualitative research involves a discovery dimension. It seeks to discover, not to test (Mohanty, 1983; Ashworth, Giorgi, & Koning,

1986; Cuba & Lincoln, 1994; Miles & Huberman, 1994; Tesch, 1995; Giorgi, 1996).

Consequently, qualitative research can be characterised along a constructivist-interpretive paradigm. Constructivism implies a conception of ontological relativism (multiple realities), subjectivist epistemology (knower and subject create understandings), and a naturalistic set of methodological procedures (Cuba & Lincoln, 1994; Denzin & Lincoln, 1994; Tesch, 1995).

2 Aims

This thesis has two aims: firstly, to study conceptions of suicide prevention among professionals and, secondly, to elaborate a model for operationalising, describing and interpreting empirical data on suicide prevention.

The research questions for the four studies can be condensed as follows:

- 1) What are the main characteristics of views on suicide prevention among experienced professionals in different real life situations (studies I–IV)?
- 2) What was the overall trend in the development of the views of the subgroup of psychologists during the follow-up period (studies I–III)?
- 3) Is the model elaborated in this study viable as a tool for a theoretically adequate description and interpretation of the professionals' views on suicide prevention (studies I–IV)?
- 4) If so, what basic theoretical positions – paradigms – are disclosed in the views of the professionals (I–IV)?

2.1 The purposes and procedures applied in the four studies (Figure 3)

The purpose of study I was to discover a model for analysing and interpreting suicide prevention and to describe and interpret the views of a group of psychologists by means of the method developed. The structure of the data was compared with that expressed in common theoretical statements on prevention. The feasibility of the model was evaluated.

The purpose of study II (the first follow-up) was to compare the psychologists' conceptions of suicide prevention in two different settings to describe and interpret any differences. The conceptions were monitored over

the field investigation phase of two years. The later conceptions were described and interpreted using the model and compared with the ideas in the first setting. The conceptions were compared with well-known theoretical statements on prevention. The feasibility of the model was evaluated by using the data.

The purpose of study III (the second follow-up) was to study how the psychologists' conceptions of suicide prevention evolved in real-life contexts during their nine years of involvement in the the NSPP. Alterations, their main characteristics, and the psychologists' own explanations for them were assessed and interpreted using the model. The feasibility of the model was evaluated by using the data.

The purpose of study IV was to discover what suicide prevention actually is in practice by studying operational conceptions, i.e. practical action plans provided by professionals representing five different fields. Views of suicide prevention in the different fields were described and interpreted using the model. The feasibility of the model was evaluated by using the data on the sectors.

In general, the study aims to contribute to the know-how of studying, training, planning and practical realisation of suicide prevention.

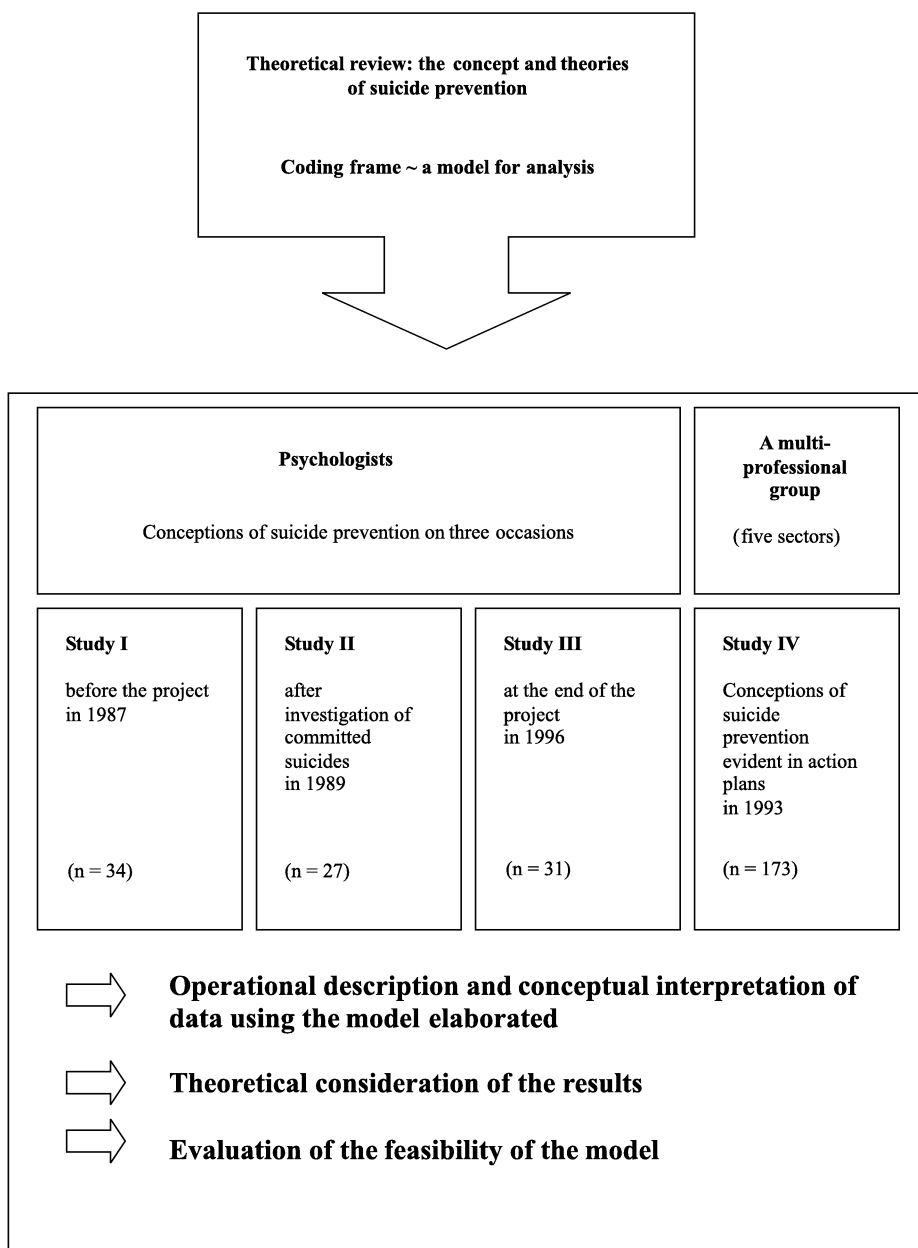


Figure 3. A schematic overview of the study programme

3 Method

3.1 Methodological approach

The purposes of this study are consistent with the general principles of qualitative research and a constructivist-interpretive paradigm in particular. The objective of the study is to find out how suicide prevention is constructed and conceptualised. The respondents create the target of the study – conceptions of suicide prevention – on the basis of their real-life experiences as freely formed texts. Thus the participants create their paradigms of prevention the characteristics of which are described in the analysis. Even the key phenomenon of the study – suicide prevention – is a social construction. Actually it does not exist if not expressly “produced” (Silvermanm 1993; Denzin & Lincoln, 1994).

The main idea of qualitative analysis – and that adopted in this study – can be condensed to the simple statement of Miles and Huberman (1994): “to make complicated things understandable by reducing them to their component parts”. The process of analysis included – along the lines typical of qualitative studies – segmenting, indexing, categorising, comparing and classifying the data and making a higher level synthesis using interpretation. The procedure is an eclectic activity, neither “scientific” nor “mechanistic” but “intellectual craftsmanship” (Seale, 2000). The methodological aims of this kind of analysis are called by Miles and Huberman (1994) discovering of regularities, discerning of patterns and conceptualisation. The interest of qualitative research is mostly focused on the content of the data. However, elaborating operations for the theoretical level is a major challenge in a qualitative study (Richards & Richards, 1994). This challenge – to distinguish the content of the data (textual level) and the structure of the data (conceptual level) – was essential in this study.

The two phases of qualitative analysis, organising and interpretation, are usually intertwined and especially in phenomenology known as the hermeneutic spiral (Tesch, 1995; Perttula, 1995; Eskola & Suoranta, 1996). Descriptive/interpretive analysis (Tesch, 1995) concerns the phases in which relevant portions of the data are separated from their context (de-contextualising) and the resultant segments assembled in one place according to topic in a “pool of meanings” (re-contextualising). In results of the analysis two kinds of concepts can usually be differentiated: first-order concepts for summarising the meanings of the segments (facts of the study) and second-order concepts to explain the patterning of the first-order concepts. The second level codes are explanatory or meta-codes and constitute an analogue to clustering and factor-analytic devices. “Pattern coding” reduces the amount of data and helps to build a cognitive map, more integrated schema for understanding incidents or interactions (Miles & Huberman, 1994). From the analysis e.g. empirical taxonomies or conceptual typologies can be elaborated (Bailey, 1994). The coding frame of this study and the procedure implied is consistent with these principles.

The method of analysis used here was developed for the express purposes of this study and to fit the quality of the data. It is not an explicit application of any named school. However, a variety of methods constitute the background to the analysis applied. The method is close to *ethnographic content analysis* (Altheide, 1987) and, in particular, *phenomenography* (Marton 1981). While classical content analysis means an objective, systematic, and quantitative description of the manifest content of communication, ethnographic content analysis is a reflexive analysis of the documents used to store and understand the communication of meaning, as well as to verify theoretical relationships. Phenomenography means describing conceptually perceived qualities of a phenomenon through contextual analysis. It is a research method for mapping the qualitatively different ways in which people experience, conceptualise, and understand various aspects of, and phenomena in, the world around them (Berelson, 1952; Altheide, 1987; Marton, 1988; Tesch, 1995).

The traditional criteria for studying reliability and validity are rarely met by a qualitative study. In turn, the headings of validity and reliability no longer seem adequate to encapsulate the range of issues that a concern for quality must raise (Seale, 1999). Nevertheless, the question of quality is as relevant a question in a qualitative study as in any kind of research. The need of rethinking the assessment of reliability and validity is connected with the constructivist view

of knowledge and reality. The constructivist critic of criteriology claims that “quality” is an elusive phenomenon that cannot be pre-specified by methodological rules. Triangulation across data sources, methods and data type “as an convergence of the two truths” illustrates the constructivist view of knowledge and reality: a single reality does not exist (Denzin, 1978; Silverman D., 1993; Miles & Huberman, 1994). By triangulation “we can bracket the findings, getting something like a confidence interval” (Miles & Huberman, 1994, 267). Also Denzin and Lincoln (1994) regard triangulation as an alternative to validation. In this study the principle of triangulation has been applied.

In qualitative research, validity depends on the employment of a data reduction process that leads to a result that others can accept as representing the data. Methods of confirmation concern both collection and analysis of the data. Transparency of the chosen method, clear operationalisation, keeping the steps of analysis and interpretation small enough, making explicit rules for solutions and interpretation, checking for representativeness and researcher effects etc. are methods recommended (Miles & Huberman, 1994; Tesch, 1995).

3.2 Context of the study

The study forms a part of the evaluation of the National Suicide Prevention Project in Finland (1987–1996) (NSPP). The data collection was included in the implementation of the project. The participants in the four studies were identified from among the respondents to the intermediate follow-up survey conducted in 1993 (Figure 3) (Upanne & Halmeaho, 1995).

The implementation of the project happened to coincide with a severe economic recession in Finland. Considerable changes in the social context of mental health care and suicide prevention ensued; these changes also had their effect on the implementation of this project. For a summary and evaluation of these developments, see the reports by Hakanen and Upanne (1999, 29–40), Upanne et al. (1999a, 46–47) and Upanne et al. (1999b, 40–41). Some of the effects induced by the recession are reflected in the data of the study III.

3.3 Participants

To identify the most experienced collaborators for studies I–III, the participants were chosen from among the psychologist respondents to the 1993 follow-up survey. They were all field investigators who had participated in the project from the very beginning and who seemed to have continued their collaboration. Before the project (1987), a questionnaire regarding suicide prevention had been directed to all field investigators (n=245). After the psychological autopsy investigations had been carried out (1989) the survey was repeated. The study group here comprised the psychologist respondents responding to the follow-up survey in 1993 for whom the replies to 1987 and 1989 questionnaires were also available.

The number of the respondents in study I was 34 (21 females and 13 males). In the follow-up (II), 27 of the subjects (79 %) were present (17 females and 10 males). When the the NSPP ended in 1996 the original (1987) participants were contacted again (III). Of these 31 subjects (91 %) responded (19 females 12 males).

All the participants (I–III) had 5 to 6 years of higher education and a Master's degree in Psychology as required of professional psychologists in Finland. When starting the project their ages ranged from 29 to 46 years (median 40 years) and their professional experience as a psychologist varied from 3 to 21 years (median 12 years). All were working in public health services in outpatient mental health care, except to three who worked at health centres. Most regions of the country were represented.

In addition to the author's professional interest, psychologists were a particularly suitable professional group (a case) to demonstrate preventive thinking. They formed the biggest professional group (47 %) among all the field investigators in the project (n=245) (Lönnqvist et al., 1997). Further, preventive mental health work had been a priority development area in Finland for several decades, with psychologists occupying a central role. Prevention is also regarded as part of a psychologist's professional duties, both in outpatient care and in health centres.

The participants in study IV were professionals who reported a development project on suicide prevention in their replies to the 1993 survey (n=220 out of the total sample of 1,786). The group contained twenty occupations and ten professional fields. In the group, all parts of the country were represented. The

five biggest professional groups and fields represented among the 220 respondents were chosen for study. The group (n=173) consisted of psychologists (n=41), clergy (n=37), nurses and other health care occupations (n=34), social workers (n=32) and physicians (psychiatrists) (n=29). The gender distribution of the group was 57 (33 %) males and 116 (67 %) females.

3.3.1 The study as a case-study

As a design, this was a case study in several respects. A case can be defined as a phenomenon occurring in a bounded context and can refer to an individual, family, group, society, circumstance or a larger phenomenon like a campaign. A case study then, is an investigation of a contemporary phenomenon within its real-life context (Yin, 1994; Miles & Huberman, 1994).

The NSPP and the circumstances created by it were a special occasion that can never again be reproduced in exactly the same way. Without these conditions the objectives of this study would have never existed and, for example, it would not have been possible to provide the data analysed here. Also, the groups studied – not the individual respondents – are cases, not representative samples from the populations in question. The groups constituted a selected sample of persons invited as experienced professionals for a special and rare purpose, and their involvement in the project exposed them to a unique kind of experience.

3.4 Data

The data in this study were qualitative in nature. The data in all four studies were freely formulated descriptions, i.e. texts.

In the studies I–II the data were acquired as a part of the survey directed at professionals who had been invited to participate as field investigators. The survey in 1987 (I) was repeated in 1989 (II) (Figure 2, Figure 3). On both occasions the respondents gave their replies, among other items, to the question *‘How can suicides be prevented in Finland?’* The replies constituted the data for studies I and II.

The follow-up survey (1989) also requested information on the respondent’s professional experiences of the psychological autopsy phase (the number of

suicide cases investigated, experience in treating suicidal patients, participation in training and personal fact-finding and assessments of the perceived effects of the NSPP: motivation, anxiety, and impact on confronting suicidal situations).

When the NSPP ended in 1996, the study group was invited to consider and compare their two previous sets of responses with their present conceptions using a self-evaluation questionnaire. The participants were asked to describe the issues that for them had undergone *changes*, and further to consider factors which had promoted such changes in their conceptions. The questions were ‘*What do you think is the reason for the changes in your conceptions? What are the factors which have had the greatest impact in these changes?*’

When implementing the project the professionals involved encountered various suicide situations and had various suicide prevention experiences. Some of them were generated by the NSPP and organised in a uniform way (e.g. psychological autopsy studies and training) while others occurred within the realm of ordinary professional work (e.g. optional participation in the NSPP implementation in 1992–1996). Implementation involved activities such as clinical work, developing practical procedures and organising training and multisectoral collaboration (Upanne et al., 1999a). No specific information about the subjects’ activities during the follow-up time was available. The subjects themselves assessed the factors they considered to have had an impact on their thinking.

The data for study IV were descriptions about “*activities or development projects your sector/unit is implementing or intending to carry out, the essential purpose of which is suicide prevention*. 1) The name of the project? Its topic? 2) What was the starting point to the project? 3) What was the purpose of the project? Its goal? 4) What was done to attain that goal? Methods? In addition, opinions relating to the suicide prevention options in the respondent’s own unit (“belief”, 5-point scale), assessed in the survey were used in the analysis. (“*What do you think, how much can your unit do to prevent suicides?*”)

3.5 Method of analysis

The procedure commonly used in qualitative analysis is to develop an organising scheme inductively from the data alone. An organising system or a conceptual template can also be created from prior material, such as the theoretical framework adopted or the research questions that guide the investigation (prestructured case). The latter is the option adopted in this study. In many cases the two methods are combined (Miles & Huberman, 1994; Tesch, 1995).

3.5.1 Coding frame

The prevention criteria which proved to be essential on the basis of theoretical analysis (Upanne, 1996a), and professional experience were used to construct a model (Figure 4). In the analysis, the main categories included in the model served as a pre-established organising system (Tesch, 1995), a tool for analysing conceptions by using the defined key criteria of prevention.

In the model, two kinds of criteria were included: descriptive criteria for categorising the data at an operational level and conceptual criteria presupposing interpretation. The key categories of the descriptive codes were *focus* (*what?*), the subject matter of prevention efforts, *strategy* (*how?*), how to intervene or what to do, and *sector* (*who?*), those who were regarded as responsible.

The conceptual codes for interpretation were timing, aim and location. *Timing* (*when?*) refers to the phase of the process considered adequate to interfere, the *aim* of an intervention (*for what purpose?*) to the intended effect on the target, for example to reduce suicide risk or to increase protective factors, and the *location* of a focus (*where?*) to the “level” on which the foci are “situated”, such as whether the matters in question are connected with the individual or with circumstances.

The subcategories of these main codes were worked up on the basis of the data obtained in study I. The applicability of subcategories were re-examined in each study, the specific quality of the new data was considered and the final subcategories were confirmed.

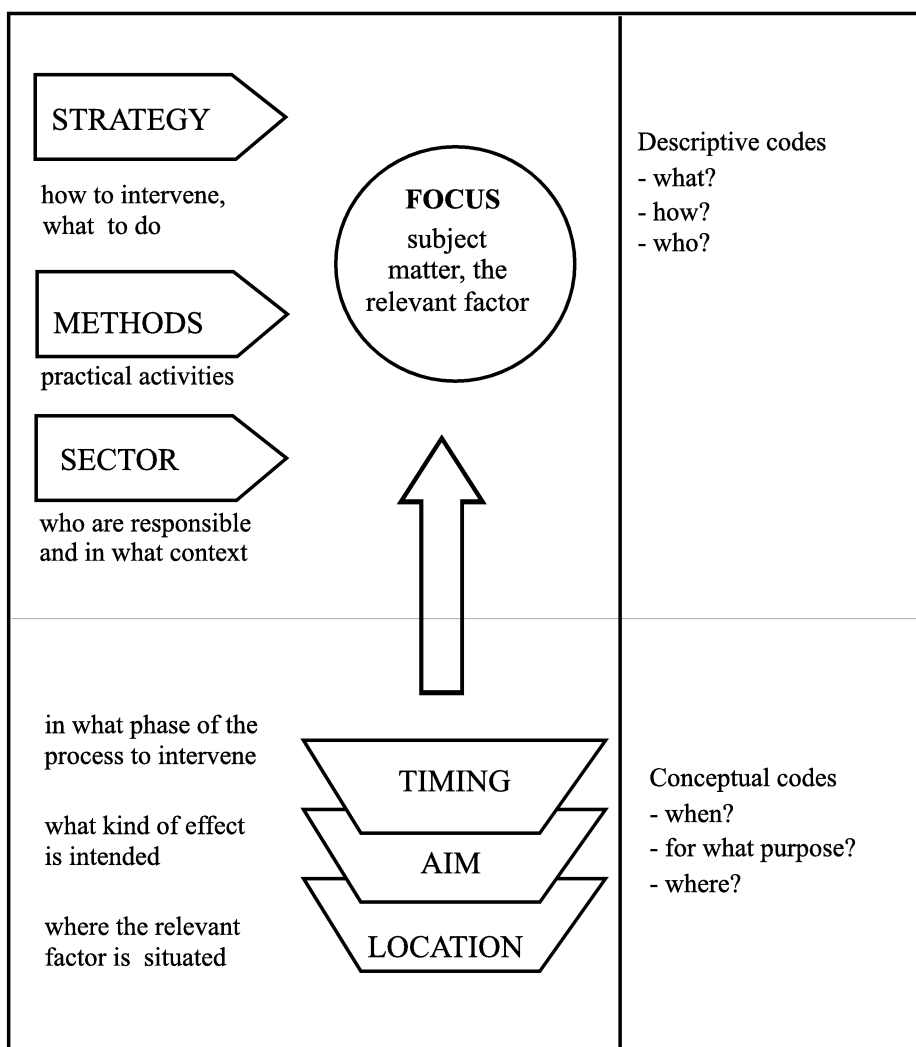


Figure 4. A coding frame for suicide prevention

In study III, *evaluation* codes were used to categorise the self assessments of the changes experienced in conceptions of suicide prevention. Evaluative replies were classified into three categories: *self-assessments of possible changes* in conceptions; *explanation* or factors the respondent considered had promoted these changes; and *observations* which were mainly assessments of the present state of mental health work. In study IV, an additional coding category “*method*” (practical action plans) was created.

In the analyses (I–IV), a further mode of categorisation; a *typology* of four approaches in prevention was applied as a second-order categorisation. The procedure is reported in the Results section.

3.5.2 Coding procedure

The analysis was based on the coding (indexing) of the responses according to the criteria. Broadly the same procedure was followed in all four studies. First, for each response, each focus (subject matter of prevention) and the text connected with it was identified as a text segment (item). Second, each focus was coded by an appropriate focus subcategory. Third, each item was coded from the viewpoint of other categories, if present (subcategories of strategy, method (IV), sector, timing, aim and location). In study III each response was coded, in addition, from the viewpoint of the three evaluation codes. For lists of the subcategories included in the codes, see the relevant articles. Below are two examples of replies and the assigned codes (study I):

Example 1.

\$m; \$F01; \$S05; \$Z05; \$T04; \$A04; \$L42

Organising more crisis services would be important. A human relationship, although only a professional one, could give hope and new views on life to somebody contemplating suicide. Gaining time is important, attaining distance from the traumatic trigger. Reaching lonely people, contact with them. The key is different kinds of befriending services.

\$	sign of a code	
\$m	male	
\$F01	focus	acute risk of suicide, serious crisis situation
\$S05	strategy	organising more services, especially crisis services
\$Z05	sector	public or voluntary social services
\$T04	timing	when serious risk appears
\$A04	aim	reduce suicide risk
\$L42	location	organisation of care services (individual level)

Example 2.

\$n; \$F14; \$S07; \$Z02; \$T01; \$A01; \$L32

Changing values and attitudes in the society from performance-oriented to human- or people-oriented, taking care of each other. Today success, effectivity, productivity, and materialism are the main values. The whole view of life ought to be changed altogether so that it could be seen by anyone and in workplaces, schools, and in the way we take care of social problems.

\$	sign of a code	
\$n	female	
\$F14	focus	concept of human being, values, attitudes, atmosphere in Finland
\$S07	strategy	changing attitudes
\$Z02	sector	society in general
\$T01	timing	before problems appear
\$A01	aim	promote, protect, strengthen
\$L32	location	circumstances: cultural level

The data of studies I and III were coded by the author. In study II the consistency of coding was assessed as a consensus (percentages) between two researchers using samples of items from data sets I and II. The mean agreement was 76 %, range 54 % to 85 % by category. In study IV an iterative coding procedure performed by the author and another psychologist was applied. After three repetitions of the coding the procedure was considered adequately substantiated.

3.5.3 Analysis

The coding method generated frequencies which were used in the analysis. The 'prevalence' of a certain subcategory was the number of references to it. The emphases were expressed either as a percentage of the total number of references or as a percentage of the respondents in that main category. The total number of occurrences of the codes did not equal the number of respondents: there may be more – or fewer – references than respondents. This is due to the free construction of the responses; sometimes several items belonging to a certain code were mentioned, or none at all.

As certain phenomena – not individual characteristics of the respondents – were the objectives of the study, the analysis was mainly performed at the group level and from the viewpoint of the coding frame rather than that of the respondents. Nonetheless some respondent-specific analysis was performed.

A computer-software tool for analysing qualitative data, WP^{index} (Sulkunen-Kekäläinen, 1992), was used in the coding and item analysis, and the SPSS-program (Roponen, 1994) and Chi-square tests were used in cross-tabulation. T-tests (Vasama & Vartia, 1980) were used to examine differences between the data in study IV.

Today more and more sophisticated software tools are available. Richards and Richards (1991, 1994) claim that although a wide variety of programs have been created, procedures are still much the same: the recognition of categories in the data, generation of ideas about them, and exploration of meanings in the data, i.e. code-and-retrieve process. WP^{index} belongs to the category of first-generation programs. It involved functions like keeping texts in an organised database, indexing, coding, searching and retrieval, searching for co-occurrence of codes, searches for codes in Boolean combinations, and registering the numbers of indexes in numeric form – which gives access to SPSS and t-test – reducing data in a condensed, organised format, such as a matrix etc. (Miles & Huberman, 1994). The program was appropriate for the purposes of this study and easy to use. Frequency counts produced by the technique of indexing the coding categories could be used in the analysis and for descriptions. Counts made it possible, for example, to express proportions of preferences in the respondents' thinking, to compare relationships between categories and to form clusters. In addition, changes in preferences could be followed (studies I–III) and compared between the groups (IV). Data could be organised in the form of a thematic conceptual matrix. Matrices helped to make patterns, themes and clustering discernible – “seeing a few general variables underlying many specifics” (Miles & Huberman, 1994).

Frequencies as a tool in analysis may create an impression of a quantitative or at least quasi-quantitative approach. Categories can, indeed, be called nominal scale variables, even if the concept of the variable is not in accordance with the essence of the qualitative approach. The dilemma when using quantitative and qualitative data in the same study has been a subject of debate in literature (Buchanan, 1992). In many studies both types of data have been combined (Greene, Caracelli, & Graham, 1989; Rossman & Wilson, 1984, 1991; Buchanan,

1992). Seale (2000) regards this argument as unproductive. The question is not, he says, whether the two sorts of data and associated methods can be linked, but when it should be done, how it is done, and for what purposes. The reasons for this procedure and its benefits for this study have been presented above.

4 Results

The main results of the four studies are presented in accordance with the research questions (chapter 2) and by applying the structure of the coding frame (Figure 4).

4.1 The main characteristics of views on suicide prevention

The purpose of *study I* was to discover a model for analysing suicide prevention and to describe and interpret the views of the study group of psychologists by means of the model. The structure of the data was to be compared with that contained in common theoretical statements on prevention.

The results showed that fourteen *foci* were enough to cover most (76 %) of the total number of ideas relating to the concept of suicide prevention. Acute suicidal risk and crisis situations, life values and attitudes in society were the most common foci. The most common *strategies* were adequate professional services. Other strategies were unspecified societal solutions and attitude change, better resourcing of health care and crisis services, supporting certain groups of people and encouraging people to use existing services. Critical comments were categorised as a part of strategies. The *sectors* responsible for implementation remained unspecified in over a quarter of the ideas. The primary sectors seen as responsible in suicide prevention were society in general and health care and other societal services in particular.

The foci were classified according to the *timing* dimension in the following categories: before risk appears (43 %), when risk appears (17 %), when symptoms appear (15 %), and when serious risk is evident (14 %), not codable (10 %). The leading *aim* was the promotive one (40 %). 85 % of the respondents

brought up at least one promotive idea. The two categories of prevention (promotion – prevention) were clearly definable operationally as different concepts. The second aim was to reduce the risk of the suicidal process (22 %). The *location* code showed clearly the emphasis on circumstances, especially living conditions (30 %) – everyday livelihood and cultural contexts – as the location of foci. Reliance on the meaning of cultural aspects like social atmosphere, values and attitudes was high, equal to that on close relationships. Services, especially in the health care sector, remained a location for a third of the essential factors. It turned out that the categories timing and aim were significantly interrelated and, consequently, nearly identical as coding criteria. While the categories of promotion and prevention, concealed in the timing category “before”, are present as discrete categories in the aim, *aim* code was preferred in the later analysis.

The purpose of *study II* was to monitor the psychologists’ conceptions of suicide prevention over the field investigation phase of two years and to describe and interpret any differences. The new conceptions were described and interpreted using the model and compared with the ideas in the first setting. The conceptions were compared with chosen well-known theoretical statements on prevention.

Although the number of *focus* ideas was double in study II, the same ideas continued to persist. Acute suicide risk, life crisis, life values and attitudes, everyday habits of upbringing and social and economic problems were still considered important. These five foci covered 39 % of the ideas presented. However, two ideas were regarded as more important than before; one was effective services and another critical ideas. Moreover, more or less the same set of *strategies* was provided. The dominant idea continued to be professional skills as an influencing strategy. A lack of strategies, and pessimism, became more frequent. In both I and II data sets, about a fifth of the foci lacked action strategies.

The priorities of the *aims* remained almost identical to those elicited before. Although ideas expressing promotive aims (1, Figure 6) decreased in number nearly significantly they nonetheless dominated. Only professional aims relating mainly to the developing of expertise and practices (6) increased in number more than the other aims. It became more prevalent to think that actions should chiefly be implemented on the individual level (20 % vs. 9 %). Nevertheless, an important *location* of essential factors remained at the level of circumstances

– social, economic and cultural factors (19 %), and health and social services (professional skills and organising services) (28 %) (Figure 7).

None of the factors included in the two-year period of psychological autopsies accounted significantly for the magnitude of the changes observed in aims or approaches, although these experiences were reported by the respondents themselves to have had a strong impact on their thoughts and feelings. Neither did the magnitude of changes differ significantly between males and females or by level of professional experience.

The purpose of *study III* was to examine how the psychologists' conceptions of suicide prevention evolved in real-life contexts during their nine years of involvement in the NSPP. Changes, their main characteristics, and the psychologists' own explanations for them were assessed and interpreted using the model.

At the end of the follow-up period, most of the respondents reported that their *ideas* of suicide prevention had been changed in many respects. Things they regarded as of more relevance now were acute suicide risks, depression, suicides among children and young people and crises situations, Finnish life-values and the healthy development of children and young people. Most prominence was given now, however, to the prevention of social marginalisation. Enhancement of professional skills and increased services were emphasised the most as *strategies*. However, more attention to targeted education, support and influencing people's attitudes was also called for.

The first priority as an *aim* was acute-phase intervention, the difference being statistically significant ($t=2.88$, $df=30$, $p<.01$) compared to both of the previous data sets (4, Figure 6). However, the preceding phase of the suicidal process, including the promotive aim continued to be considered essential, too – a fifth of the prevention ideas concerned protective factors. Nevertheless, emphasis on the promotive aim was significantly lower ($t=2.06$, $df=30$, $p<.05$), compared to study I data. In study III the individual level came to be regarded as more and more important (43 %) as a *locus* of actions (Figure 7). Group-related themes did not emerge at all. Other factors perceived as important involved professional services, the societal level and environmental issues. The self-reported factors affecting changes were varied in nature and did not explain the trends in the conceptual change.

The purpose of *study IV* was to discover what suicide prevention actually is in practice by studying operational conceptions, i.e. practical action plans

provided by professionals representing five different fields. Views of suicide prevention among the different fields were described and interpreted using the model.

The ideas of suicide prevention described in the action plans of the five sectors (psychologists, clergy, nurses, social workers, psychiatrists) clearly focused on a few specific topics (*foci*): life crisis, acute risk of suicide, preventive mental health work generally and, in addition, developing professional know-how. Aside from a couple of characteristic choices, the priorities of the foci were much the same in each sectoral group.

In all groups the “multi-method professional *strategy*” was dominant. Key strategies were improving services, professional skills, a curative attitude and developing practices of care. Each sectoral group favoured more or less the same list of key strategies. Five *methods* – practical interventions, training for professionals, networking, public information and encountering clients covered 85 % of all the methods mentioned. The method most frequently reported (25 % of the responses) included a practical intervention. Activities covered all the focus ideas presented. Most emphasis was put on crisis situations: 81 % of all methods were practical activities whereas, e.g., the focus of preventive mental health work remained more on a planning level, with only 35 % of methods being practical interventions. The priorities were much the same in each group. “A multi-method approach” was applied: when planning a project, usually several strategies and methods, more or less the same sets, were adopted irrespective of the topic. The respondents had a sincere *belief* in their potential for suicide prevention. Nearly all the respondents (95 %) regarded their unit as able to prevent suicides at least somewhat, and half of the respondents (54 %) considerably.

While all the *aim* categories were applied in the practical projects, the three categories of professional purposes (6), reducing risk of a suicidal process (3), and reducing acute suicide risk (4) proved the dominant aims. Nonetheless promotive aims – interventions aimed at enhancing protective factors were also represented (10 %). Aims relating to professional know-how proved more important than aims relating to the various needs of people. No significant differences appeared between the sectors in adopting aims. However, for example, the aim of reducing acute suicide risk (4) was most commonly adopted in the medical sector.

A third of the practical activities were focused on individual patients or clients. If professional services are reckoned as individually focused interventions, 57 % of preventive ideas were realised on the individual level. About a quarter of the activities focused on the group level, and the (local) population level. Apart from a few non-significant tendencies, priorities in terms of *location* were much the same in each group.

4.2 Trends in the development of views

Trends in views during the follow-up were analysed using the approaches and the aim and location codes. The approaches were clusters of foci based on the analysis of the cross-tabulation between the focus and strategy codes. In addition, the clusters combining the focus and strategy codes were cross-tabulated with the remaining codes (studies I and II). On the basis of the analysis the approaches could be characterised as conceptual patterns (typology) expressing different ideas about suicide prevention.

The approaches showed clearly different emphases in the three studies (Figure 5). Most of the psychologists' views of suicide prevention represented the care-approach. Downplaying of the conditions approach clearly seemed to be a choice. In study I 24 %, in II 30 % and in III as many as 73 % of the respondents did not mention factors related to it. The increase in the amount of critical ideas was also noteworthy. Compared to the study I material, the increase in study III was statistically significant ($t=2.05$, $df=30$, $p<.05$). Nevertheless, all the approaches were present in all these study materials, but only on the group level.

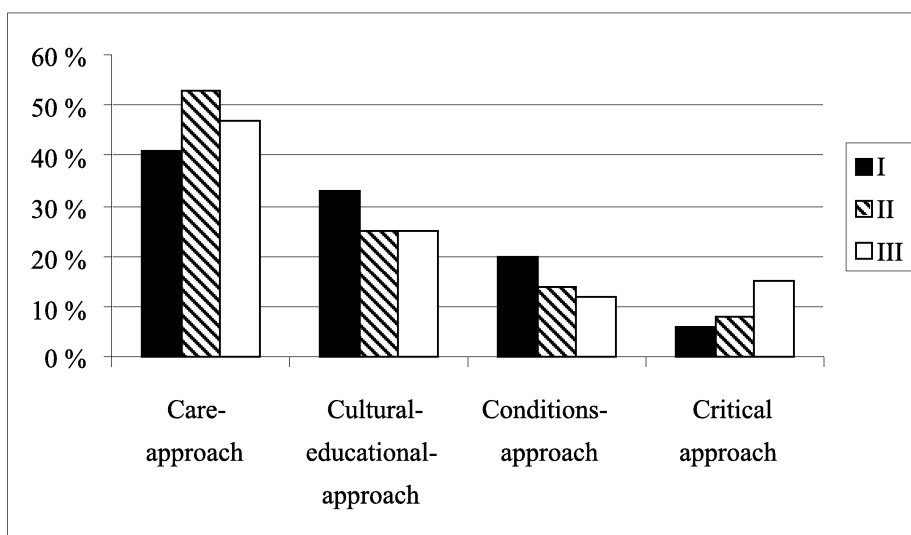


Figure 5. Approaches to suicide prevention that emerged in studies I–III (% of the number of items)

Similar trends can be seen in the prevalences of the aim and location codes in the three studies. A decreasing emphasis on promotive aims and an increasing emphasis on reducing suicide risk (Figure 6) and an increasing emphasis on individually oriented activities illustrate the general trend (Figure 7).

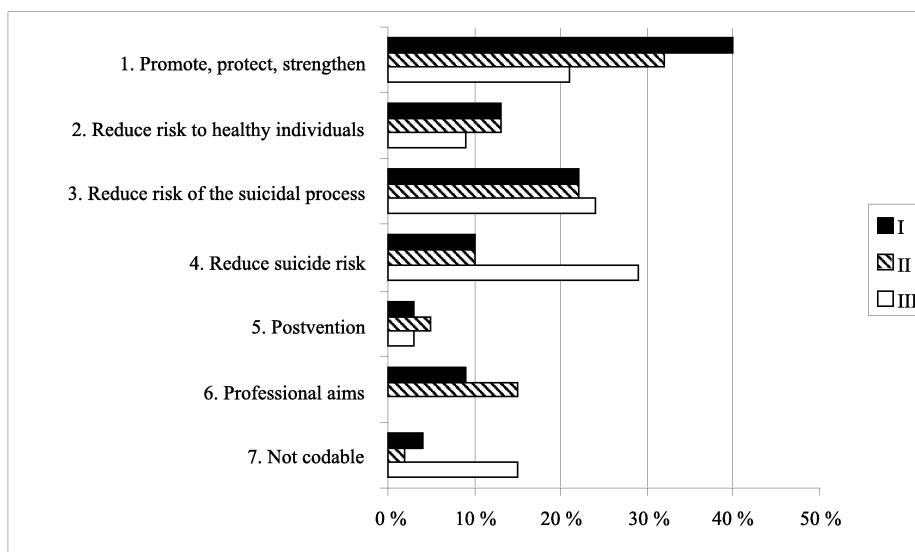


Figure 6. Aims of suicide prevention that emerged in studies I–III (% of the number of items)

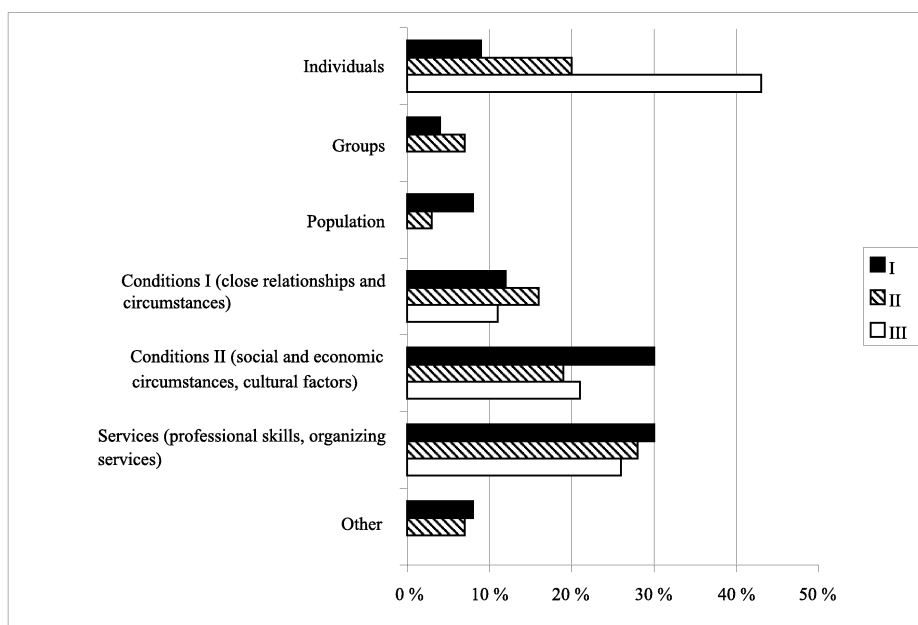


Figure 7. Location of foci of suicide prevention that emerged in studies I–III (% of the number of items)

In study IV more than two out of three action plans represented the *care-approach* (Figure 8). The conditions approach was also more in favour than the cultural-educational approach. Critical views did not appear. The approaches also showed the planned activities in the different fields to be fairly similar in nature: no significant differences between the sectors appeared. However, a nearly significant difference appeared in the case of the cultural-educational approach ($\chi^2=9.09$, $df=4$, $p<.06$). While the social sector applied this approach in 20 % of its projects, the medical sector was not at all inclined to it. The explanation turned out to be gender difference in orientations. A significant difference between male and female respondents in favouring the cultural-educational approach occurred. Women (15 %) were significantly more in favour of this approach compared to men (2 %) ($\chi^2=6.82$, $df=1$, $p<.01$) (Figure 8).

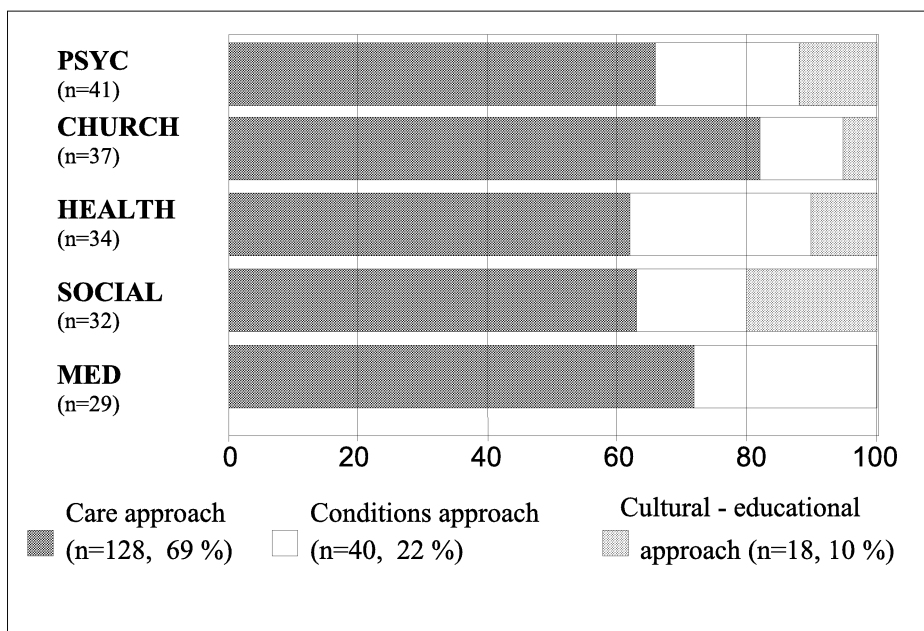


Figure 8. Approaches (n=186) as they emerged in different groups (% of the number of choices in each group)

Although the analysis in studies I–III was conducted on the group level, *individual choices* could be detected. For example, although all four phases of *timing* were taken into account on the group level (I), all four were regarded as important in the same essay by only three respondents. Nevertheless, foci representing the first phase (“before”) were mentioned by every respondent. One group (15 %) emerged to advocate solely taking steps 1 and 2 (before symptoms appear). None of the respondents mentioned actions “when serious risk occurs” as the only phase meriting intervention.

Although the “utilisation rate” – the number of *aims* referred to per respondent – increased in study II, this development did not apply to all individuals. For instance, the items incorporated in the promotion code (1) increased in the responses of 12 respondents, decreased in the case of six respondents and remained the same for nine respondents.

Although the respondents mainly preferred several *approaches* simultaneously in study I, 26 % of the respondents omitted the care approach, 21 % the cultural approach, and 41 % were not at all in favor of the conditions

approach. Each approach had at least one loyal advocate who did not accept any other.

In study II this comprehensiveness remained. Now 44 % of the respondents applied all three approaches (with the critical one excluded) and 76 % applied at least two. Nobody relied solely on the cultural and conditions approach in his/her prevention ideas. The care approach seemed to be the key, with the other views supplementing it. The bulk (41 %) combined the care and the cultural approaches, omitting the conditions approach, and 11 % favoured the care approach complemented by the conditions approach, while omitting the cultural one. Only three respondents abandoned the care approach in study II, while five rejected the cultural approach, and 13 respondents rejected the conditions approach.

4.3 Results relating to the feasibility of the model

The feasibility of the model can only be judged indirectly from the results emerging from the analysis. The results are related, according to the aim 3, to the effectivity of the method of analysis and the structure of the data, not to the content of it. The relevant results here are, e.g. the access to categorisation of the data according to the coding criteria, the conceptual criteria in particular and the option for theoretically meaningful interpretations of the results. The criteria could be used as variables, e.g. in comparing results between the groups (IV) and for further categorisations (approaches). Conceptual codes in particular and approaches permit characterisations which can be regarded as paradigms.

One way of trying out the viability of the model was to explore the *correspondence between the data and certain theoretical models* using location and aim codes. It emerged that the data were comparable with the key categories embedded in the models adopted as examples.

Analysis according to the location criterion showed in terms of the “multilevel analysis” of Winett et al. (1989) that the proportions of the levels were: personal 9 %, interpersonal/social 20 %, community 24 %, and regulatory/policy level 47 %. In terms of system vs. individual factors in Cowen’s (1985) dichotomy the relative proportions were 54–46 %. According to Caplan’s model (1964) which is based on the aim criterion, the emphasis was on primary

prevention, 75 % of statements being in that category. According to the Finnish model (1990), the share of promotive aims was 45 %, of nonspecific prevention 23 %, and that of specific prevention 17 %. According to Silverman and Felner's model (1995) (aim and location) the data and the model were in perfect correspondence (Table 6 in I). The emphasis in promotive aims was evenly on individual and conditions levels. The medical model and the systemic interactional model described in I (p. 243) could also be characterised.

The iteration of the procedure in *study II* showed that some changes had occurred. According to the *location* criterion (Winett et al., 1989) the changes between the data of I and II in the proportions of the levels were: personal (9 % vs. 22 %), interpersonal/social (20 % vs. 23 %), community (24 % vs. 16 %), and regulatory/policy level (47 % vs. 40 %). The analysis in terms of Cowen's (1985) dichotomy showed that the emphasis on system factors decreased from 54 % in I to 38 % in II in favor of the individual level (46 % vs. 62 %). According to Caplan's model (1964) the emphasis on primary prevention decreased from 75 % in I to 64 % in II. According to the Finnish model (1990) ideas on promotive aims decreased from 45 % to 35 %. Instead, the proportion of ideas on nonspecific prevention increased from 23 % to 33 %. The proportion of ideas representing specific prevention did not grow, but rather slightly decreased (17 % vs. 9 %). According to Silverman and Felner's model (1995), protective conditions were now considered the most important. The decrease in the status of personal competence as a promotive target was significant ($t=2.96$, $df=30$, $p<.01$). Instead, the importance of personal vulnerability factors as a target of prevention increased nearly significantly ($t=1.91$, $df=30$, $p<.10$). The risk factors connected to circumstances were considered as important as before.

5 Discussion

The basic questions for this study were, first, whether the essential characteristics on views of suicide prevention among professionals in different real life situations can be differentiated and interpreted and secondly, whether the model evolved in this study would prove feasible in the analysis. The results showed that using the model a theoretically adequate characterisation of views could be constructed and the paradigms adopted by professionals could be delineated. Although participants' views were comprehensive in broad outline, approaches characteristic of the medical model tended to dominate.

The study showed that the basic conception of suicide prevention among psychologists was comprehensive, including several focus ideas and following the systemic view and process theory of suicidal development and the interactional model of prevention, with the promotion of protective factors as the leading aim. The difference between the views expressed before the project and those experienced later was clear. The trend showed that the closer the respondents' connection with practical services, the more clinical the view and the greater the concern on serious problems as foci, individuals as the location, the later phase of suicidal process as the timing for intervention and early detection and treatment as the aim. The analysis of practical plans showed that different sectors tended to share the above paradigm. No clear sectoral profiles according to any of the theoretical criteria emerged. In addition, methods of prevention were alike irrespective of the specific topic.

The analysis proved the coding frame feasible in disclosing the implicit views of the respondents with respect to the prevention paradigm.

As shown in the Introduction, much efforts has been expended over the last decades to develop strategies of suicide prevention. The approach adopted in this study has not, however, been attempted before. Thus this can be considered

the first study in which the concept of suicide prevention has been studied using empirical material. Suicide prevention was studied here using conceptions provided by professionals in real life conditions within the National Suicide Prevention Project in Finland. The data available for this study were unique. The study followed a prospective design. The first three studies monitored the progress of the conceptions of a group of psychologists and the trend observed was described with regard to time and the accumulation of practical experience as well as changes in the society. In study IV practical plans for suicide prevention from five professional sectors were studied. The empirical material was analysed using a model based on prevention theory developed in the course of this study.

5.1 The main characteristics of views on suicide prevention

Before the project, the conception of suicide prevention among the psychologists was comprehensive. According to the *descriptive criteria*, as many as 10 to 20 topics were used to span the domain of suicide prevention. The priorities were, nevertheless, clear. The three most frequent foci were suicide risk, acute life crisis and life values and attitudes. Ideas relating to strategies and the sectors responsible for activities were narrow. Professional services were prioritised as strategies. There was no concern with naming the sectors responsible. The respondents' own sector, health care or social services were prioritised.

The idea behind the criterion "sector" is that each focus idea is connected with a certain domain in society. It is important that the expertise and contacts of those very fields are invited in setting aims and implementing strategies connected with that focus. For example, an appropriate sector for the focus "coping" of young people is school. The idea of setting sector-specific challenges was applied when constructing the national strategy in the NSPP (1992).

After two years the number of ideas had doubled but their range remained the same. Nine years later when weighing up the previous conceptions, the meaning of serious problems like acute suicide risk and social marginalisation was exacerbated. From that perspective, the previous comprehensiveness was even regarded as "a daydream".

In the multisectoral group (IV) concentration on a few foci, mainly acute problems, was a clear choice when planning suicide prevention activities.

Professional learning was adopted as a special focus. As a strategy, the large number of practical interventions was an encouraging finding in accord with the aims of the national project. The evaluation survey conducted in 1996 (Hakanen & Upanne) confirmed that the activities included in this study were serious efforts: after four years 73 % of them were still continuing and a third had been adopted as a part of everyday work.

In practical planning a large variety of methods was common in all sectors. Usually several strategies and, especially, methods were combined. Differences between the main lines of activities and detailed methods often remained unclear. The strategy adopted could be characterised as “a multimethod professional strategy”. Having several ideas for a strategy might reflect an effort to make a real impact or simply uncertainty when thinking up a new plan.

In planning, the priority of methods as a starting point, as compared with focus and aim, was common. In addition, developing methods was often adopted expressly as a discrete focus without any connection to a specific focus idea. Further, combinations of methods were much the same irrespective of the topic. Such an approach may be problematic. Starting with methods entails a risk of poor recognition of substance (focus: the relevant factor) and purposes (aim: what kind of effect is intended). This, in turn, is often why opportunities for evaluation are missed: if you do not know what your aim was, you cannot know whether you reached it.

The *conceptual codes* disclosed the paradigm of suicide prevention in I to be theoretically quite comprehensive. It was process-oriented and followed the interactional model. The aims of suicide prevention covered all the steps of the developmental phases characterised by the code subcategories, the leading aim being the promotive one. The bulk of the respondents brought up at least one promotive aim.

Using the conceptual codes timing, aim and location, the trends in changes in the structure of views in I–III emerged clearly. Emphases with regard to the development process and location of the foci changed. Relevant from the point of view of the prevention paradigm was the decrease in ideas in the “before the fact” timing categories and especially the decrease in the priority of promotion as an aim. Already in II the bulk of new ideas concerned other aims than promotion. The aim of decreasing acute suicide risk increased in number. In III the first priority as an aim was acute phase intervention, the difference being statistically significant (Figure 6).

Changes could also be seen through the location code. The share of focus ideas located on the individual level increased. In I the psychologists' "free ideas" were interpreted to reveal the systemic view and interactional model, with both circumstances and the individual level present. In the data sets II and III the number of ideas referring to circumstances decreased in favour of individually focused ideas (Figure 7). Thus the profound changes caused by the recession and experienced and brought up by the psychologists in the data set III did not raise the share of circumstances as a locus of intervention. Instead, the increase in individual distress was considered more and more important. Increased know-how among professionals about the strategy of "crisiswork" and for that reason, also better recognition of the need of help might also be an explanation for this refocus. Simultaneously with but independent of the NSPP, strong interest among professionals and training movement in the carrying out of crisis intervention across several sectors was kindled in the 1990s in Finland (Hakanen & Upanne, 1999, 36; Saari, 2000, 17–19).

The codes timing and aim showed the same development. The later the intervention phase, the more self-evidently it concerned the manifestation of symptoms, which can be detected only in individuals' behaviour or complaints. The idea of timing interventions before this fact would also focus other factors such as experiences and living circumstances.

In IV the views were more in favor of the medical model. Timing was focused mostly in the later phases of the developmental process with the aims mainly concerning suicide risk. The share of promotive aims was minor (10 %). Profession-centred foci exceeded suicide-connected ones. Some conditions-factors were present albeit the individual view was chosen as the main line. Kelly (1984) also found that almost 90 % of professionals believed that programmes focusing on individuals were the best examples of prevention, although they simultaneously endorsed institutional programmes (i.e. social action).

The pathway of conceptions in I–III can also be described using *approaches* (Figure 5). With time the care approach established itself at the expense of the cultural-educational approach and conditions approach. In IV two thirds of interventions represented the care approach. However, also the other two approaches also occurred. For this reason, the paradigm of prevention in the sectoral group might, by and large, be judged to be comprehensive. However,

Silverman and Felner (1995) claim that this kind of work is not prevention at all; rather it is early detection and treatment.

In practice the respondents apply a “multistrategic approach”. For example, the common orientation among psychologists was the care approach combined with the cultural-educational approach. Also, the cultural and condition approaches were clearly adopted. However, in III the conditions approach was totally omitted by 73 % of the respondents.

The growth of critical and pessimistic views in the psychologists’ group (as much as a fifth of the respondents in III) merits consideration. Reflecting feelings such as helplessness, tiredness and nihilism and the enormous demands of work in this field, it is certainly an important part of suicide prevention. However, the psychologists here represented the most highly qualified and motivated professionals. The magnitude of feelings of this kind among mental health professionals in general would repay study.

The conclusion is that free professional conceptions on suicide prevention can follow the comprehensive, interactional paradigm, but in practice views tend to focus more on factors and practices characteristic of the medical (care) paradigm.

5.2 Individual and sectoral paradigms

Although on the group level certain trends were detected, development seemed, nevertheless, to be individual. For example, the respondents made individual choices between approaches by favouring some and omitting others. The care approach remained, however, the leading approach. No-one, except the fifth, who presented the critical approach as the only idea (III), omitted the care approach. A few respondents held to one approach only in all the data.

To give another example, the trend referring to the promotion code disclosed that prevention conceptions are in fact cognitive choices, perhaps even beliefs. The significance of promotive aims was individual. For example, while the total number of choices relating to the promotive aims decreased in II, the number expressly increased among a few respondents. This points to an idea occurring in literature (e.g. Albee, 1980) that the concept of promotion is an indicative idea in the concept of prevention.

The taking up of stands and the shaping of opinions in a personal way invites the conclusion that within a shared frame each respondent applied a paradigm of his/her own. Paradigms seemed expressly personal. Data on professional experiences, experiences during the project investigations or gender did not explain the quality of changes in views.

The great homogeneity of practical interventions and the lack of discrete sectoral profiles across the sectors (IV) points to the conclusion that professional in different fields share a common paradigm of suicide prevention. Several unifying factors such as shared information provided by the project, a shared mode of individually-oriented professional culture in the field of public regional services can be brought to explain the similarity. Perlmutter et al. (1982) also found that the unique context of prevention programmes was crucial in defining the goals appropriate to the different levels of prevention activity. A common set of interventions – “a multi-method approach” – may also be a practical necessity due to the assortment of methods commonly available. In addition, the data used in this study were more about collaborative unit plans than personal professional ideas. Another type of data, e.g. personal views not connected with practices provided by different sectors might change the picture. In defined professional contexts and in common projects, like the data here, possible individual paradigms cannot be applied. A situation like this has been termed socially shared cognition (Resnick, Levine, & Teasley, 1991) and sharing cognition through collective comprehension activity (Hatano & Inagaki, 1991).

A widespread recognition of the risk factors involved in the suicidal process may have a positive effect in increasing the efficacy of certain essential interventions in suicide prevention. Segments of the population reached and served in different domains are in any case assumed to be different. The opposite conclusion would be that concentrating on risk factors means neglecting the potentials of the unique foci and modes of intervention incorporated in the different roles of professions and sectors in society. At the same time, opportunities for developing views of prevention broader than the present paradigm may fail to be introduced.

A valuable finding is the strong belief in the possibilities of suicide prevention in their field expressed nearly by everybody in IV. According to the evaluation study (Hakanen & Upanne, 1999) this belief was even stronger in 1996. The professionals placed great trust in their sectors' potentials and in themselves to have an impact on suicide prevention.

The possible gender difference in views concerning the cultural-educational approach disclosed in IV might be worth studying further. If approaches are conceived to reflect different conceptions of humankind and problems, basic gender differences in views are not an unimportant detail in society (Hammerlin & Larsen, 1997).

5.3 Feasibility of the model

In this study the theoretical and empirical aspects of suicide prevention were combined. The model of analysis was based on key concepts in the prevention literature. The study provided empirical material for operationalising the concepts. The clarity and options for meaningful classifications, interpretation, comparisons with theoretical models as well as internal comparisons across the data provide good feedback for the feasibility of the model. Using the model it was possible to characterise the structure and comprehensiveness of conceptions of suicide prevention and interpret them from the viewpoint of prevention theory. The analysis also helped to operationalise concepts embedded in the theoretical models.

The study showed that the coding categories incorporated in the model and their combinations were suitable in constructing a general description of conceptions. Descriptive codes, *focus* in particular, was helpful in defining an essential aspect of suicide prevention: what factors and how many of them can define the concept. The question of essential content is the key target in planning. Foci and aims, not methods, ought to be decided as the first thing when constructing practical programmes.

Conceptual codes (aim, timing and location) as critical aspects of prevention theory permitted theoretical interpretation of the results. The *aim*-code is the expression of the supposed impact of intervention. It was designed to differentiate all three aims of primary prevention: the promotive aim and the two modes of primary prevention: influencing both predisposing and precipitating factors. Thus the first three aim-categories (Figure 6) corresponded to the classical (Caplan's) category of primary prevention. In this study, the aim-category expressed by a respondent was interpreted to reflect his/her conception of the nature of the problem: what its origin and possible initial phases are and, consequently, what factors determine the need to intervene. Cross-tabulation of

the subcategories of focus and aim enabled the provision of operational definitions for the different aim-categories, meaning that e.g. operational content of promotion could be characterised.

Also question incorporated in the *location*-code also concerns the comprehensiveness of conceptions relating to the multifactorial nature and developing process of the suicidal pathway. The code provides to the differentiation at the individual vs. system levels of factors the respondent has regarded essential in intervention. Although the comprehensive systemic and transactional view – discussed in the Introduction – is applied e.g. in most national strategies, in practice that approach is not self-evident, as seen in this study.

The views presented in the data are in accordance with the person vs. system -model presented by Cowen (1985). Views emphasising individual factors and views emphasising system factors and, consequently, interaction between individual and circumstances both occurred. Also these two emphases correspond roughly the paradigms embedded in the medical and interactional model (I).

The results referring to *timing* were mainly omitted due to the strong congruity with aim. Nevertheless, timing is clearly a separate view from the viewpoint of prevention theory. It presents the challenge of considering the timing of an assumed intervention with respect to the assumed process of development of a disturbance even better than the aim-code. Timing concerns at what point an intervention is deemed appropriate, a concern encountered also in medical and interactional paradigms. Adoption of such a view matters in practice. Is there anything that can be tackled before individual symptoms of a disturbance are evident and can be identified? The view of suicide as a development process was applied in the psychologists' group (I, II). The ideas could be coded into all five timing categories.

Study of the correspondence of the results with the theoretical models chosen for reflection (in I and II) showed that the views expressed by the group could be compared with current prevention models using the codes. The views seemed to correspond largely to the models. A good expression of this is the way the data contribute to demonstrating the feasibility of the model presented by Silverman and Felner (1995), in which two criteria, aim and location, are integrated (I, Table 7). The analysis shows rather detailed contingency, a sort of cognitive analogy between the model and the group's thinking.

Approaches are clusters constructed on the basis of cross-tabulations of subcategories of the main codes. The core of approaches is clusters of certain types of foci and the meaningful grouping of related strategies rather than theoretical criteria such as specific aims of prevention. Approaches represent a method of reporting the results. They are descriptive, practical categories and, in the same time, a conceptual typology (Bailey, 1994) for clustering ideas and activities relating to suicide prevention. They are also a kind of metaphor as a result of applying the principles of “pattern forcing” and “moving up the abstraction ladder” (Miles & Huberman, 1994, 245–256).

Approaches provide one way of characterising paradigms of prevention. There is a close resemblance between the care approach and the medical model and between the cultural and conditions approaches and the interactional model. The care approach is close to Caplan’s concept of secondary prevention, early intervention by Silverman and Felner (1995a), and specific suicide prevention according to the Finnish strategy (1993).

5.4 Methodological considerations

The strategy of the study is in accordance with the methodological principles applied in qualitative research (Miles & Huberman, 1994; Tesch, 1994). However, it is not a direct application of any specific method, but one developed for purposes of this study.

In this study a less used qualitative research strategy was adopted. The main framework for the analysis was evolved in advance from the theoretical basis and not from the data alone as is usual in qualitative strategy. Evolving the model for analysis was a preparatory part of the study (Upanne, 1996). The first version of the model was the one applied in the content analysis of recommendations for the national suicide prevention strategy (Upanne et al., 1990). This pilot study showed the viability of the frame. What was pre-prepared from the point of this study were “questions” for the analysis in the form of a coding frame (an organising scheme by Tesch, 1994). The qualitative subcategories in the analysis were, however, evolved from the data. This model might also be regarded an interpretive repertoire applied in discursive studies (Potter & Wetherell, 1987; Nikander, 1997). Clearly defined conceptions and the method of conducting the analysis made the procedure transparent and

reversible. Although the method of analysis was quasi-quantitative, utilising frequencies, the numbers were not the results. The role of frequencies was to provide a means for differentiation, considering structures and making comparisons. The method was adequate in analysing a cursory type of data and for the purposes of this study.

The coding frame is, however, conceptual, and the coding procedure presupposes that the user is familiar with the concepts and the field of prevention, the suicidal process and a systemic view of the interaction between human beings and the environment. In addition, choices regarding timing, aim or location were not made by the respondents; instead, they were interpreted from the data by the author. The respondents did not “use” the categories. They were not necessarily aware of the theoretical underpinning of their plans. However, the “use” of the categories was used by the author for interpreting the theoretical orientation and drawing conclusions about the preferred paradigm. This procedure of interpretation was part of the conceptual analysis of the study (Tesch, 1994; Miles & Huberman, 1994).

The analysis concerned elements the respondents considered essential in prevention. The analysis could be interpreted as a locus of control approach applied in a professional context (Härkäpää, 1992; Lester & Young, 1999). The trend described by the results seems to reflect a kind of reality testing.

The conceptuality of the model means that coding tends to overinterpret the data. This is, however, a facet of the viability of the model: it helps to recognise theoretically essential features in the data. It is also possible that the researcher-effect can occur. This is considered a pertinent part of qualitative research given that no other way of proceeding than the researcher’s ideas is available (Tesch, 1994; Miles & Huberman, 1994; Seale, 2000). In II, a parallel coding experiment and in IV an iterative coding procedure were conducted. In this study the transparency of the methods is supposed to contribute to the reliability and validity of the results (Seale, 2000).

All the data were freely formulated texts. As replies to open questions in surveys they were short and condensed. This makes them cursory and possibly also superficial as compared e.g. data gathered by interviews. Nevertheless, the data was appropriate for the purposes of this study as far as the characterisation of conceptions is concerned and especially so for the purpose of evolving the analytical model.

The data in this study concerned cases. Case refers here to a unique occasion connected with certain people (Yin, 1994). The idea was to tackle the phenomenon where it exists. The Finnish project created circumstances for the issues studied here to occur in real life conditions. The fact that no studies have been directed to this topic before points to the lack of correspondingly favourable conditions.

The data in the four studies were different with respect to timing and quality. The data was gathered on successive occasions. The essential issue subject to change in the meantime was that of increasing contact with the practices of suicide prevention. This difference between the data sets served for triangulation (Denzin & Lincoln, 1994): using a few occasions and data the design can validate the overall picture of conceptions and the method of analysis as well. The difference has also served in interpreting the changes observed.

In fact the data can be characterised as falling into two categories: “free views, daydreams” (I) and “realistic practical views” (II–IV) on suicide prevention. The data in studies I–III concerned universal ideas on suicide prevention. The data in I were prospective “natural, free ideas”. The data in studies II and III were provided in circumstances where the psychologists had been deeply involved with individual suicide cases (II) and with the practical challenges of prevention (III). The data in study IV were operative conceptions created in connection with the first practical planning phase. Due to this successive data gathering the study can be regarded as following “a time-series design”. It monitored a specific phenomenon (the conceptions of suicide prevention) with respect to time with special interventions involved (the course of the project) (Elmes, Kantowitz, & Roediger, 1992, 183–186).

The four data sets can be conceived as describing the progress of the project. In the psychologists’ group the trend is towards a nonspecific combination of training carried out by the project, personal involvement in it, practical experience of suicide cases and real life challenges to prevention in the course of implementing the project. As stated earlier, project experiences available tended to be constant for all participants and did not e.g. explain individual differences in orientations. Thus the results provide a description of, rather than an explanation for the progress.

The data gathering, performed as it was over several occasions, entailed a number of drop-outs: a total of seven respondents in II and three respondents in III. The most probable effect of these missing responses might be an

underestimation of the share of critical and pessimistic views in the results. For example, in II the only informed reasons for the seven non-respondents were in the cases of two persons who became local project leader and, consequently, non-recipients of the questionnaire and one refusal for personal reasons. Possible fatigue with the project or its topic or change of interests might give a good reason to interpret the share of the critical approach in reality bigger than that reported in the results.

A possible researcher bias was mentioned earlier in connection with the interpretative use of conceptual criteria. Another reason for the data being possibly “inadvertently contaminated” (Elmes et al., 1992, 210), in this case e.g. specially prepared for a known receiver, might be the role of the author in the project. However, the author being in the role in question concerns only the period of data gathering for the studies III and IV. The data for the studies I and II were gathered before this took place, during the first period of the project. What could, indeed, be imagined to be a researcher effect or rather a courtesy towards a colleague is the reasonably high percentage of responses in III still after nine years. According to my appraisal the responses – self-evaluations of participants’ own earlier responses – are, instead, sincere with no sign of special purposefulness. Also the nature of the data for study IV reveals that the responses are natural descriptions of local ideas.

5.5 Implications for further studies and for developing suicide prevention practices

The results of this study provide a reasonable “first level” characterisation of the field of professional suicide prevention. The data used here were, however, too concise to reveal all the relevant aspects of thinking and activities in the field. For a profounder study of the topic e.g. interviews or other methods of detailed data gathering need to be employed.

This study was a case study in which the data gathering focused on occasions with high concentration of the experiences in question. A new study would be needed to check the results found using representative samples from the professions present here. The paradigms professionals adopt explicitly or implicitly have an impact on real life practices and on society (Hammerlin & Larsen, 1997). For example, lack of interest in comprehensive activities and, in

particular, protective activities as well as critical views would be worthwhile studying more carefully.

In practice the planning of preventive activities is, in addition to poor organisation and poor resources, often technically confused and hasty. As was seen in this study, methods tend to be prioritised in planning. Focus, the key factor in the prevention idea is, indeed, very difficult to determine and it is not rare that it is lost altogether. If the focus factor is missing, the aim, the objective of change expected to be seen and evaluated in the the factor, is lost as well. Maybe due to the preliminary nature of the action plans neither the aspect of evaluation or follow-up was present in the data. In the model evaluation would be a necessary part of the criterion “strategy”.

In my study the model evolved was used in the form of a coding frame to analyse concrete material. This experience shows that the model can also be adopted as a theoretical, conceptual tool for analysing ready-made plans, discussions or one’s own thoughts, or as material in professional training. The simple key concepts used help to reveal some of the essential aspects of planning e.g. in initial situation where “all the flowers are blooming”. Due to neutral theoretical and strategic nature of the concepts the model can be adopted and developed further in any field of prevention. The overall aim of the model is to help in making planning focused, aim-oriented, theoretically self-conscious and differentiated in practice. These qualities would help in evaluation, increase the credibility of the idea of prevention and, in addition, promote a feeling of know-how among professionals themselves.

6 Summary in Finnish

Tällä tutkimuksella oli kaksi tavoitetta: kuvata ja tulkita teoreettisesti mielenterveysalan ammattihenkilöiden käsitystä itsemurhien ehkäisystä ja kehittää samalla teoreettinen malli itsemurhien ehkäisyn analysoimista varten käyttämällä tämän tutkimuksen empiiristä aineistoa mallin toimivuuden testaamiseen.

Itsemurhien ehkäisy on vakava yhteiskunnallinen haaste. Samalla se on sekä teoreettisesti että käytännössä vaikeaselkoinen alue, mikä vaikeuttaa osaltaan alan käytännön työtä ja tutkimistakin. Asian tärkeys, sekä tekijän oma kokemus itsemurhien ehkäisytöiden kehittämisessä ja siinä koetut ammatilliset haasteet olivat lähtökohtana tälle työlle.

Tutkimus koostuu neljästä osasta. Tutkimustehtävä oli kaikissa osatutkimuksissa pääpiirteissään sama: kuvata ja tulkita ammattihenkilöiden käsityksiä kehitettyä analyysimallia apuna käyttäen ja arvioida analyysin perusteella mallin toimivuutta. Kolmen ensimmäisen tutkimuksen osallistujina oli psykologiryhmä (n=34), jonka käsitysten kehittymistä seurattiin kaikkiaan yhdeksän vuoden päähän (kuvio 3). Neljäs tutkimus koski viiden eri alan ja samalla ammattiryhmän (n=173) tuottamia käsityksiä itsemurhien ehkäisystä. Kolmen ensimmäisen tutkimuksen aineistona oli psykologien sanallisesti ilmaiset käsitykset itsemurhien ehkäisystä yleensä. Neljännen tutkimuksen aineistona oli eri alojen laatimat operatiiviset suunnitelmat itsemurhien ehkäisemiseksi.

Tutkimus liittyy Suomessa vuosina 1987–1996 toteutettuun valtakunnalliseen Itsemurhien ehkäisyprojektiin (kuvio 2). Projektiin nimetyt kenttätutkijat tutkivat ajanjaksolla 1.4.1987–30.3.1988 kaikki Suomessa tapahtuneet itsemurhat haastatteleamalla jälkikäteen läheisiä ja mahdollisia hoitaneita ammattihenkilöitä. Saatu tieto käsiteltiin alueellisissa asiantuntijaryhmissä. Ryhmien kokoaman tiedon ja antamien suositusten pohjalta valmisteltiin itsemurhien ehkäisyn valtakunnallinen strategia. Strategian avulla käynnistettiin projektin val-

takunnallinen toteutus vuosiksi 1992–1996. Tähän tutkimukseen osallistuneet psykologit toimivat projektissa kenttätutkijoina ja edelleen käytännön toteuttajina. Tutkimukseen IV kuuluneet asiantuntijat osallistuivat samoin projektin toteutukseen osana omaa työtään. Samalla kun projekti oli ainutkertainen tapahtuma, myös tämän tutkimuksen osanottajaryhmät ovat tapauksia: tietoisesti valittuja esimerkkejä itsemurhien ehkäisyyn erityisesti paneutuneista ammattihenkilöistä.

Tutkimuksen aineistot koottiin osana projektin toteutusta. Molemmat tutkimusryhmät identifioitiin vuonna 1993 toteutetun projektin väliseurannan yhteydessä. Psykologien ryhmään valittiin henkilöt, jotka kyselyyn vastaamisen perusteella osallistuivat edelleen projektin toimintaan vuonna 1993 ja jotka olivat osallistuneet myös projektin ensimmäiseen seurantakyselyyn vuonna 1987. Tämä prospektiivinen kysely toistettiin vuonna 1989 projektin kenttätutkimusvaiheen päätyttyä. Kyselyssä pyydettiin vastaamaan mm. kysymykseen ”Kuinka itsemurhia voidaan ehkäistä Suomessa”. Esseemuotoiset vastaukset tähän kysymykseen muodostivat tutkimusten I ja II aineiston. Projektin päätyttyä vuonna 1996 tutkimusryhmän psykologeille lähetettiin seurantakysely, jossa heitä pyydettiin arvioimaan itse ajatustensa kehittymistä vertaamalla ajankohtaisia näkemyksiään aikaisempiin vastauksiinsa.

Tutkimuksen IV aineistona oli itsemurhien ehkäisyä koskevat toiminnalliset kehittämissuunnitelmat, jotka eri alojen edustajat raportoivat seurantakyselyn 1993 yhteydessä. Esitetyistä suunnitelmista (n=220) määrällisesti suurimpien alojen suunnitelmat (n=173) otettiin tutkimusaineistoksi.

Tutkimus edustaa laadullista tutkimustapaa. Tutkimuksen osallistujat tuottivat tutkittavaa ilmiötä koskevat kuvauksensa vapaasti muotoiltuina tekstiaineistoina tosielämän olosuhteissa osallistuessaan käytännön toimintaan. Aineiston erittely osiinsa tuotti kuvauksen käsitysten pääpiirteistä ja luonnehdinnan käsitysten oleellisista piirteistä käsitteellisellä tasolla. Analyysin tarkoituksena oli ymmärtää henkilöiden ajatuksia preventioteoreettiselta kannalta. Analyysin ilmentämiä käsityksiä verrattiin myös eräisiin teoreettisiin esimerkkimalleihin. Toisin kuin kvalitatiivisessa tutkimuksessa yleensä, tässä tutkimuksessa analyysin teoreettinen, orientoiva kehys (kuvio 4) oli valmisteltu etukäteen tutkimustiedon ja tekijän ammattikokemuksen pohjalta. Kehyksen ja analyysin sisältöluokat muokattiin sen sijaan tavalliseen tapaan aineistosta. Tutkimuksen toisen tavoitteen kannalta katsottuna empiirinen aineisto toimi mallin toimivuuden kokeiluaineistona. Analyysi perustui teknisesti aineiston indeksointiin

koodauskehyksen avulla ja indeksien analyysiin WP^{index}-ohjelman, SPSS-ohjelman ja t-testin avulla.

Tulokset osoittivat, että psykologien käsitys itsemurhien ehkäisystä ennen projektin alkamista (tutkimus I) oli monipuolinen käsittäen laajimmillaan lähes 20 sisältöteemaa (focus). Silti eniten mainittujen teemojen muodostama kärki oli kapea: yhtäältä akuutti itsemurhavaara ja kriisitilanteet ja toisaalta yhteiskunnallinen ilmapiiri, arvot ja asenteet, kasvatustavat ja sosio-ekonomiset ongelmat katsottiin itsemurhien ehkäisyn tärkeimmiksi sisältöteemoiksi. Vaikuttamistavat (strategy) keskittyivät ammatillisen toiminnan eri muotoihin ja vastuutaho (sector) yhteiskunnan palveluihin, etenkin terveydenhuoltoon. Oma ammatillinen vastuunotto interventiona korostui. Tarkastelu käsitteellisten kriteerien avulla osoitti, että etenkin ennen projektia tärkeimpänä tavoitteena (aim) pidettiin promotiivisia toimia: suojaavien tekijöiden, mm. yksilöllisten voimavarojen kehittämistä tai tukemista. Kaikkiaan 40 % kaikista sisältöteemoista koski promotiivisia teemoja. Samalla tulos merkitsi, että vastaajat painottivat toimien ajoittamista jo vaiheeseen ennen riskitilanteiden syntymistä. Kuitenkin myös muut prosessin vaiheet (timing) huomioitiin. Olosuhdetekijöitä (lähes kolmannes) pidettiin yhtä tärkeinä vaikuttamisen kohteina kuin yksilötekijöitä ja esimerkiksi ihmisten välisiä suhteita (location). Analyysi antaa aihetta tulkita, että psykologien näkemys edusti prosessiteoriaan (kuvio 1) ja vuorovaikutusteoriaan pohjaavaa näkemystä suisidaalisuuden kehitystekijöistä ja edelleen ehkäisevien toimien kohdentamisesta. Preventioteoreettiselta kannalta tärkeä kannanotto oli suojaavien tekijöiden voimakas painottaminen.

Jo toisessa aineistossa oli näkyvissä tietty ajattelun kehitystrendi, joka selkiintyi edelleen tutkimuksessa III. Kehityskulkua kuvattiin tavoite- (aim) ja sijainti- (location) kriteerien sekä preventio-otetta (orientaatio) kuvaavan yhdistelmäkriteerin (approach) avulla. Neljä otetta (hoito-ote, kulttuuris-educatiivinen ote, olosuhdeote, kriittinen ote) muodostettiin focus-koodin ja muiden koodien ristiintaulukoinnin avulla. Orientaatioita luonnehditaan mm. osatutkimuksessa I.

Vaikka psykologiryhmän preventiökäsityksen laajuus osoittautui pääpiirteissään pysyväksi, silti jopa merkitseviä muutoksia ilmeni. Esimerkiksi tavoiterakenne muuttui siten, että suojaavien tekijöiden tukemisen tavoite väheni ja nimenomaan akuutin itsemurhavaaran vähentämisen tavoite voimistui (tutkimuksessa III merkitsevästi) (kuvio 6). Se merkitsi samalla yksilökohtaisen toiminnan merkityksen lisääntymistä ajattelussa (kuvio 7). Vaikka preventio-ot-

teiden tärkeysjärjestys säilyi, silti kehityskulun suunta ilmeni myös niissä. Hoidote pysyi pääorientaationa, sen sijaan kulttuuris-educatiivisen otteen ja olosuhdeotteen osuudet vähenivät. Merkille pantavaa oli kriittisen otteen lisääntyminen (kuvio 5). Lisäksi vastaajien poissääminen (tutkimuksessa II seitsemän, tutkimuksessa III kolme) antaa aihetta olettaa kriittistä ja pessimististä suhtautumista olleen ryhmässä tosiasiaa vieläkin enemmän kuin tulokset osoittavat.

Tuloksia käsiteltiin pääasiassa ryhmäkohtaisesti. Osoittautui kuitenkin, että näkemyksissä ja niiden kehityssuunnassa, mm. suhtautumisessa promotiiviseen tavoitteeseen, oli yksilökohtaisia eroja.

Kehitystrendiä ja vastaajien eroja siinä eivät selittäneet käytettävissä olevat tiedot: tutkimukseen osallistujien itsensä esiin tuomat kokemukset projekti-tutkimuksen aikana tai työ- ja elämäkokemukset aikavälillä 1989–1996. Koska kehityskulun selittäminen ei ollut tutkimuksen nimenomaisena tehtävänä, yksityiskohtaista tietoa muista mahdollisista selittävästä tekijöistä ei hankittu erikseen. Tulostarkastelussa päätellään, että näkemysten muutokset liittyivät kliinisen työn haasteiden lisääntymiseen käytännön työssä. Näiden haasteiden lisääntymisen ja osin myös niiden laadullisen muuttumisen (esim. kriisitilanteet ja sosiaalinen syrjäytyminen) koettiin olleen yhteydessä samaan aikaan kohtaan osuneeseen taloudelliseen lamaan Suomessa.

Tutkimukseen IV osallistui viisi ryhmää: psykologit (n=41), kirkon ammattihenkilöt (n=37), hoitohenkilökunnan edustajat (n=34), sosiaalityöntekijät (n=32) ja psykiatrit (n=29). Toimintasektoreita ja ammatteja ei ollut mahdollista erottaa toisistaan. Viiden sektorin toimintasuunnitelmat keskittyivät kokonaisuutena selkeästi muutamaan keskeiseen sisältöteemaan (focus): yhtäältä akuuttiin itsemurhavaaraan ja kriisitilanteeseen ja toisaalta preventiivisen mielenterveyshuollon yleiseen kehittämiseen ja ammattitaidon parantamiseen. Oma ammattitaito oli sisältöteemana yhtä tärkeä kuin asiakas/potilaskohtaiset teemat. Vaikuttamisstrategiaa voi luonnehtia monimenetelmäiseksi ammatilliseksi strategiaksi. Viisi menetelmää: käytännön interventio (esim. toimintamuodon kehittäminen), ammattilaisten koulutus, verkostoituminen, julkinen tiedotustoiminta ja yksilökohtainen hoito tai auttaminen muodostivat menetelmäkimpun, joka kattoi 85 % kaikista suunnitelmissa mainituista menetelmistä. Vaikka toimintasuunnitelmissa esiintyivätkin periaatteessa kaikki tavoitetasot, tärkeimpiä tavoitteita olivat suisisäälisen prosessin kehittymisen ehkäiseminen ja akuutin itsemurhavaaran vähentäminen sekä ammattitaidon kohentaminen

eräänlaisena välitavoitteena. Tavoitteet ja sisältöteemat merkitsevät, että toiminta sijoittui (location) pääasiassa yksilötasolle.

Osoittautui, että ryhmien käsitys itsemurhien ehkäisystä käytännön toimintojen kautta katsottuna oli oleellisilta osiltaan yhdenmukainen. Sektorikohtaisia profiileja tai tilastollisesti merkitseviä eroja ryhmien välillä ei tullut esiin yhdenkään kriteerin kohdalla. Näkemysten samanlaisuus näkyy kootusti selvimmin preventio-otteissa (kuvio 8). Vaikka kaikkia orientaatioita esiintyy jos-sain määrin kaikissa ryhmissä (psykiatrien ryhmää lukuun ottamatta), hoito-ote eli jo ilmenneeseen ongelmatilanteeseen keskittyvä, yksilökohtaiseen ammatilliseen interventioon perustuva toimintatapa oli selkeä päänäkemys kaikissa ryhmissä. Olosuhdeotteen osuus oli viidennes ja kulttuuris-edukatiivisen otteen osuus vain 10 %. Viimeksi mainittua orientaatiota ei esiintynyt lääkäreiden (MED) esittämissä toimintasuunnitelmissa.

Kuvailun selkeys, käsitteellisen tulkinnan mielekkyys ja teoreettisen päätelyn toteutettavuus ja tulkittavuus sekä teoreettisten vertailujen mahdollisuus antavat hyvän palautteen analyysimallin toimivuudesta. Tulosten tulkitseminen kahden keskeisen vaikuttamisparadigman: lääketieteellisen tautimallin ja vuorovaikutusmallin (tutkimus I) näkökulmasta antaa aihetta päätellä, että käytännön ammattityössä eri aloilla preventioajattelu tukeutuu tautimallin näkemykseen ja ikäänkuin täydentää sitä vuorovaikutusmalliin kuuluvilla toimintakohteilla ja intervention periaatteilla.

Kehitetyn mallin käsitteet ovat neutraaleja teoreettisia ja strategisia käsitteitä. Niinpä mallia on mahdollista käyttää ja kehittää edelleen minkä tahansa sisältöteeman yhteydessä. Malli soveltuu käsitteelliseksi työvälineeksi edistävän ja ehkäisevän toiminnan tutkimukseen, koulutukseen ja käytännön suunnitteluun. Sen avulla työstä on mahdollista kehittää tavoitteellista ja teoreettisesti ja toiminnallisesti hallittua toimintaa ja lisätä samalla myös evaluoinnin mahdollisuutta.

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Original publications

I

A Model for the Description and Interpretation of Suicide Prevention

Maila Upanne, MS

Views about suicide prevention are based on underlying beliefs about the origins of problems and basic concepts about humankind. These implicit theories have an effect on prevention practices. Making these views explicit is one of the keys for the further development of suicide prevention. In this study a paradigm for analyzing suicide prevention by means of a coding frame and interpreting findings by means of theoretical models of prevention was elaborated. The analysis was based on empirical data consisting of definitions of prevention given by psychologists ($N = 34$) participating in the national suicide prevention project in Finland. The study demonstrates that suicide prevention can be differentiated at the operational level by means of the analysis method generated. Moreover, the findings can be interpreted according to theoretical criteria. Views expressed by the psychologists seemed to correspond largely to central features of current prevention models. Furthermore, the data can be seen to serve as an empirical validation of these models. Suicide prevention proved to be a multifactorial concept manifesting mainly process theory and interactional explanations of suicidality, and prevention practices fell into a simple typology of four categories.

Suicide is a serious problem all over the world, and during the past few decades much effort has been devoted to identifying and developing effective measures for prevention. Recently several countries, including Finland, Norway, Sweden, the Netherlands, and Slovenia, as well as New Zealand and the province of Alberta in Canada, have published national strategies based on a World Health Organization (Ministry of Social Affairs and Health, 1987) initiative. In 1996 the United Nations published a guide for national activities (United Nations, 1996).

Finland was one of the first countries to carry out a comprehensive national suicide prevention project, in 1986–1996. The aim was to study different aspects of suicide comprehensively, to develop strategies for prevention, and thereby to decrease suicide mortality across the country. The project was based on empirical research,

in which each suicide committed during a 1-year period was investigated by the psychological autopsy method utilizing interviews and other measures (Lönnqvist et al., 1997). The research findings generated useful data and recommendations from professionals for developing the national strategy. The strategy included a theoretical model for suicide prevention, detailed descriptions of practical challenges, and recommendations for developing practices in various fields (National Research and Development Center for Welfare and Health, 1992; Upanne, Arinperä, & Lönnqvist, 1990). A comprehensive national project was implemented in 1992–1996 on the basis of the strategy (Upanne, 1996).

Suicide and its associated factors have been analyzed carefully in many studies. However, research activities have tended to focus less on suicide prevention, and

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studies on prevention have focused mostly on the effectiveness of single measures (e.g., Egmond & Diekstra, 1990). Suicide prevention has been discussed and defined by specialists from a variety of theoretical perspectives. However, implementation and suicide prevention, practices in real-life circumstances, and the meaning of the concept to working professionals have not been thoroughly studied. Analysis of essential decisions in prevention and a model for describing procedures are also missing from the overall picture. Kelly's (1984) study on attitudes and activities of mental health professionals is one of the few investigations in this area. The reason for ignoring actual practices in research might be the fact that field professionals have tended not to be involved in developing suicide prevention before collaborative programs began. In practice, however, any undertaking in suicide prevention always depends on the way prevention is conceptualized. For example, when implementing national programs, final definitions and operationalizations are made by professionals and other people involved. Therefore their views are of the greatest importance in developing suicide prevention.

The general aim of prevention in the health field is clear: to prevent psychosocial and health problems that are known to harm people and society. The second question is how to achieve this effect. What actually is essential in suicide prevention?

There are certain questions that have always provoked conflicting arguments in theoretical discussion on suicide prevention. The ways these questions have been framed have been regarded as theoretical turning points or even paradigmatic shifts (Cowen, 1983; Perlmutter, Vayda, & Woodburn, 1982; Rappaport, 1984; Silverman, 1993; Winett, King, & Altman, 1989). The meaning of psychosocial factors, the interrelationships between people and the environment, the suicidal process, and the aims of prevention have proven to be the most essential features of the discussion (Albee, 1980, 1986; Klein & Goldston, 1976; Lorion, Price, & Eaton, 1990; Shaf-

fer, Philips, Garland, & Bacon, 1990; Silverman, 1993; Winett et al., 1989).

Much controversy has centered on the concept of primary prevention (e.g., Caplan, 1964) as it relates to models of psychological dysfunction. One modern explanation of psychological disturbances is that they result from developmental processes that include many phases and factors that involve interaction between humans and circumstance. This means that all these phases and factors can be subject to intervention, and disturbances therefore can be prevented, at least in theory. However, differing models of the etiology of psychological disturbances entail differing possibilities for prevention. A clear contrast to the optimistic view of prevention arises from the idea of a single-factor linear explanation that includes known causes for disturbances. A frequently cited criticism by Lamb and Zusman (1982) is that "without knowledge of cause, primary prevention programs can only be shots in the dark" (see also Wilkinson, 1994). These opposite conceptions of the very basic ideas about man, health, and mental disturbances can be described, respectively, as an interaction model and a medical (sickness) model. These summaries serve as background information for this study (see Table 1). In the analysis, general themes embedded in these two models have been operationalized further. Furthermore, separating the aims of primary prevention into two groups has been an essential basis for developing prevention programs. Thus primary prevention is defined as an intervention with the aim of either (1) promoting positive results (health, well-being, coping) or (2) reducing negative results (maladjustment, disturbances, suicidal behavior). This dichotomy—according to Albee's (1980) competence model and the defect model—can be regarded as a kind of primary conceptual test of prevention theory (Albee, 1986; Bloom, 1981; Cowen, 1983; Silverman & Felner, 1995).

On the basis of the literature it can be concluded that theoretical prevention models can be reduced to certain basic

TABLE 1
Characterization of the Sickness Model and the Interaction Model

The sickness model	The interaction model
<ul style="list-style-type: none"> • Problem is regarded as an illness or disturbance. Prevention is also focused on disturbance. • Disturbance can be prevented only if there is a single known cause or risk factor. Causes originate within the individual. • Aim is to discover symptoms and prevent their onset or deterioration. • Intervention can be achieved only after the manifestation of the problem ("waiting style") instead of before ("seeking mode") (Winett et al., 1989). • Prevention functions mainly on the personal level. • The main aim of activities is curative. The necessary contexts and skills for prevention are curative. • The model "concentrates on persons with disturbances." 	<ul style="list-style-type: none"> • Problems develop from interaction between people and circumstances in a cumulative process. • Problems are not precipitated linearly by single causes. Problems result from a process of development. • In prevention it is essential to anticipate development and prevent the process leading to problems by intervening in contributing factors and the process events. • Contributing factors are mostly psychological (individual) or social (environmental). • Prevention can also be achieved in other than curative contexts. • The model "concentrates on circumstances and the interaction of factors."

points of view and that they can be differentiated according to just a few criteria, such as (1) location of relevant factors, (2) timing of interventions during the process, and (3) aim of interventions. The analysis of prevention models shows that different models take a stand on what is essential in prevention by invoking criteria selectively. Caplan's (1964) well-known model is based on the *aims* and *timing* of prevention (primary, secondary, and tertiary prevention). Good examples of models referring explicitly to *location* criteria are those of Cowen (1985), Felner and Felner (1989), and Winett et al. (1989).

According to Cowen (1985), relevant factors can be found on the person-system dimension, such that models can be divided into system-centered models, including living conditions in the large sense, and person-centered models, including problems, competence, and so on. Felner and Felner (1989) divide both risk factors and prevention models into three groups according to "the continuum of the transactional process": person focused, transaction focused, and environmentally

focused models. Winett et al. (1989) differentiate possible foci in health psychology into four zones: personal, interpersonal, organizational and environmental, and institutional and societal levels.

In the Finnish model, aims, timing, and location are combined. Suicide is conceptualized as a result of an individual life process that has accumulated the damaging effects of several kinds of problems as predisposing or precipitating factors. In the model the explanation of a nonspecific and multifactorial development process has been applied, leading to a multifocused implementation strategy. In the model the targets and aims of prevention are divided on three levels: suicide-specific, nonspecific, and "promotive" foci and aims (promoting coping and buffering factors; National Research and Development Center for Welfare and Health, 1992).

A good example of an existing model of prevention that integrates two criteria is the one presented by Silverman and Felner (1995). It divides prevention according to *aims* into prevention, early intervention, and treatment. Two aims are

differentiated: increasing resilience (promotion) and reducing risk (prevention). Promotive aims are divided further between promoting individual competence and protecting circumstances (*location*). In the same way, preventive activities should be focused both toward individual vulnerabilities and predisposing and precipitating factors.

From the standpoint of prevention theory and good planning, however, the *subject matter* is vital: Which issues should be tackled in order to achieve the expected effect? According to Silverman (1993) prevention concentrates on factors relevant according to the problem theory—a theory or a model by which the existence of the disturbance is explained. In practical planning these “relevant factors” tend to remain abstract and are difficult to conceptualize, and consequently they are rarely taken as a starting point or even into consideration. Therefore, in practice, prevention is often classified according to many functional criteria, such as target groups (young, adults, unemployed), methods (information, crisis therapy, hot line), or the sector responsible (health care, school). In particular, recognizing the difference between the target phenomenon and target persons is an essential issue. The concept of subject matter (hereafter termed “focus”) has been elaborated specially by Engeström (1990) in his “developmental work research” that applies “activity theory.” The concept of focus was applied as a key in analyzing over a thousand recommendations when preparing the Finnish national strategy (Upanne et al., 1990). That analysis serves as a pilot study for this research. The working hypothesis is that theoretical models of prevention can be differentiated according to basic criteria revealed through analysis. However, what about empirical data? In this study the preceding criteria serve as the basis for the analysis.

PURPOSE OF THE STUDY

The main purpose of this study, which forms part of the evaluation studies of the

Suicide Prevention Project in Finland (Hakanen & Upanne, 1996), was to discover a model for analyzing and theoretically interpreting suicide prevention and thereby to make essential criteria of prevention explicit. In the first part of the study a method for operationalizing basic factors in suicide prevention was developed. In the second part a way of comparing the structure of the data to that of theoretical models was studied. The method for analyzing and interpreting findings was built upon on the conceptual analysis of the essentials of prevention theory. The second purpose of the study was the operational description and theoretical interpretation of the views of professionals by means of the method developed. Figure 1 outlines the study schematically.

METHODS

Context and Data

The original context of the study was the first period of the national suicide prevention project, Suicides in Finland—87. Before the project began, an inquiry was directed to professionals who had been invited to participate as field researchers in the study. As a part of this inquiry professionals gave replies to the question “How can suicides be prevented in Finland?” This qualitative literal material, consisting of short, freely formulated essays written in response to the inquiry, formed the data of this study. In their essays respondents could name several subject matters (many foci). Therefore a respondent did not get one score per variable, as when using the multiple-choice method. Instead, he or she could be included in many categories of the same variable at the same time. This quality of the data was of consequence to the analysis.

The subject group ($N = 34$; 21 females and 13 males) was chosen retrospectively (with a view to further studies) from among the psychologist field researchers who were still collaborating in 1993 in the first follow-up study on the project. All the subjects had 5–6 years of higher education

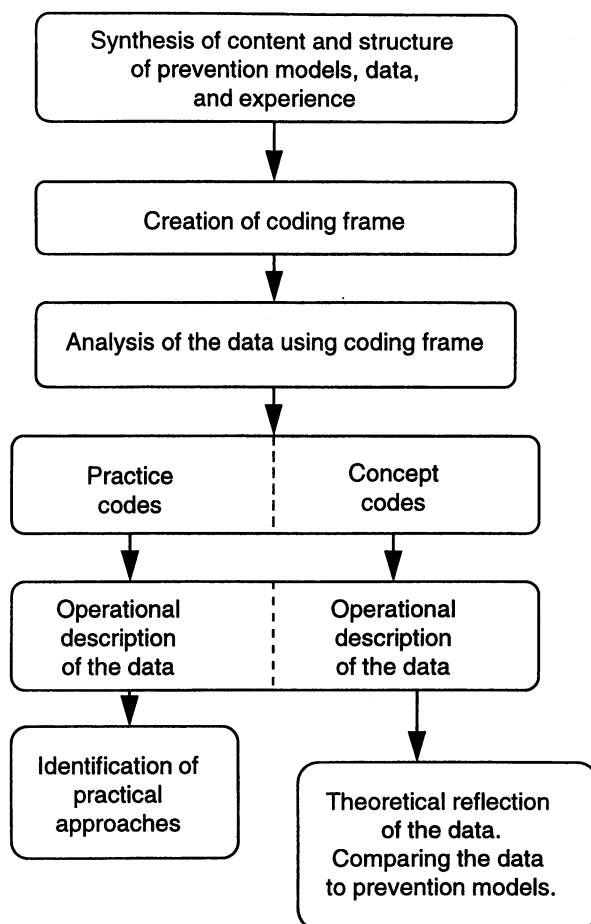


Figure 1. Schematic model of the study.

and the university Master of Arts degree required to be a professional psychologist in Finland. Their ages ranged from 29 to 46 years, with a median age of 40.2 years. Professional experience as a psychologist varied from 3 to 21 years, with a median of 12.1 years. All the psychologists were working in public health services in outpatient mental health care, except for three who worked in health centers.

Psychologists were chosen as subjects because they formed the biggest professional group (47%) among all the field researchers ($N = 245$), which included psychiatric nurses (27%), social workers (15%), medical doctors (8%), and others (3%) (Lönnqvist et al., 1997). Furthermore, psychologists are a particularly suitable professional group for dealing

with the theory and practice of prevention. Preventive mental health work has been a priority development area in Finland for several decades, with psychologists occupying a central role. Prevention is regarded as a part of a psychologist's professional duties, both in outpatient care and in health centers. The study group is a special case. This expertise in suicide prevention would never have been available for research without a special, practical situation like this research project.

Frame for the Analysis

A coding frame was developed on the basis of theoretical criteria, professional experience, and the data. By means of coding

categories and their subcategories the data could be analyzed in detail and parts of it combined in different ways, and the interpretation could still be kept on an operational basis. In constructing the coding frame the data was followed very carefully: All meanings given to suicide prevention were included in categories (see Figure 2). In the coding frame two kinds of concepts were included: practical codes categorizing data on an operational level and theoretical ones (concept codes) presupposing some interpretation.

The key concept for the analysis was *focus*, the subject matter or factor to be tackled by described interventions. All other qualities of prevention and codes in the analysis are connected with the focus. *Strategy* (how to intervene, what to do) and *sector* (who are the right persons or authorities to do something) are practical issues. Being able to identify a designated sector is a necessary point in practical planning, for example, in delegating chal-

lenges included in comprehensive strategies.

The theoretical criteria for interpretation are timing, aim, and location. Similar criteria were used by Felner and Silverman (1989), Silverman (1993), and partly by Bloom (1981) in their frames for prevention. Still, the most common criterion applied in prevention models seems to be location. Time, aim, and location are defined in this study as follows.

The *timing* of intervention refers to the phase of the suicidal process that should be subject to intervention. For example, should a process and its preceding factors be intervened in before or after the manifestation of clear individual symptoms? On the basis of the data, four timing categories could be formed: before problems appear, when risk appears, when symptoms appear, and when serious risk appears.

The *aim* of intervention refers to the intended effect in the target. For example,

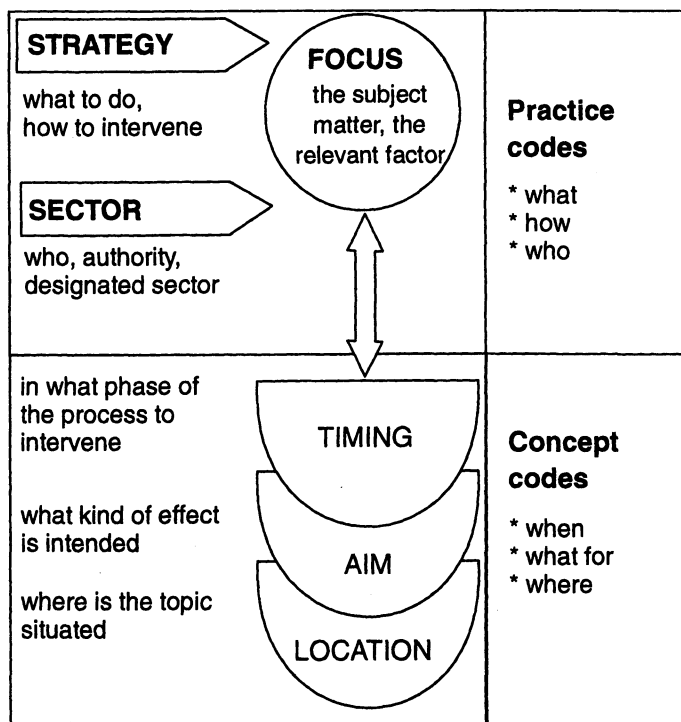


Figure 2. The coding frame for suicide prevention.

is the intervention supposed to have some positive effect, is it to prevent a defect by reducing the risk level, or is it to prevent a disturbance from getting worse? On the basis of the data, six aim categories could be formed (see Table 3).

The *location* of a focus refers to where, or on what level, a focus of intervention is situated. The idea of the structure of the coding categories was to cover all levels, or "zones," of people–environment interaction, from the microlevel to the macrolevel, as Bronfenbrenner (1979) has presented them. For example, foci may be characterized as individual or connected with close relationships, social conditions, or culture (see Table 4).

Analysis

The essays produced by respondents were examined and itemized according to the foci apparent in them. Each separate focus mentioned was regarded as an item, that is, a unit for analysis. Each item was indexed by symbols according to the subcategories under each main category. The essays (and items) tended to contain brief, tight definition-like statements. They were formulated in many personal ways and constructed from different points of view.

Example 1. Organizing more crisis services would be important. A human relationship, although only a professional one, could give hope and new views on life to somebody contemplating suicide. Gaining time is important, attaining distance from the traumatic trigger. Reaching lonely people, contact with them. The key is different kinds of befriending services.

Example 2. Changing values and attitudes in the society from performance-oriented to human- or people-oriented, taking care of each other. Today success, effectivity, productivity, and materialism are the main values. The whole view of life ought to be changed altogether so that it could be seen by anyone in workplaces, in schools, and in the way we take care of social problems.

Most of the respondents produced several items, and the number of them varied between respondents. Because of this a respondent could be counted in many sub-

categories of the same main category at the same time. For this reason, and partly due to the theoretical concerns of the study, the analysis was done on the variables, not on the respondents.

Interrater reliability for the coding procedure was examined: The percentages of consensus varied from 67% to 83% (focus, 79%; strategy, 75%; sector, 83%; timing, 75%; aim, 67%; and location, 78%).

The analysis utilized the qualitative data analysis program WP-index (Sulkunen & Kekäläinen, 1992). The method of indexing items produced qualitative categories with frequencies (incidence of a coding category). Frequencies can be used in further qualitative analysis.

Analysis—the grouping of the data into conceptual categories and the reflection of the categories in theoretical models—was based on the frequency with which data fell into categories and analysis of contingencies. The contingency table produced by the program is a cross-tabulation between qualitative categories of two variables showing coincidence, that is, a correlation-type relationship between them. In the theoretical reflection the empirical data were compared with the models of prevention mentioned earlier. This procedure was carried out by classifying data according to categories represented in the models by means of relevant subcategories of concept codes.

RESULTS

Practical Attributes of Suicide Prevention

The total number of items mentioned was 138, with an average of 4.2 per essay/respondent. Female psychologists provided more items (average 4.8) than males (average 3.2). A total of 23 foci emerged from the data analysis (Table 2). The three foci most often mentioned covered a quarter (25%) of all items, and fourteen covered three quarters (76%). Acute suicidal risk and crisis situations, on the one hand, and

TABLE 2
Foci of Suicide Prevention

Focus	Cumulative %	% (f) ^a	% (n) ^b
Acute risk of suicide, serious crisis situations	9	9 (13)	26 (9)
Life crisis, turning points, difficulties	18	9 (12)	26 (9)
Concept of man, values, attitudes, atmosphere in Finland	25	7 (10)	29 (10)
Livelihood, social and financial support	31	6 (8)	23 (8)
Upbringing, parenthood, families (support)	37	6 (8)	23 (8)
Knowledge of suicide risk factors	43	6 (8)	18 (6)
Attitudes toward problems and care, seeking help	49	6 (8)	20 (7)
Other: method, criticism, not codable	54	5 (7)	20 (7)
Life skills, know-how, self-care	59	5 (7)	20 (7)
Marginalization, problems due to society	63	4 (6)	18 (6)
Healthy development, well-being, coping (support)	67	4 (6)	12 (4)
Mental health, crises: common knowledge	71	4 (5)	12 (4)
Availability of methods: weapons, medicines	75	4 (5)	9 (3)
Attempted suicide	76	4 (5)	15 (5)
(11 topics with less than 5 respondents)	99	22 (30)	—
Total	100	100 (138)	34

^aPercentage of the total number of items. ^bPercentage of the respondents naming the item at least once.

everyday values and attitudes, on the other, were the most common foci.

Intervention strategies were nominated clearly. Eleven strategies were mentioned in all, the most common (22%) being adequate professional services. After that came societal solutions (13%) and changing attitudes (12%). Not being able to name a strategy (12%) was also a kind of solution. More services and resources in health care (8%), supporting certain groups of people (7%), critical comments (7%), and encouraging people to use services (6%) were the next most common. These eight strategies covered 86% of the total.

A sector was commonly not specified (27%), or society in general was considered responsible (16%). Other sectors mentioned were crisis services (16%), other health services (9%), other combined services (7%), and education of professionals (5%). These items covered 85% of the total.

Theoretical Attributes of Suicide Prevention

Foci could be classified according to the timing dimension as follows: before problems appear (43%), when risk appears

(17%), when symptoms appear (15%), and when serious risk appears (14%) (not codable, 10%). We can see that topics referring to "before the fact" interventions formed the overwhelming majority. Although all four phases were taken into account in the collective response, all four were regarded as important in the same essay by only three respondents. In contrast, foci representing the first phase were mentioned by every respondent. There was also a group of five people (15%) advocating solely primary prevention; that is, activities before difficulties appear. Not a single respondent in the study group brought up activities "only when problems are evident and serious risk is occurring" as the only phase for intervention.

The aims code was designed to include all three aims of primary prevention: the promotive aim and the two modes of primary prevention, as presented by Silverman and Felner (1995) (see Table 6). So the first three categories correspond to the classical (Caplan's) category of primary prevention. Of all the foci, 75% represented primary prevention in a broad sense. The leading aim was the promotive one (40%) and next was reducing risk for

the suicidal process (22%). In Table 3 we can see that 85% of the respondents brought up at least one promotive idea (a focus with a promotive aim and a proper strategy, sector, etc., connected with it). The idea of postvention, common in this project later, did not yet appear.

Cross-tabulation of timing and aim showed that they are nearly identical as coding criteria. The quality of proper aim is connected with the phase of the developmental process of suicidality. However, the timing category "before" conceals two aim categories—both promotion and prevention. Therefore, to make them both explicit the aim criterion is preferable.

The analysis showed that different categories of prevention could be clearly defined operationally as different concepts. This is shown by contingencies between the categories of aim-focus and of aim-strategy. In this data descriptions of foci and strategies were not very detailed.

According to the data, factors falling in the promotive category particularly concerned the foci of cultural values, life circumstances, upbringing habits, and coping skills. This presents a challenge for strategies like changing public attitudes and social solutions. The first aim of primary prevention particularly means prevention of marginalization using social and economical solutions. The challenge is to recognize risky circumstances before individual symptoms appear. The second aim of primary prevention refers particularly to improved recognition of life crises and suicidal risks, especially in connection with psychiatric disturbances. It includes

restriction of the availability of means for suicide. This challenge especially concerns the skills of professionals in crisis services in recognizing individual symptoms and assessing the risk of suicidal acts. Secondary prevention is focused on recognizing and providing proper care for individuals at serious suicidal risk or who have attempted suicide. This is regarded as a duty of all professionals in health care.

Foci could be classified according to the location codes on many levels (see Table 4). Overall the group seemed to believe that suicide prevention needs to be put into practice mainly via living conditions (30%), particularly in everyday livelihood and cultural contexts. Reliance on cultural aspects like atmosphere, values, and attitudes and on common social practices was actually surprisingly high, equal to that on close relationships. Services, especially in the health care sector, were regarded as an essential location (30%) for interventions.

A fifth of the foci mentioned were classified into the category "people" (20%). In addition to personal problems and actions, these individual challenges also refer to individual values and attitudes, although on the population level. If care services are included as individual-oriented activities, this level accounts for more than a third of all activities (38%).

Practical Approaches to Suicide Prevention

Cross-tabulation of focus and strategy subcategories showed that four meaning-

TABLE 3
Aims of Prevention

Aim	Cumulative %	% (f) ^a	% (n) ^b
Promote, protect, strengthen	40	40 (55)	85 (29)
Reduce risk to healthy individuals (1: circumstances)	62	13 (18)	41 (14)
Reduce risk for the suicidal process (2: individuals)	75	22 (30)	53 (18)
Reduce suicide risk (secondary prevention)	85	10 (14)	29 (10)
Postvention	93	3 (4)	12 (4)
Intermediate aims	97	9 (12)	12 (4)
Not codable	100	4 (5)	32 (11)

^aPercentage of the total number of items. ^bPercentage of the respondents naming the item at least once.

TABLE 4
Location of Foci

Location	% (f) ^a	% (n) ^b
People	20 (28)	65 (22)
Individuals (problems, behavior, etc.)	12	18 (6)
Groups (survivors, other groups)	5	15 (5)
Population	11	32 (11)
Conditions I (close relationships, circumstances)	12 (17)	44 (15)
Conditions II	30 (41)	103 (35)
Social and economic circumstances	22	56 (19)
Cultural factors	19	47 (16)
Services	30 (41)	82 (28)
Professional skills	24	44 (15)
Organizing services	17	38 (13)
Other	8 (11)	23 (8)

^aPercentage of the total number of items. ^bPercentage of the respondents naming the item at least once.

ful categories of approach could be outlined. Clusters were formulated in two phases. Preliminary clusters were categorized out of groups of factors clearly combined (highest frequencies) with certain groups of strategies. The remaining items were placed in thematically related clusters. The final clusters were cross-tabulated (contingency-analysis) as combined variables with strategy, sector, aim, timing, and location to validate the preliminary four approaches.

Foci and strategies of prevention formed a typology of four approaches (see Table 5) that could be named according to the quality of factors involved. The care ap-

proach (41%) cultural approach (33%), conditions approach (25%), and critical approach (6%) each had a role and portrait of its own. On the basis of contingencies between the data these approaches could be characterized as follows.

The *care approach* refers to professional activities after serious or preindicative individual symptoms have appeared. The duty is to recognize and provide good care, particularly in cases of suicidal crisis, life crisis, attempted suicide, depression, other psychiatric disturbance, alcohol problems, and somatic illness. The right timing of prevention is when the first individual symptoms are manifested or a serious risk

TABLE 5
Typology: Approaches to Suicide Prevention

Foci + strategies	Approach	% (f) ^a	% (n) ^b
Clinical topics + professional services	Care approach	41 (57)	74 (25)
Values, attitudes + information, health education	Cultural approach	33 (45)	79 (27)
Livelihood + social actions	Conditions approach	20 (28)	53 (18)
No focus	Critical approach	6 (8)	24 (8)
Total		100 (138)	

^aPercentage of the total number of approaches. ^bPercentage of the respondents that named at least one item belonging to the category.

is evident (63% of topics in this timing category). The main strategy is to improve the skills of professionals and organize services more effectively (65% of strategies in this category). The main aim is primary prevention (reduce individual risk) and secondary prevention (together 67% of topics in this aim category).

The *cultural approach* refers to cultivating the atmosphere, attitudes, and values in society in general and in people's minds so that the cultural environment is more strongly life supportive and positive about the possibilities of overcoming personal difficulties. Activities are aimed at cultivating social support, coping and parent-hood skills, and healthy development of children, improving compliance with and knowledge of mental health and crises, and enriching the concept of being human. The aim is to create prerequisites for managing problems (89%) before they appear, via cultural (38%) activities focused on the population level (20%) or on social relationships (16%).

The *conditions approach* aims to make social and economic aspects of life more secure to reduce the likelihood of difficulties emerging from risky circumstances. Activities are aimed at preventing marginalization, supporting belonging, restricting the availability of suicide methods, securing people's livelihoods, and taking other measures that encourage positive development and well-being. Activities are focused at the time before risk conditions emerge (54%) or when the risk can be recognized (36%). Interventions target social and economic aspects of life (61%), everyday living conditions (7%), and close relationships (7%). The aim is to create skills for managing life better (50%) and to lessen risks (32%).

The *critical or powerless approach* is that suicide prevention, its aims, and its potentials are ambiguous. Possible aims and strategies are criticized, and controversial ideas are also presented.

The individual respondents often seemed to prefer several approaches at the same time. However, 9 respondents out of 34 (26%) omitted the care approach, and 7 (21%) the cultural approach. Fourteen re-

spondents (41%) were not at all in favor of the conditions approach. Each approach had at least one loyal advocate who did not accept any other.

Theoretical Reflection: The Examples

For theoretical reflection of the data, the models of Cowen (1985), Winett et al. (1989), Caplan (1964), Upanne et al. (1990), and Silverman and Felner (1995) were utilized. The analysis according to the location criterion shows that in terms of Cowen's dichotomy two thirds of statements represent system factors. However, if health services are interpreted as targeted at individuals, the categories of person and of system are almost equal (54% vs. 46%). In this data, transactional factors (Felner & Felner, 1989) are embedded in environmental factors. The strong emphasis on environmental factors can be seen even more clearly using the "multi-level analysis" of Winett et al. (1989). The proportions for each of the levels are personal (9%), interpersonal/social (20%), community (24%), and regulatory/policy level (47%).

Ideas for intervention (foci) covered different phases of the developmental process in stepwise fashion. Although acute suicidality was regarded as the key topic, overall the group was clearly in favor of foci timed "before the fact" and of "the developmental focus" according to Silverman (1993). Support for the process idea could also be seen in individual statements. The approach with respect to timing seems to be a choice of personal importance: A small group of psychologists (15%) proved to be advocates of "before the fact prevention" only. Most respondents identified foci from various phases.

Although timing criteria and aim criteria seemed to produce nearly the same classification of data, the special benefit of using the aim code was the distinction between preventive and promotive interventions, which allowed the "impossible concept" of promotion to be operationally characterized. The group seemed to have

internalized preventive aims in both categories.

As far as practical approaches (typology) are concerned, it is clear that the emphasis of the care approach is individual (96%), while that of the cultural approach (76%) and conditions approach (96%) is system oriented. Care services were interpreted here as individually targeted.

Caplan's (1964) classic model is based on an aim criterion, the division of prevention according to the aims of primary, secondary, and tertiary prevention. The study shows that the emphasis by the subjects was decisively on primary prevention; 75% of statements were in that category. There was a substantial proportion (40%) of statements supporting the secondary aim of primary prevention: promoting or protecting specified factors. Another important aim was reduction of predisposing risk (22%).

The same organization of aims could be seen in the strategic model developed in the Finnish project. Foci were divided on the basis of aims attached to them on three levels. The levels divide preventive interventions according to the suicidal process. On the basis of the classification of foci, the share of promotive aims was 45%; of nonspecific prevention, 23%; and of specific prevention, 17%. General development of services accounted for 17% and uncodable items, 5%.

In Silverman and Felner's (1995) model, location is integrated as a second-level criterion with aim. Classifying data first according to aim and then according to location shows that categories of the model are covered by the data quite evenly (the category "treatment" remains empty in this data). The data and the model seem to be in perfect correspondence (see Table 6).

DISCUSSION

This study demonstrates that by applying the method developed in this research for analysis and interpretation, prevention can be described adequately in operational terms. It also proves that findings can be

interpreted from theoretically relevant standpoints. Therefore the model seems worthy of further development for analyzing empirical data.

Even if the reliability of the coding was moderate, it became evident that the codes tended to be too abstract to be easily utilized, especially for those not familiar with prevention. There was also some ambiguity due to the very detailed nature of the categories. This means that differences in coding can be very fine. In further studies the coding categories need to be adapted to the type of data.

A source of confusion in reading the findings may be that the analysis did not provide exclusive individual scores per variable. For this reason an individual-based analysis was not feasible. Instead, the items and coding categories served as units for analysis.

The findings indicate that the group of psychologists investigated had a rather comprehensive range of views about suicide prevention, particularly because this was prior to their personal experience in the project. However, due to the nature of the context, meaning the very beginning of the project, the opinions remained in fairly unspecified form. Moreover, they were only short statements in a larger inquiry.

Using the practical criteria (focus, strategy, and sector) it was possible to describe suicide prevention in operational terms, and thereby reveal several underlying foci and methods. Some 10–20 topics were needed to cover the whole span of suicide prevention; the 14 most frequently presented foci covered 76% of all mentioned. The three most frequent foci, presented with their appropriate strategies, were recognition and care of suicide risk, recognition of acute life crisis and support, and influencing life values and attitudes.

The strategy regarded as most relevant—competent professional mental health services—covered a fifth of all the methods mentioned. Here the responsibility and practical involvement of the respondents were revealed. A strategy of "no strategies" (12%; see p. 248) may be a sig-

TABLE 6
Aims of Prevention According to Silverman and Felner (1995)

Aim and location	Code	%f(138) ^a
Promotion	Aim	
Conditions: protective factors	Location	20 (27)
Individuals: competence	Location	20 (28)
Total		40 (55)
Prevention	Aim	
Conditions: risk factors	Location	
predisposing		9 (12)
precipitating		13 (18)
Individuals: vulnerabilities	Location	13 (18)
Total		35 (48)
Early intervention	Aim	10 (14)
Other		15 (21)

^aPercentage of the total numbers of items.

nificant obstacle in developing suicide prevention and a sign of powerlessness.

Classification of foci according to the time dimension proved that thinking in the group closely reflected the process theory of suicidal development. Also evident was that the group applied an interactional explanation to the development of the suicidal process and its prevention. Foci could be classified according to the location code distinctively on many systemic levels and in many functional contexts. The individual level proved to be important, but even more vital were factors connected with living conditions. The group laid stress on living-condition factors in both meanings: increasing protective factors and reducing risk factors. The group had internalized preventive aims, while the expressly promotive part of it occupied a dominant role in the group's thinking. An empirically based draft for a definition of suicide prevention could be as follows:

Real danger, acute suicidality, and other serious life crises must be recognized and appropriate care provided. Still there remains the bigger picture: The problem is substantially a product of the Finnish culture and living conditions, which reinforce it in certain ways. This state of affairs needs to be changed. Greater support and safety is needed in everyday life in terms of financial and social welfare, but also for mental health and coping abilities. However, it remains very difficult to define measures

exactly. Nevertheless, the most important principle is to try to intervene at the early developmental phase of problems in order to avoid their full manifestation.

In the analysis there emerged a simple typology of four practical approaches: the care approach (41%), cultural approach (33%), conditions approach (25%), and critical approach (6%). It is enough to provide a simple conceptual and operational definition for diverging orientations in suicide prevention practices. The core of approaches is the similarity of foci and the meaningful grouping of familiar strategies rather than theoretical criteria like specific aims of prevention. On a practical level the typical approach seems to be a combination of many forms of prevention. Although the common orientation in this group was the care approach, nevertheless the overall perspective can be regarded as multifocused and multistrategic. The cultural and conditions approaches had been clearly adopted by the psychologists. Nevertheless, they seemed to have made conscious choices between approaches by preferring versus omitting certain ones. They evidently take an implicit stand on basic theories of disturbances and intervention. There is a close resemblance between the care approach and the medical model and between the cultural and conditions approaches and the interactional model (Ta-

ble 1). Even this rough typology can be used, for example, in planning and education to differentiate totally divergent orientations in prevention.

Views expressed by the group correspond largely to current prevention models that were chosen in this study for theoretical reflection. A good expression of this is the way the data contribute to demonstrating the feasibility of the model presented by Silverman and Felner (1995), in which two criteria, aim and location, are integrated (Table 5). The analysis shows quite a detailed contingency, a sort of cognitive analogue between the model and the group's thinking.

However, these data probably are not likely to be valid for generalizing findings to all mental health professionals, or even to all psychologists in Finland. The statements were provided by a specially selected group under special circumstances. It is probable that mainly psychologists familiar with prevention were chosen for field researcher positions. On the other hand, psychologists as a professional group in Finland have in fact exerted a central role in developing and educating other professionals on prevention in the mental health field. However, before this inquiry no common training in suicide prevention had been received by the group. In further studies conceptions as well as prevention practices of other professional groups will be examined.

The prevention theories that professionals and governmental authorities apply do not remain only theoretical issues. Views about prevention reveal beliefs about the origins of problems and basic psychological concepts about humankind: Where do all those psychological disturbances come from? These implicit theories can play a decisive role in health politics. What activities are worthwhile pursuing and which interventions are relevant, credible, efficient, and deserve funding can depend on these invisible background theories. Making views explicit would benefit research, education, planning of practices, and understanding of policies.

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II

REAL LIFE EXPERIENCES AND PROFESSIONAL CONCEPTIONS OF SUICIDE PREVENTION using a conceptual model

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Abstract

This prospective follow-up study monitored the evolution of psychologists' conceptions of suicide prevention over the course of their participation in psychological autopsy studies that constituted the first phase of the National Suicide Prevention Project in Finland. Studying the feasibility of an earlier model (Upanne 1999a) for analysing suicide prevention was another purpose of the study.

Ideas on prevention were compared in two different situations in the course of the project using the criteria embedded in the model. Items were categorized using *descriptive* criteria of prevention in terms of the questions what, how, and who and *conceptual* criteria in terms of the questions when, what for, and where. Ideas could be classified into a typology of four categories: care approach, cultural-educational approach, conditions approach, and critical approach. The follow-up suggested that the model is a feasible method for analysing conceptions of suicide prevention, and that it was possible to interpret conceptions in a theoretically adequate manner. In addition, ideas could be compared with certain known theoretical models of prevention. The model could thus be used in further research and for practical purposes.

Real life experiences definitely had an impact on the psychologists' views; conceptions altered towards emphasising the care approach and individual risk

factors. Nonetheless, the overall structure of the prevention paradigm remained multifactorial, stressing multistage influencing. Surprisingly, the priority of acute suicide risk as a preventive target did not increase. Promotive aims remained the most important aim category.

Key words: suicide prevention; prevention theory; model for analysis

Introduction

Despite the scope of the literature on prevention theory and practice, there is little information on professionals' views of prevention. One exception is Kelly's (1984) study on mental health professionals' ideology of primary prevention. Since prevention gets its final definition in practice through the actors involved and the activities they undertake, bringing their views to light is a worthy challenge in the development of prevention strategies.

Implementation of The National Suicide Prevention Project in Finland (1987–1996) allowed the rare opportunity to study professionals' views of suicide prevention in real life conditions. The first opportunity arose in connection with implementation of the first stage of the project: the study *Suicides in Finland 1987*. This was an empirical investigation in which all suicides committed in Finland during one year were recorded and analysed using the psychological autopsy method (Lønqvist et al., 1997). Four types of interviews were conducted: 1) (mainly) face-to-face interviews of family members of the deceased using structured interview forms with 234 items, 2) interviews of health professionals who had attended the victim during the previous 12 months, 3) the last contact with a health or social professional was evaluated by interview and, if needed, 4) additional unstructured interviews were done. When all the data were collected, a multidisciplinary team discussed all the cases, and a comprehensive case report was prepared (Henriksson, 1996). Based on the research findings and recommendations from the regional teams the national strategy for suicide prevention was developed (Upanne, Arinperä & Lønqvist, 1990; *Suicide Can Be Prevented* 1993). The strategy was implemented as a practical project in the 1992–1996 period (Upanne, 1996a) and was evaluated in 1997 (Upanne et al., 1999; *Suicide Prevention Project in Finland* 1999).

The group of field investigators involved with data compilation for the psychological autopsy studies (N=245) consisted of psychologists (47%), psychiatric nurses (27%), social workers (15%), physicians (8%), and others (3%) (Lønqvist et al., 1997). Before interviews the professionals participated in the preparatory training provided by the project. Later they were invited to continue to participate in the implementation of the project.

Before the project began (1987), a larger questionnaire was directed at the investigators. It included questions on conceptions of the suicidal process,

committing suicide, and experiences in treating suicidal persons, among others. The inquiry was repeated as a process evaluation after the two-year field investigation phase (1989). These inquiries made it possible to compare conceptions in different phases of project implementation.

But how can ideas about or activities in suicide prevention be described? What are the viewpoints which cover the essence of prevention? For describing and interpreting conceptions of suicide prevention a conceptual model was developed in the previous study (Upanne, 1999a). The preparatory, literature-based study indicated that theoretical prevention models and conceptions of prevention can be differentiated according to just a few criteria (Upanne, 1996b). Theoretical arguments mostly seemed to refer to 1) the *timing* of the interventions during the suicidal process, 2) the *aim* of the interventions, and 3) the *location* of the relevant factors of prevention. Different models emphasize what they regard as essential in prevention by invoking criteria selectively. *Caplan's* well-known model (1964), for example, is based on the aims and timing of prevention (primary, secondary and tertiary prevention). A good example of models referring explicitly to location criteria is that of *Cowen* (1985). According to Cowen prevention models can be divided correspondingly into person centred models (including problems, competence, etc.) and system centred models (including, e.g. living conditions). In *the Finnish Suicide Prevention Strategy*, the targets and aims of prevention are divided on three levels: suicide specific, nonspecific, and promotive foci and aims (Upanne et al., 1990). The levels differ in terms of aims, timing, and location. For example, on the specific level the aim is to prevent the suicidal process from proceeding, interventions are timed on the suicidal risk already recognised, and foci of prevention take place mainly on the individual level. In the model presented by *Silverman & Felner* (1995) two criteria – aim and location – are integrated. Primary prevention is further divided (according to aims) into two categories: promotion and prevention. Aims of promotion (enhancing protective factors) concern two locations: the individual level and circumstances. Correspondingly, prevention consists of reducing individual vulnerabilities and reducing levels of conditions of risk. These four models were used as frames of reference in characterizing the results and assessing the feasibility of the model employed.

The previous study on psychologists' conceptions of suicide prevention before their personal experiences in the national project showed that they had a rather comprehensive range of views in mind (Upanne, 1999a). Conceptions

could be analysed and interpreted using the model. The results indicated that thinking in the group closely reflected the process theory of suicidal development (referring to the timing criterion). Ideas provided by the group could be classified on many systemic levels and in many functional contexts (location criterion). So the group could be interpreted to have applied an interactional explanation to the development of the suicidal process and its prevention. Factors on individual level proved to be vital, but even more so were factors connected with living conditions. The views expressed by the group corresponded largely to the current prevention models chosen for theoretical reflection.

How definitive views of suicide prevention adopted by professionals are? What are the aspects possibly reinforced by real life circumstances – in this case intimate contact with suicide cases and prevention challenges learned? Is it possible to describe new ideas using the same criteria as in the previous study?

The purposes of this study were

- to compare the professionals' conceptions of suicide prevention in two different settings during the project (free ideas - empirical ideas) and to describe and interpret any differences using the model for analysing suicide prevention developed in the previous study
- to evaluate the feasibility of the model and
- to compare the professionals' conceptions with certain theoretical models on prevention.

Methods

Context and subjects

The respondents of this study included those psychologist field investigators (n=34) who had submitted responses to the first project inquiries in 1987 and continued participating in the project implementation. They were identified retrospectively from among the psychologist respondents of the 1993 follow-up study (Upanne & Halmeaho, 1995). The purpose of this retrospective case-finding was to identify professionals with prolonged experience in suicide prevention, in addition to this study, for later monitoring (Upanne, 2000). From the original study group (n=34; 21 females and 13 males) 27 responded to the follow-up inquiry in 1989.

Psychologists were regarded a good example of professionals for this study. They have occupied a central role in developing preventive mental health work in the country. They also formed the biggest group among the investigators. Furthermore, prevention is regarded as a part of psychologists' professional duties both in outpatient care and in health centers.

All the subjects had 5 to 6 years of higher education and the Master of Science degree in psychology demanded in Finland for a professional psychologist. Their ages ranged from 29 to 46 years (median 40 years) and the length of their professional experience as a psychologist varied from 3 to 21 years (median 12 years). All were working in public health services in outpatient mental health care, except three who worked in health centers. Different districts of the country were represented. In terms of age and professional experience, the subjects who were not reached did not differ from the group studied.

The study was a case study where the group formed the case (Yin, 1994; Huberman-Miles, 1994, 435). The subjects involved were a unique sample of professionals who were predisposed to special and intensive experiences.

Data

In both inquiries, before the project (later pre-project: free ideas”) and after the two-year investigation phase (later follow-up: empirical ideas”), the professionals gave their replies to the question “*How can suicides be prevented in Finland?*” The replies – qualitative material consisting of short, freely formulated essays – formed the main data of this study.

Additional data describing suicide-related experiences during the follow-up period: the number of suicide cases investigated, experience in treating suicidal patients, familiarisation with the theme (participation in training and personal fact-finding), and perceived effects of the project (motivation, anxiety, the project’s impact on confronting suicidal situations), were based on the follow-up inquiry.

Method

Design

The study compared conceptions of suicide prevention among the study group by using the descriptions they supplied at two different occasions. In the analysis, the follow-up data were compared with those gathered prospectively in the pre-project. The results were interpreted further by comparing the data with certain theoretical models.

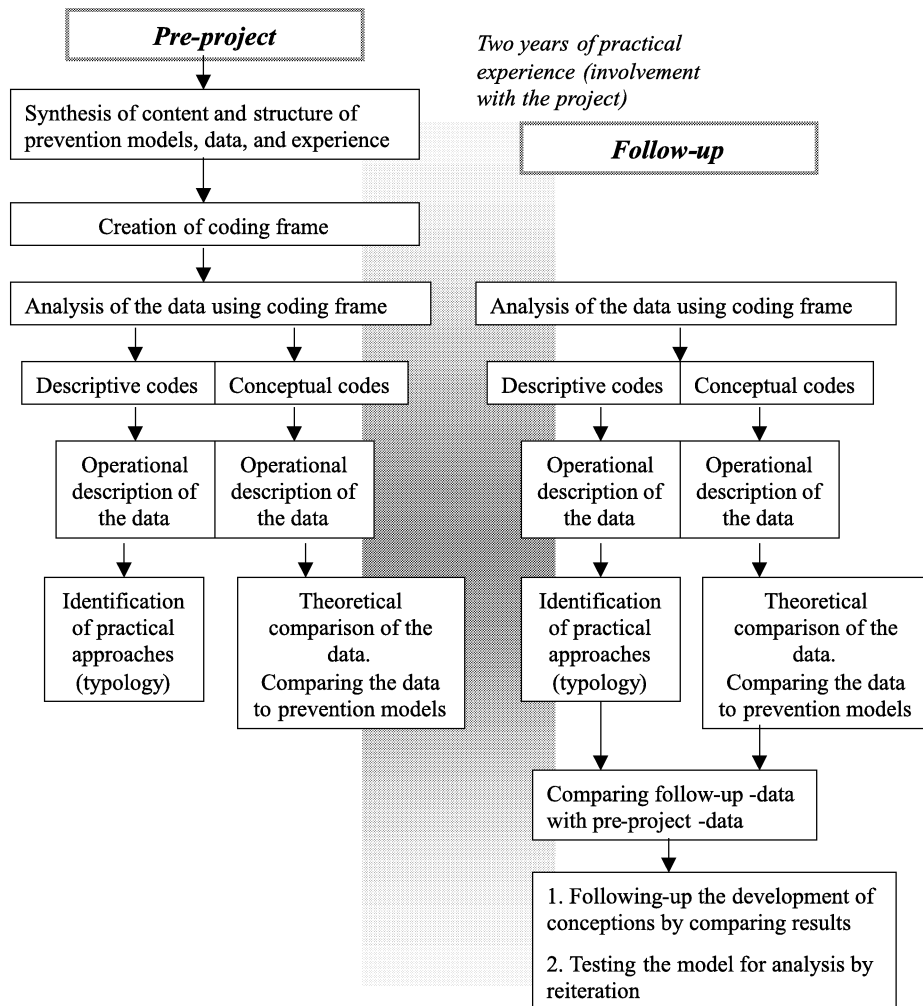


Figure 1. The scheme for the study

The study was carried out in real-life settings formed by the ongoing process of the project and the professional work involved. In terms of methodology, experiences during the follow-up time were not controlled interventions planned expressly to have impact on conceptions. Rather, they were a pertinent part of the process. Certain experiences generated by the project were formally equal for all participants (e.g. psychological autopsy investigations and training). Other

experiences belonged to the realm of ordinary professional work and were varied and individual in nature.

The frame for the analysis

In the study the model for analysing data developed in the pre-project (Upanne, 1999a) was reiterated. In preparing the model, theoretical evolution of prevention and professional experience were utilised (Upanne, 1996b). The subcategories and the actual analysis were formed by analysing the empirical data. The model was based on the criteria presented in the form of a coding frame (Figure 2). In the frame two categories of criteria were included: *descriptive* codes categorizing data on an operational level, and *conceptual* ones based on interpretation.

Descriptive codes. The key concept for the analysis is the subject matter of prevention efforts (hereafter *focus*); i.e. the relevant factor to be tackled by the described interventions. All other qualities of prevention - codes in the model - are connected with the focus. *Strategy* (how to intervene) and *sector* (the right persons or authorities), are other descriptive codes.

Conceptual codes. *Timing* refers to the phase of the suicidal process that is obvious in the prevention idea. For example, is the idea to intervene before or after the manifestation of clear symptoms in individuals? The *aim* of intervention refers to the intended effect on the target. For example, is the intervention supposed to have some positive effect, or to reduce the risk of suicide? The *location* of a focus refers to on what “level” the foci to be intervened in are situated? For example, are matters individual or connected with circumstances?

The pre-project indicated that the codes for timing and aim are highly interrelated. This is understandable because the aims of prevention (Figure 4) actually progress stepwise in terms of the *time dimension* as the problem exacerbates: (1) prior to the emergence of problems or risks, 2) in the presence of risk factors, 3) with the onset of personal risk or first symptoms, 4) after the emergence of serious risk, 5) other. However, the aim code incorporates a theoretically germane addition to the first category of the timing code (prior to..), namely a distinction

between the promotive and preventive aim. Therefore, the analysis through the aim code was preferred.

The structures of the subcategories of each main code were based on the analysis of the pre-project data. When coding the present data mainly the same subcategories were used. The subcategories of each code will be presented in the Results section.

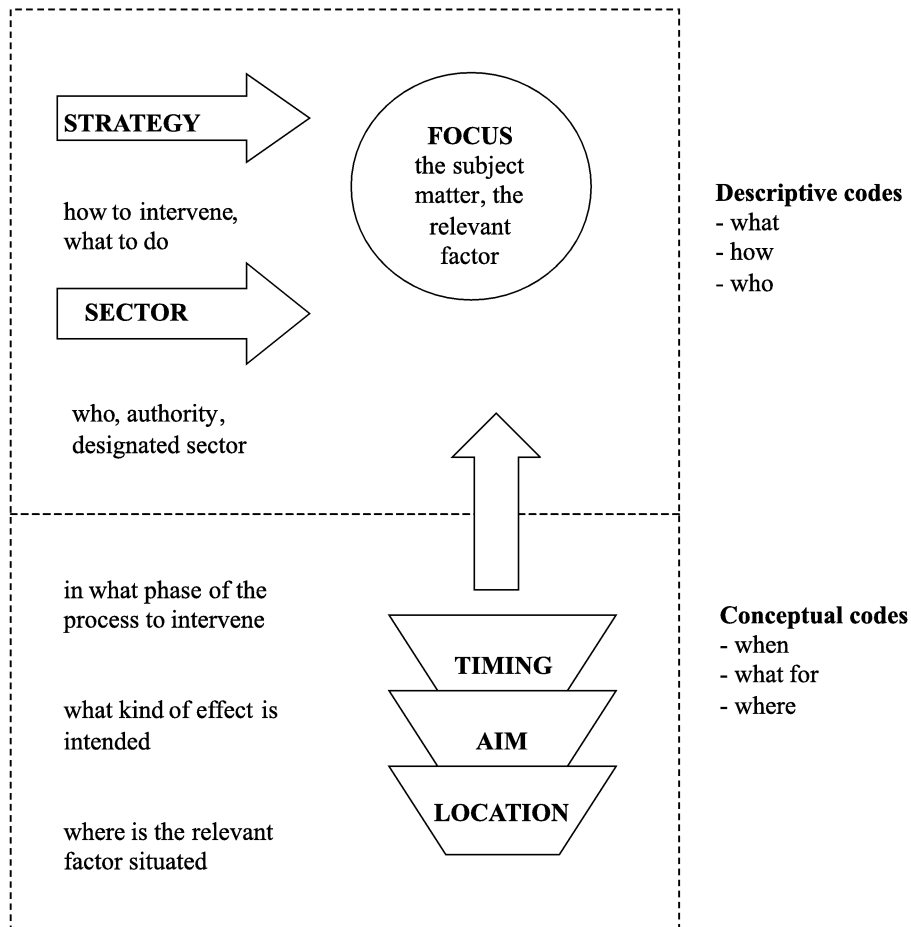


Figure 2. The coding frame

Cross-tabulation of coding subcategories in the pre-project study showed that a further mode of categorisation, a *typology*, could be developed. It turned out that certain types of strategies were connected with certain types of foci. The foci could be grouped into four meaningful clusters referring to different approaches in suicide prevention. The preliminary clusters were cross-tabulated as combined variables with the subcategories of strategy, sector, aim, timing, and location. It was established that the four focus-clusters could be empirically characterised in terms of all other codes by describing the degree of congruency between the cluster and subcategories of other codes. The four approaches, the *care*, *cultural-educational*, *conditions*, and *critical approach* based on the follow-up data are characterised in the Results section.

Theoretical models chosen for reflection were used as additional frames in the comparison and characterization of the results.

The analysis method

The data were first categorised as items. Each separate idea on prevention introduced by the respondent was regarded an item. Each item was assessed from the viewpoint of each coding criterion (focus, strategy, sector, timing, aim and location). Thus, each item was associated with six code signs (indexes of appropriate subcategories).

Applicability of the subcategories was developed and the uniformity of the coding procedure between the pre-project and follow-up data confirmed by using an iterative coding process and parallel coding. Samples from both bodies of data first coded by another researcher and then by the author were compared, the divergent codes were discussed, and the definitions of the codes were made more specific. New samples were coded by both the author and the co-researcher. The inter-rater reliability as proportions of consensus in codings was about 70% (code *focus*: pre-project 78%, follow-up 82%; *strategy*: 75% vs. 54%; *sector*: 83% vs. 79%; *timing*: 75% vs. 85%; *aim*: 67% vs. 75%, *location*: 78% vs. 78%). Disparities primarily resulted from vacillation in the use of categories too similar in substance. In addition, the viewpoints involved with subcategories were not always clearly visible in the texts. Still, the coding categories proved feasible enough for the purposes of the analysis.

The coding method generated code frequencies. While a respondent could present several ideas or no idea at all belonging to a certain subcategory the frequencies of the codes and the number of the respondents were not equal. The prevalence of a subcategory was assessed on the basis of the frequency of references to it, either as a percentage of the total number of items or as a percentage of the subjects having made reference to the category. Conclusions were based on differences of prevalences of subcategories in the two studies on the group level.

The codes allowed the data to be analysed in detail, with items combined in different ways, and interpretation kept on an operational basis. Coding categories could be used as nominal scale variables in the analysis. The analysis comes close to a descriptive interpretation analysis, in which the procedure moves from “decontextualisation to recontextualisation” (Tesch 1995:115).

A computer-software tool for analysing qualitative data, WP^{index} (Sulkunen-Kekäläinen, 1992), was used in the coding and item analysis, and the SPSS-program (Roponen, 1994) was used in cross-tabulation. T-tests were used to examine differences between relative proportions of items in pre-project and follow-up data (Vasama & Vartia, 1980).

Results

Suicide prevention in terms of descriptive attributes

As compared to the pre-project, changes referring both to quantity and to quality of ideas occurred in the follow-up. The number of ideas (items) (213) was 1.8 - fold (if corrected with estimates for the seven non-respondents) as compared to pre-project (138 items). The average was 7.6 items per respondent (pre-project 4.1). As before, the female respondents had more to say: on average they provided 8.7 (pre-project 4.8) ideas, while the men mentioned 6.5 (pre-project 3.2).

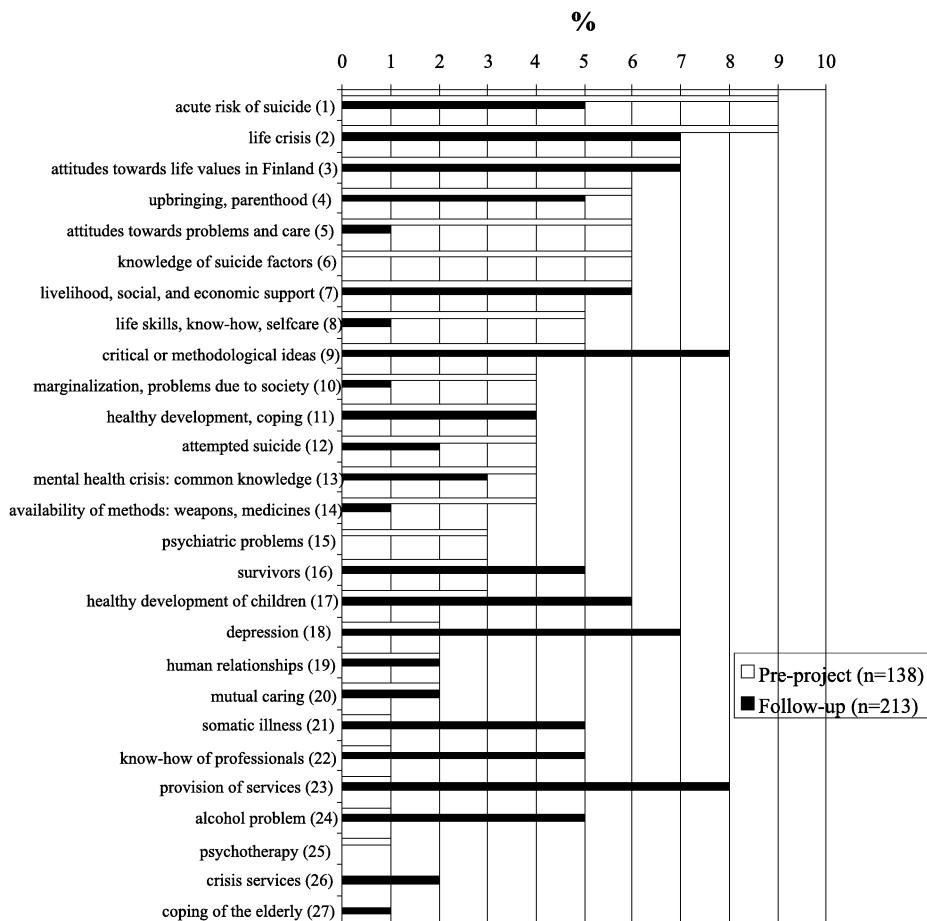


Figure 3. Proportions of focus ideas in the pre-project and follow-up

The foci mentioned in the follow-up were largely the same as in the pre-project. The proportions of the five issues (of the total number of items) that had been held to be most important before remained approximately the same in the follow-up (Figure 3): (1) identification of acute suicide risk, (2) life crisis and hardships, (3) efforts to change attitudes towards life and values, (4) upbringing habits, as well as (7) social and economic support. These five foci covered 30% of all preventive ideas generated in the follow-up (pre-project 37%).

There were two foci whose prevalence clearly rose in the follow-up: (23) providing efficient services and developing new methods for prevention and (9) critical or methodological ideas. Certain other matters were also stressed more in the follow-up: (18) depression, (17) supporting healthy development of children and youth, (21) somatic illness, (24) alcohol problems, (16) survivors and (22) know-how of professionals. In all, 13 foci (preventive ideas) were enough to form the bulk (75%) of the concept of suicide prevention.

In the follow-up new *strategies* were not provided, but the feasibility of the strategic ideas mentioned before was confirmed. Corresponding to findings in the pre-project, adequate professional services, unspecified societal solutions, better resourcing of crisis services, education of the public, and pessimistic ideas about prevention were the strategic approaches included most often. They formed the majority (75%) of the total strategy of suicide prevention.

The dominant idea (23% of all strategies) continued to be professional skills as an influencing strategy. In pre-project 88% of the respondents brought it up. In the follow-up it emerged nearly twice (1.9) per respondent. The prevalence of societal solutions, second in priority, was 13% of the total amount of strategic ideas at both times. A lack of strategies, and pessimism, became more frequent. In both materials, about a fifth of the foci remained without action strategies.

The implementation sector remained unspecified for over a quarter of the ideas in both pre-project (27%) and follow-up (29 %). Suicide prevention was primarily seen as a task of society (pre-project 16%, follow-up 11%) and especially of health care and other societal services (24% and 28%).

Suicide prevention in terms of conceptual attributes

In the pre-project, the promotive aim (1) was dominant, with 40% of the ideas incorporating it. The second-most important aim (22% of the items) consisted of ideas to reduce the “risks for the suicidal process” (3). There were hardly any ideas about postvention. In follow-up, the priorities of the aims remained almost identical. All the alternatives for preventive aims were included. Only the intermediate aims referring mainly to developing expertise and practices (6) increased in number nearly significantly more than the other aims ($t=1.65, df=30, p<.10$). Although the ideas expressing promotive aims (1) decreased in number nearly significantly ($t=1.73, df=30, p<.10$) they still dominated (32 %). Ideas concerning unspecific risks prior to suicide risk (3) still ranked number two (22%) (Figure 4).

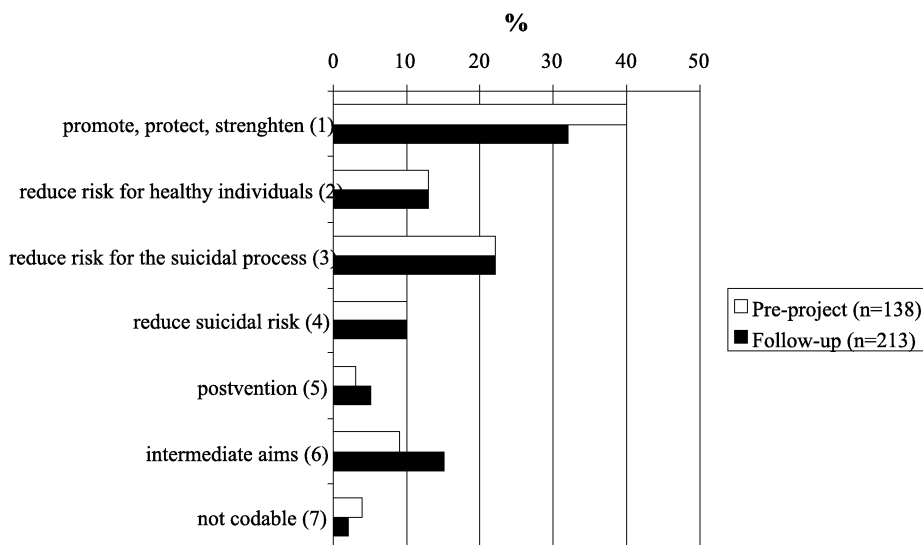


Figure 4. Proportions of aims of prevention

Not only did the number of ideas increase in the aim categories, but their “utilisation rate” – the number of aims referred to per respondent – also increased, the promotion category excluded. The proportion of respondents mentioning preventive ideas in the different aim categories changed as follows: 1) in the pre-project 85%, in the follow-up 78%, 2) 41% vs. 56%, 3) 53% vs. 70%, 4) 29% vs. 44%, 5) 12% vs. 33%, 6) 32% vs. 56%, 7) 15% vs. 15%. However, this development did not apply to all individuals: while a certain trend in preventive ideas may have become more prevalent on the group level, it lost ground with some respondents. For instance, the items incorporated in promotion code (1) increased in the responses of 12 subjects, decreased in the case of six respondents and remained the same for nine respondents.

In terms of *location*, the foci were initially mainly situated outside the individual, i.e. in circumstances (30% of the items) and services (30%). The increase in items referring to individual level factors could also be seen with this code (9% vs. 20%). Nevertheless, an important location of suicide prevention interventions remained at the level of circumstances – social, economic and cultural factors (30% vs. 19%), and health and social services (professional skills and organising services) (30% vs. 28%).

Typology: four approaches of suicide prevention

It turned out that clusters (typology) could be formed in the same manner as in the pre-project. Cross-tabulation of the four approaches and other codes produced the following characterisations:

The care approach refers to the professional duty to recognise clients’ needs and provide good care, particularly in cases of life crisis, suicidal crisis, attempted suicide, depression, other psychiatric disturbance, alcohol problems and somatic illness (the main foci). The right timing of prevention is when the first individual symptoms are manifested or a serious risk is evident (57% of foci in these two timing categories). The main aim is reducing individual risk and acute suicidal risk (57%). The main strategy is to improve skills of professionals and organise services more effectively (76% of strategies). The interventions are mainly believed to take place (location) through health services (48%).

The cultural-educational approach refers to cultivating the atmosphere, attitudes and values in society in general and in people’s minds (the main foci),

so that the cultural environment is more strongly life-supportive and positive about the possibilities of overcoming personal difficulties. The aim is to create prerequisites for managing problems before they appear (87% of foci in this category) via cultural activities like education (26%) and public information (19%) focused on social relationships (32%) and the population at large (32%).

The conditions approach emphasises making the social and economic aspects of life more secure so as to reduce the likelihood of difficulties emerging from risky circumstances (the main foci). Activities are focused on the time before risk conditions emerge (87% of foci). Interventions concern (location) social and economic circumstances (67%), everyday living conditions (10%), and close relationships (10%). The aim is to create prerequisites for managing life better (77%) and to lessen risks (23%).

The critical or powerless approach considers suicide prevention, its aims and its potentials, to be at best ambiguous. Aims and strategies are criticised, and controversial ideas are also presented. Critical ideas could not be coded according to other coding criteria.

In follow-up only the prevalences of the care approach and the critical approach increased (Figure 5). About half of all ideas about interventions belonged to the care approach. The increase in the proportion of subjects in favour of this approach was statistically significant ($t=2.72$, $df=30$, $p<0.01$). Instead, the proportions of subjects in favor of the conditions approach and the cultural-educational approach decreased (cultural approach nearly significantly: $t=1.67$, $df=30$, $p<.10$).

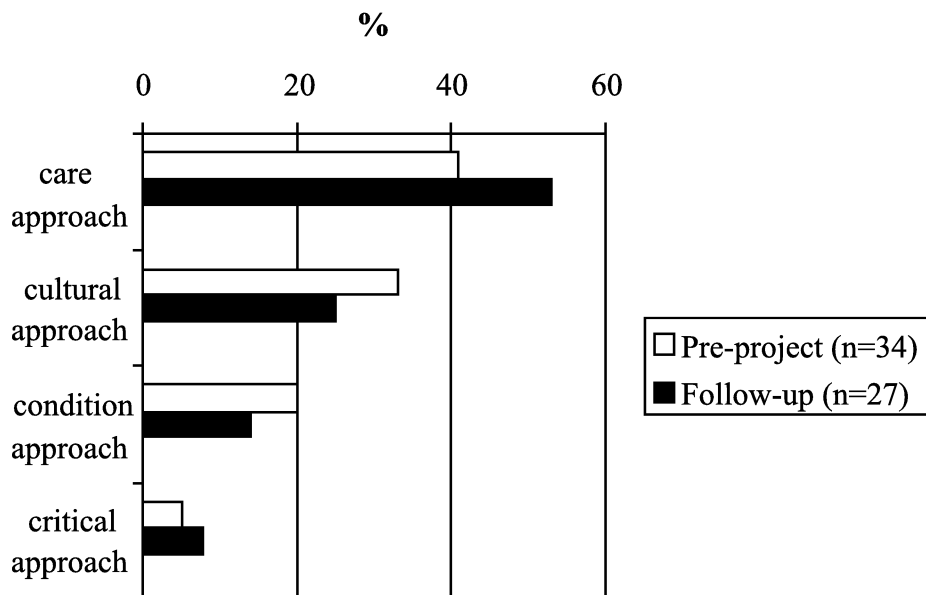


Figure 5. Proportion of approaches to suicide prevention in the pre-project and in the follow-up

Individual approaches

The individual respondents seemed to prefer several approaches at the same time. Forty-four percent of the respondents applied all three approaches (with the critical one excluded) and 76% applied at least two. The pre-project equivalents were 35% and 74%. The care approach seemed to be the key, with the other elements supplementing it. The bulk (41%) combined the care and the cultural approaches, omitting the conditions approach, and 11% favoured the care approach complemented by the conditions approach, while omitting the cultural one. Nobody relied solely on the cultural and conditions approach in his/her prevention ideas.

Only three respondents abandoned the care approach in the follow-up (pre-project nine), while five rejected the cultural approach (pre-project seven), and 13 respondents (48%) rejected the conditions approach (pre-project 14). Downplaying of the conditions approach clearly seemed to be a choice. Eight respondents omitted topics referring to conditions on both occasions. As many

as 11 expressed issues coded in the critical category (pre-project eight). For two respondents, this category remained the only one.

Characteristics of project experiences during the follow-up period

According to the freely formulated written comments, the most intensive experiences during the follow-up time took place in connection with the psychological autopsies of actual suicide cases. The majority of the group members (44%) had investigated no more than five cases, while a third (33%) had investigated as many as 10 or more. Almost all had familiarised themselves with the suicide theme by taking part in training (96%) and by studying independently (74%). The suicide theme had also emerged in everyday work. Only a few had professional experience of suicides committed by clients, or of treating survivors. However, about half (59%) reported treating persons who had attempted suicide ("treatment experience"). Almost all subjects (85%) had treated their clients for suicidal ideation ("clinical experience").

The project was regarded as having had an impact on the perception of care situations and the emotions evoked by them: 63% of all the subjects with clinical experience and 41% of those with treatment experience considered the project to have had some influence on their perceptions, while 63% and 33%, respectively, reported that the project had also affected them emotionally, often powerfully and in various ways. The issues raised by the project had provoked anxiety in almost everybody (63% mild, 30% strong). The motivation to undertake project work was usually good (70%) or moderate.

The connections between experiences during the follow-up period and trends in changes (increased - unaltered - decreased) were studied using the *approaches* and *aim* codes as criteria.

Cross-tabulation of the experiences with changes showed that none of them accounted significantly for the magnitude of changes in approaches or aims (number of suicide cases investigated, experience in treating suicide attempters, anxiety). Neither did the magnitude of changes differ significantly between the sexes or by level of professional experience. The invariance of the study group's experiences as regards motivation, training and experiences of treating suicidal patients excluded these variables from this consideration.

Correspondence of the follow-up data with the models of prevention chosen for reflection

The follow-up data could be classified and interpreted through the models chosen for reflection: Caplan (1964), Cowen (1985), the Finnish model (Upanne et al., 1990) and Silverman & Felner (1995). Comparison of the data with the models was based on codes that correspond to the basic criteria incorporated in each model.

According to Caplan's model, in which *aim* is the criterion, the proportion of ideas associated with the category of primary prevention decreased from 75% to 66%. The proportion of the aim of reducing risk of suicide remained the same (at 10%).

According to Cowen's model, in which *location* is the criterion, it turned out that almost two thirds of the statements still represented system factors, although there was a shift towards the person category (person centred 22% vs. 32%, system centred 78% vs. 64%). However, if health services were interpreted as targeted at individuals, the priorities were almost reversed (person 62% and system 38% of all statements). Thus, based on the Cowen model, more than half of the prevention ideas focused on personal themes.

According to the Finnish model in which *aim*, *timing*, and *location* are the criteria, the proportion of ideas representing specific prevention did not grow, but rather slightly decreased (17% vs. 9%). The share of ideas on nonspecific prevention increased from 23% to 33% and that of ideas on promotion decreased from 45% to 35%.

According to Silverman & Felner's model, among the promotive factors protective circumstances were now considered the most important. Instead, the decrease of the status of personal competence as a promotive target was significant ($t=2.96$, $df=30$, $p<.01$), whereas the importance of personal vulnerability factors increased nearly significantly ($t=1.91$, $df=30$, $p<.10$). The risk factors connected to circumstances were considered as important as before.

Table 1. Proportions of aim categories according to Silverman & Felner's model (1995)

<i>Aim and location</i>	<i>Code</i>	<i>Pre-project</i>		<i>Follow-up</i>	
		<i>(n=138)</i>	<i>%</i>	<i>(n=213)</i>	<i>%</i>
PROMOTION	aim				
<i>conditions: protective factors</i>	location	27	20	46	22
<i>individuals: competence</i>	location	28	20	20	9 ⁽¹⁾
total		55	40	66	31
PREVENTION	aim				
<i>conditions: risk factors</i>	location				
- predisposing		12	9	15	7
- precipitating		18	13	16	8
<i>individuals: vulnerabilities</i>	location	18	13	44	21 ⁽²⁾
total		48	35	75	35
EARLY INTERVENTION	aim	14	10	22	10
POSTVENTION	aim	4	3	11	5
OTHER		17	12	39	18
total			100		100

1) $p < .01$

2) $p < .05$

Discussion

This prospective follow-up study showed that views of suicide prevention are adapted with conditions. Although the structure of conceptions remained the same, clear differences in emphasis emerged. The mere fact that the number of intervention ideas (items) almost doubled illustrates that learning took place and a more multifaceted vision emerged. The way in which conceptions were reconsidered can be seen in the changed priorities made visible through the applied coding frame.

As compared with “free ideas”, in real life situation client-specific themes (*foci*) became more frequent, and the need for care was emphasised more. This could be summarised as an increase in the care approach. However, this emphasis did not include an increase in the significance of the acute suicide risk phase as a focus of prevention. Instead, a marked rise in the importance of a preceding risk phase and its related factors occurred. Based on the Silverman & Felner model (1995), one can see that the significance of factors referring expressly to personal vulnerability as a predisposing factor gained more credence (Table 1). For example, prevention ideas referring to depression (18) and alcohol abuse (24) (Figure 3) increased in number.

Despite this emphasis, the promotive goal fared surprisingly well as one of the central *aims* of suicide prevention (Figure 4). A kind of choice appeared between the individual vs. circumstance levels as the *location* of activities (cf. Cowen, 1985). Reliance on the relevance of individual competencies as protective factors diminished significantly, but the relevance of circumstance factors persisted. The relevance of risk factors connected with living conditions as a preventive target also remained intact (Table 1).

The increased demand for professional know-how and services as primary *strategies* became evident in the study. This can be interpreted as proof of more awareness of the severity of the issue and hence an increased challenge for professional responsibility. This viewpoint can be seen as the necessary intermediate goal in developing suicide prevention. The increase in cynical and critical comments is worth attention as a reflection of the demanding nature of this issue.

Despite the reorientation described, the structure of professionals' conceptions of prevention did not essentially change during the follow-up period.

The concept remained multifaceted. The increase in the individual respondents' "utilisation rate" of different criteria reinforces the idea of a comprehensive vision. Adoption of the comprehensive vision and stepwise aims of prevention suggest that the psychologists applied a multistage and multi-factorial process theory, both as an implicit theory on suicide and as a paradigm for suicide prevention.

However, apart from these general tendencies on a group level, psychologists' individual choices in prevention varied. While a curative *approach* seems to constitute the essence of suicide prevention (Figure 5), personal visions may eventually diverge to the extent that they evolve into personal paradigms on prevention. For example, one person leaves out the cultural-educational viewpoint, while another omits the conditions approach. The rejection of the conditions approach was especially noteworthy.

Conceptions were monitored as a part of an internal evaluation of a natural process of the project implementation, not using an experimental design with a control group. Consequently, methodologically results are to be considered more as a general professional development than express effects of the project. In the light of well-known experiences during the follow-up time the changes may be interpreted as evidence of impressive real life experiences as an investigator, of having taken the matter seriously, of learning, and also of emotional arousal. Referring to the respondents' own descriptions the project had a remarkable cognitive and emotional impact on them. Partly due to the lack of variance, neither experience factors nor the available background information provided explanations for the differences in personal orientations.

The nature of the data as qualitative "natural reactions" suggests them to be valid to reflect visions adopted. The method of the empirical analysis proved successful in keeping the stages of analysis visible and reversible. However, due to the conceptual nature of the coding categories there necessarily remained a certain level of interpretation in the coding procedure, the proper use of which calls for the internalisation of the theoretical meaning of the codes. For that reason the results have to be considered as qualitative characterisations.

As Tesch (1985) notes, creating an "organising system" from prior material, such as the theoretical framework adopted here, is a rarely used option in interpretive qualitative research. However, the strategy applied in this study: a combination of theory-based, "concept-based" and data-based methods, is common (Morse, 1994, 221). The analysis of this new data suggests that the

model is viable in differentiating ideas of suicide prevention. The categories of prevention could be outlined using the codes accurately enough to provide adequate interpretations. Orientations in prevention could be disclosed and interpreted. The typology of approaches as an application of the model turned out to be a clear and condensed way of describing the main choices in prevention, both on the general and personal levels. In addition, the frame helped to give an operational form to the theoretical models and to make practical categorisations pertinent to the theoretical criteria (timing, aim, and location). So views could be characterised according to the theoretical models adopted for reflection. In addition to its value in research, the model could be used as a practical tools for planning and training purposes.

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III

A Model for Analyzing Suicide Prevention

Maila Upanne

This study monitored the evolution of psychologists' (n = 31) conceptions of suicide prevention over the 9-year course of the National Suicide Prevention Project in Finland and assessed the feasibility of the theoretical model for analyzing suicide prevention developed in earlier studies [Upanne, 1999a,b]. The study was formulated as a retrospective self-assessment where participants compared their earlier descriptions of suicide prevention with their current views. The changes in conceptions were analyzed and interpreted using both the model and the explanations given by the subjects themselves. The analysis proved the model to be a useful framework for revealing the essential features of prevention.

The results showed that the freely-formulated ideas on prevention were more comprehensive than those evolved in practical work. Compared to the earlier findings, the conceptions among the group had shifted toward emphasizing a curative approach and the significance of individual risk factors. In particular, greater priority was focused on the acute suicide risk phase as a preventive target. Nonetheless, the overall structure of prevention ideology remained comprehensive and multifactorial, stressing multistage influencing. Promotive aims (protective factors) also remained part of the prevention paradigm. Practical working experiences enhanced the psychologists' sense of the difficulties of suicide prevention as well as their criticism and feeling of powerlessness.

Keywords: Suicide prevention, evaluation, model for analysis, professional paradigm.

Despite the wealth of scientific information on prevention issues and the ubiquitous implementation of prevention strategies, there is precious little information available on how prevention is perceived by the actual implementers. In one of the rare studies of this subject, Kelly [1984] examined mental-health professionals' ideologies concerning primary prevention. In studies and project strategies, the objectives and interventions of prevention can be defined precisely and uniformly; in real life, however, the implementing professionals and decision-makers define prevention through their

own thoughts and actions. It is only then that decisions are made on what is actually meant by prevention, and, for example, how a published strategy will be implemented. This makes the ideas of implementers an important source of information in developing prevention.

From a theoretical viewpoint, the concept of prevention has been evolving for several decades as a common field of psychology and psychiatry. An example of this theoretical work is that of Albee [1980, 1986], who was particularly a proponent of expanding the

concept of prevention to include the promotive aim. Another example of theoretical development is Bloom's [1981] work *Primary Prevention: A Possible Science*. International discussions about the aims and practices of suicide prevention encompass well-established fields of interest [Ramsay & Tanney, 1996; Silverman & Felner, 1995b; Prevention of Suicide, 1996].

The literature is rich in analyses of the theoretical essentials of prevention. A literature review revealed that theoretical prevention models—and concepts of prevention—can be differentiated according to just a few criteria [Upanne, 1996a]. Most theoretical arguments seem to refer to

- the *timing* of the interventions during the suicidal process,
- the *aim* of the interventions,
- the *location* of the relevant factors.

Different models emphasize what they regard as essential in prevention by invoking criteria selectively. Caplan's well-known model [1964], for example, is based on the aims and timing of prevention (primary, secondary, and tertiary prevention). Good examples of models referring explicitly to location criteria are those of Cowen [1985], and of Winett, Altman and King [1989]. According to Cowen, prevention models can be divided into system-centered models and person-centered models. Winett et al. [1989] differentiate relevant factors into four levels: personal, interpersonal, organizational/environmental, and institutional/societal. In the Finnish suicide prevention strategy, the targets and aims of prevention are divided on three levels: suicide-specific, nonspecific, and promotive foci and aims [Upanne et al., 1990]. The levels differ in terms of the criteria of aims, timing, and location. In the model presented by Silverman and Felner [1995a], two criteria—aim and location—are integrated. Primary prevention is further divided (according to aims) into two categories: promotion and prevention. Promotion consists of aims concerning enhancing protective factors in individuals and circumstances (according to location), while prevention consists of reducing individual vulnerabilities and levels of risk. In the model, Caplan's concept of secondary prevention is called early intervention.

Developing professionals' ideas of suicide prevention was adopted as one of the aims of The National Suicide Prevention Project in Finland (hereafter

NSPP). The purposes embedded in project plans and education included better professional understanding of the nature of suicide, particularly in terms of the interaction of individual and circumstances, both suicidal process and multifactorial model as explanatory frames for suicide.

This study served to probe deeper into how the psychologists' conceptions of suicide prevention evolved in real-life contexts during their 9 years of involvement in the NSPP. If changes did occur, what were their main characteristics and what were the professionals' own explanations for them?



Method

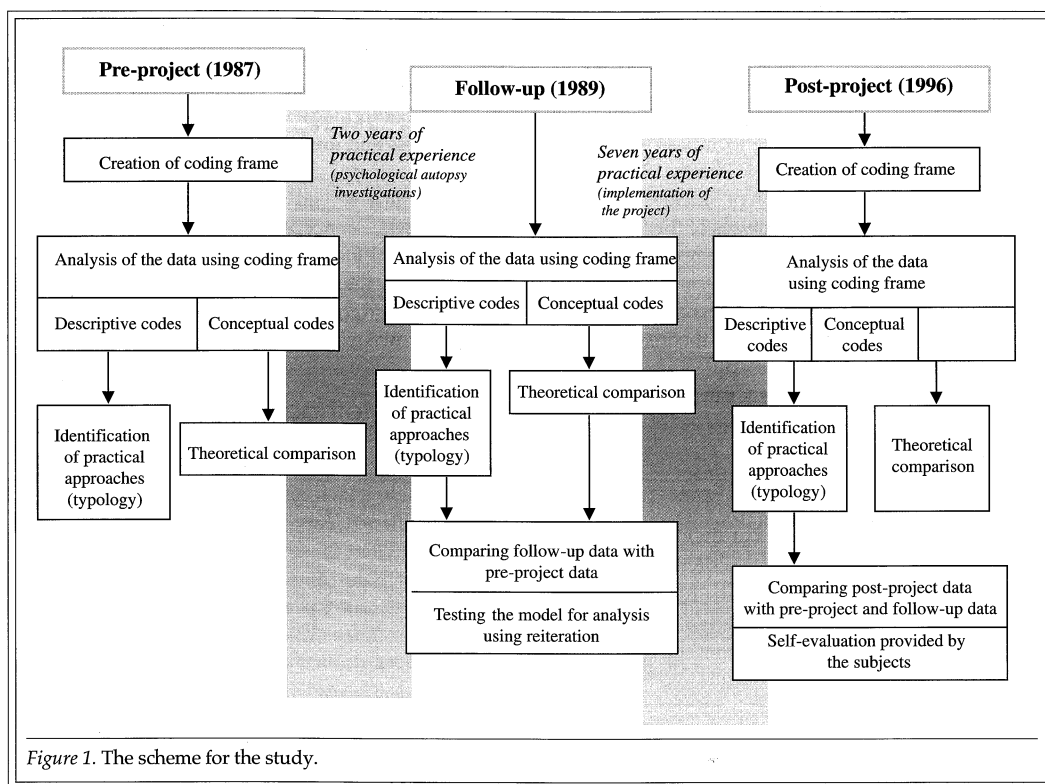
Context

During the first 2 years of the NSPP, professionals ($n = 245$) were invited to participate as field researchers in the first part of the project, which concerned data compilation for detailed psychological autopsy investigations for a countrywide study, *Suicides in Finland -87* [Lönnqvist, Marttunen et al., 1997]. They participated in training to carry out these investigations and in seminars on suicide prevention led by experts. The national strategy based on the study results and recommendations on prevention was published in 1993 (Suicide Can Be Prevented) and was implemented as a countrywide project in 1992–1996 [Upanne, 1996b]. The researchers were, among other things, invited to continue collaboration during the implementation phase [Upanne, Arinperä et al., 1990].

The professionals involved encountered various suicide and suicide-prevention experiences during the follow-up. Some experiences were generated by the NSPP and organized in a uniform way (e. g., psychological autopsy studies and training), while others occurred within the realm of ordinary professional work (e. g., optional participation in the NSPP implementation in 1992–1996). Implementation involved activities such as clinical work, developing of practical procedures, and organizing training and multisectoral collaboration [Upanne, Hakanen & Rautava, 1999].

Subjects

Psychologists formed the largest professional group (47%) of the field researchers. The present study group



($n = 34$) consisted of psychologists who continued collaboration with the project after the research period. They were identified from among the respondents of the 1993 follow-up survey directed at all those involved in implementation [Upanne & Halmeaho, 1995]. When the NSPP ended in 1996, the same group was contacted again. The respondents to this postproject inquiry ($n = 31$) formed the group studied here.

All the subjects had 5–6 years of higher education and a Master of Science (Psychology) degree required of all professional psychologists in Finland. Their ages ranged from 29 to 46 years (median 40 years), and their professional experience as a psychologist varied from 3 to 21 years (median 12 years). All were working in public health services in outpatient mental health care, except three who worked at health centers. Most regions of the country were represented. In terms of age or professional experience, the three nonresponding subjects did not differ from the study group.

Design of the Study

This is the last of the three-part study in which conceptions of suicide prevention were monitored among a group of psychologists with prolonged involvement in the NSPP from 1987 to 1996. In the first study, the model for analysis was developed and the conceptions analyzed [Upanne, 1999a]. The second study examined the evolution of these notions between 1987 and 1989 (after the psychological autopsy studies) and interpreted them using the model [Upanne, 1999b].

The present study assessed the evolution of conceptions using the descriptions supplied by the psychologists at three points in time: at the beginning of the NSPP ("preproject," in 1987), after 2 years ("follow-up," in 1989) and after 9 years when the project ended ("postproject," in 1996).

Methodologically, this was a case study in which the group was the case [Yin, 1994]. The study moni-

tored preventive thinking in real-life settings, formed by the ongoing process of the NSPP and the professional work involved. The subjects constituted a selected sample invited as experienced professionals for a special and rare purpose, and their involvement in the NSPP exposed them to a unique kind of experience. The subjects were studied from the standpoint of their professional role only.

Data

The data for the study were mainly qualitative in nature and were collected in three questionnaires. The first (preproject) questionnaire in 1987 was repeated in 1989 (follow-up). On both occasions one of the questions was "How can suicides be prevented in Finland?" The replies—short, freely formulated essays—formed the reference data for the present study.

The follow-up inquiry also requested information on the respondent professionals' experiences of the psychological autopsy phase. Multiple-choice questions were used to ascertain the number of suicide cases investigated, experiences in treating suicidal patients, participation in training and personal fact-finding, and assessments of perceived effects of the NSPP (motivation, anxiety, impact on confronting suicidal situations).

When the NSPP ended in 1996, the study group was invited to consider and compare their two previous sets of responses with present conceptions using a self-evaluation questionnaire. The feasibility of this method had been piloted using a case study. Copies of each subject's previous replies were attached to the current questionnaire. The subjects were first asked to describe, in their own words, the issues that had undergone *changes* for them, and then asked to consider factors that had promoted such changes in their conceptions. The question was "What do you think is the reason for the changes in your conceptions? What are the factors having had the greatest impact?" No specific information about the subjects' activities during the follow-up time was available. In this study, the subjects themselves assessed the factors they considered to have impacted their thinking. The questionnaire was responded to by 91% of the follow-up group ($n = 31$, 19 women and 12 men).

Coding Frame

The original model applied in this study was constructed using theoretical criteria [Upanne 1996a], pro-

fessional experience and the preproject data. The idea was to provide a tool for analyzing conceptions of suicide prevention by using the defined key criteria of prevention. Both of the previous studies had proved the model to be feasible: Conceptions could be understood, and they could be classified as well as interpreted according to the theoretical criteria adopted.

This study used two main types of code:

- previously developed *codes* referring to *ideas* about prevention,
- *evaluation* codes referring to changes in conceptions based on the material of this study.

The *codes* referring to prevention included descriptive criteria for categorizing the data at an operational level and conceptual ones presupposing some interpretation. The key categories of the descriptive codes were *focus* (*what?*), meaning the subject matter of prevention efforts, and *strategy* (*how?*), meaning how to intervene or what to do. The conceptual codes for interpretation were aim and location. The *aim* of an intervention (*what for?*) refers to the intended effect on the target, for example, to reduce suicide risk or to increase protective factors. The *location* of a focus (*where?*) refers to the "level" on which the foci are situated. For example, are matters connected with the individual or with circumstances? Two categories included in the previous studies: *sector* (*who is supposed to act?*) and *timing* (*when, in what phase of the process?*), were left out of this analysis—*sector* because of the lack of data and *timing* because of overlapping with the aim code [Upanne 1999a]. Each of the codes had been subcategorized based on the data of the previous studies. Now the applicability of these subcategories was tested, the specific quality of the postproject data was considered, and the final subcategories confirmed. The subcategories of the codes are presented in the results section.

The *evaluation* codes were used to categorize the self-assessments of experienced changes of conceptions of suicide prevention. Code subcategories were devised based on the data. Evaluative replies could be classified into three categories:

- *self-assessments of change* in conceptions;
- *explanations*: factors the respondent considered having promoted changes;
- *observations*: mainly assessments of the present state of mental health work.

The analysis of interrelationships of the code subcategories carried out in the preproject ("first study") proved that meaningful clusters could be formed. The analysis showed that these clusters could be used as an additional framework when describing the findings. On the basis of contingencies (cross-tabulation) between the subcategories of focus and strategy four clusters—*care, cultural-educational, conditions, and critical approaches*—emerged. The prevalence of other coding criteria in each cluster was examined using cross-tabulation. This analysis was repeated using the follow-up data [Upanne, 1999b]. Based on the analysis, all approaches could be characterized using all codes:

- *The care approach* refers to the professional duty to recognize clients' needs and provide good care, particularly in cases of life crisis, suicidal crisis, attempted suicide, depression, other psychiatric disturbance, alcohol problems and somatic illness. The right timing for prevention is when the first individual symptoms are manifested or a serious risk is evident. The main aim is reducing the individual risk and acute suicidal risk. The main strategy is to improve the skills of professionals and organize services more effectively. Interventions are mainly believed to be located in and take place through healthcare services.
- *The cultural-educational approach* refers to cultivating the atmosphere, attitudes, and values in society in general and in people's minds so that the culture becomes more strongly life-supportive and positive about the possibilities of overcoming personal difficulties. The aim is to create prerequisites for managing problems before they appear, via cultural activities such as education and provision of general information. Activities are located on the level of social relationships and the population at large.
- *The conditions approach* aims to make the social and economic aspects of life more secure in order to reduce the likelihood of difficulties emerging from risky circumstances. Activities are focused on the time before risk conditions emerge. Interventions concern social and economic circumstances, everyday living conditions and close relationships (location). The aim is to create prerequisites for managing life better and to lessen risks.
- The foci belonging to the *critical or powerless approach* consider suicide prevention and its aims and potentials to be ambiguous. Aims and strategies are criti-

cized, and controversial ideas are also presented. Critical ideas could not be coded according to the criteria used for the other approaches.

Method of Analysis

The analysis was based on the coding of the responses according to the criteria. For each response each focus or subject matter of prevention was identified as a text segment or item. The total number of foci mentioned was 59. Each focus was coded by an appropriate focus subcategory and further assessed, if possible, from the viewpoint of strategy, aim and location (subcategories). In addition, each response was coded from the viewpoint of the three evaluation codes (experienced change, own explanation, and observations). After three repetitions of the coding (by the author), the procedure was considered adequately substantiated.

The coding method generated frequencies that were used in the analysis. The prevalence of a certain category was assessed on the basis of the frequency of references to it, and frequencies were used to compare the emphases on the items in the three studies. The prevalences of the coding subcategories were analyzed either as a percentage of the total number of items or as a percentage of the subjects having made reference to the item. Sometimes several items belonging to a certain code were mentioned, or none at all. This is why the frequencies of the codes do not equal the number of respondents: there may be more—or less—references than subjects.

The analysis was mainly performed at the group level and from the viewpoint of the coding frame rather than that of the respondents. The results from the preproject and follow-up data were used as reference material in the analysis.

The codes allowed the data to be analyzed in detail, with categories combined in different ways, and interpretation to be kept on an operational basis and reversible. The analysis comes close to a descriptive interpretation analysis, in which the procedure moves from "decontextualization to recontextualization" [Tesch, 1995]. A computer software tool for analyzing qualitative data, WP^{index} [Sulkunen-Kekäläinen, 1992], was used in the coding and item analysis, and the SPSS program [Roponen, 1994] was used in cross-tabulation. *t*-tests were used to examine differences between the data.



Results

Did Conceptions of Suicide Prevention Change?

The bulk of the respondents (81%, $n = 27$) reported that some changes had taken place in their thinking over the project years. Two respondents' two sets of answers made the total number of responses 29. Twelve or 39% of the subjects—to facilitate reading, percentages are used despite the small frequencies—reported that their thinking had really changed, and 45% ($n = 14$) that it had become more focused but not essentially changed. Three persons reported their conceptions having become clearly more ambiguous. Five reported no changes, and one did not comment on the question. Based on the cross-tabulation, the perceived certainty of the change was not associated with any particular focus.

What Kinds of Change Took Place?

Items embedded in the descriptions of change ($n = 59$) could be coded into 26 foci (subcategories), the majority of which ($n = 19$) were mentioned only by one or two respondents. Suicide prevention foci that had become more important during the follow-up for at least 10% to 16% of the respondents ($n = 3$ to 5) included social marginalization, suicide risks, depression, suicides among children and young people, and crises; and of the related risk groups, Finnish life-values and children's and young people's healthy development. Compared to the previous follow-up study, most prominence was given now to the prevention of social marginalization. An example:

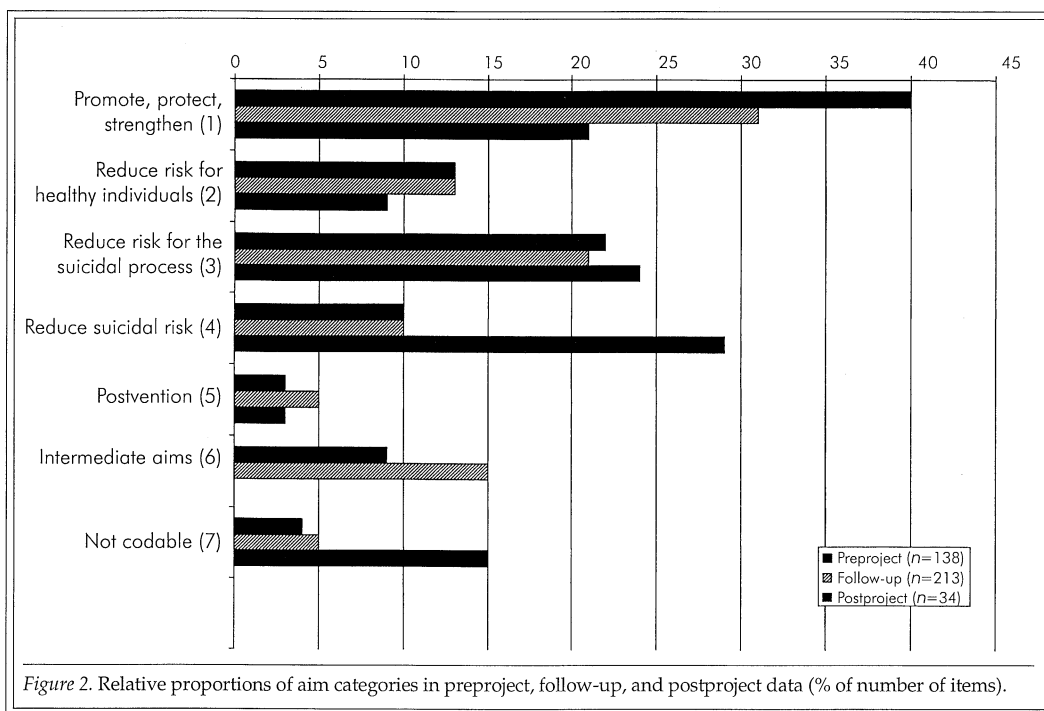
I'm of the same opinion as I was in 1987 and 1989, but the changes in society in the 1990s have left their mark: Uncontrollable societal change has brought about enormous insecurity and uncertainty about the future into people's lives. More and more individuals and families are faced with unemployment and economic difficulties, and completely new social groups have ended up in crises. It has been especially sad to witness the exclusion of a large group of young people and the relentless increase in the number of the long-term jobless. Indeed, the population is—perhaps permanently—being divided into winners, those who get by, and those who have given up.

The strategies of suicide prevention were commented on in 30 statements, 40% of which concerned professional services in some way. Enhancement of professional skills (7 statements) and increased services (5 statements) were emphasized the most. These notions were put forward in the preproject and follow-up studies as well, and thus the impression of the significance of "a professional strategy" seems solid. However, more attention to targeted education, support, and influencing people's attitudes was called for (23% of the strategies). Practically no new strategies emerged, but the need for developing new approaches was recognized (13%). An example:

I've worked for 4 years in a psychosis group, where we discuss daily self-destructive tendencies among those seeking help, trying together to work out survival strategies. Positive feedback from individual clients as their suicidal tendencies are alleviated has made me think more positively about the means of targeted crisis work.

The classification of the foci from the viewpoint of *location* ($n = 47$) shows that the individual level came to be regarded as more and more important with time as a locus of actions. In this material 43% of the foci were at the individual level (even if care services were excluded), compared with 9% in the preproject and 20% in the follow-up. Group-related themes did not emerge at all in the present material. Other factors perceived as important involved the societal level, such as care services (26% of the foci), and environmental issues, such as socioeconomic circumstances and the cultural environment (a total of 26% of the foci). The proportion of the foci concerning social relations remained the same as in the follow-up material (11% of the responses).

The changes mentioned above were detectable when using the *aim* code as well (Figure 2). Acute-phase intervention was now the first priority, the increase being statistically significant ($t = 2.88$, $df = 30$, $p < .01$) compared to both of the previous studies. However, the preceding phase of the suicidal process was still considered important. Within a prevention paradigm, it was noteworthy that the promotive aim was still considered essential, too: A fifth of the prevention ideas concerned securing protective factors. Nevertheless, emphasis on the promotive aim diminished statistically significantly ($t = 2.06$, $df = 30$, $p < .05$), compared to the preproject data.



The trend described above also appeared in terms of approaches (*typology*). Grouping the foci into four approaches applying the same procedure as in the previous studies revealed that the care approach was still the strongest orientation. Nonetheless, prevention ideas belonging to other approaches continued to be represented as well. This three-part study showed that the prevention paradigm adopted by the subjects is comprehensive, with the order of priorities of approaches being (1) curative, (2) cultural-educational, (3) conditions, and (4) critical approach. However, matters belonging to the conditions approach were not too well recognized; in the follow-up study 30% of the respondents omitted topics referring to conditions and in this study, as many as 73% ($n = 19$) did not mention factors relating to it. The increase in the amount of critical ideas is also noteworthy: For about one-fifth of the group ($n = 6$) a critical viewpoint remained the only contribution. Compared to the preproject material, the increase was statistically significant ($t = 2.05$, $df = 30$, $p < .05$). An example:

My conceptions have not changed, except that my pessimism about implementing these measures has deepened. At least from the outpatient mental-health-care viewpoint, the situation is almost hopeless: There are simply no resources for anything "extra" as the staff are already exhausted and inundated with patients. More resources are needed.

In the two previous studies, the respondents tended to prefer more than one approach at the same time. In this study the combination of care, culture, and conditions approaches was favored by 6% of the respondents (at the follow-up stage by 44%). The combination of at least two approaches was preferred by 29% (in the follow-up 76%). Both in the follow-up (41%) and in this study (16%) it was usual to combine the care approach and the cultural one, while omitting the conditions approach. In all three studies, nobody relied solely on the cultural or conditions approach in their prevention paradigm.

Cross-tabulation between the respondents' preference of approaches in the three studies showed that priorities could change in the respondents' minds. For

example, some respondents brought up issues concerning the care approach only in the postproject material. On the other hand, many people who had previously adopted the care approach no longer stressed issues related to it. The critical approach gained the highest number of new supporters.

What Were the Factors Affecting Changing Conceptions of Suicide Prevention?

The respondents enumerated several personal experiences as perceived reasons for the changes in their viewpoint. Changes in ideas were mostly attributed to working experiences in general. These comments accounted for about a third (31%) of the descriptions ($n = 36$). Other factors mentioned were coming face to face with suicidal situations with clients, private-life experiences, and progress in one's own thinking in general. Each of these factors were mentioned by 13% of the respondents. Social activities associated with the profession, training, changes in working life, societal change, and advances in awareness of suicide prevention were further explanations for the changes (two references to each). Participation in the NSPP and support from it were mentioned by four respondents.

Additionally, factors observed in living and working circumstances were brought up as having impacted the subjects' thinking. Factors both impeding prevention and beneficial to it were reported. The strongest opinions concerned negative and threatening developments in prevention. Nearly half of the respondents (45%) expressed concern (58% of all comments, $n = 43$) about the possibilities of carrying preventive interventions any further. The most important concern was associated with the "collapse" of psychiatric care in the 1990s and dwindling resources and the resulting problems in prevention. Societal factors, such as hardening attitudes and people's increasing difficulties, were identified in 14% of the comments. One example:

For the most part, my views have not changed from 1989, but now, after the desperate straits of the recession, my thoughts strike me as idealistic daydreaming. Humanistic values are waning, and attitudes are hardening also among health-care and social-welfare personnel. One huge question mark is how to influence social values so that failure—personal disappointments, "going downhill," powerlessness and helplessness—would be more acceptable and could occur without a sense of losing human dignity.

ness—would be more acceptable and could occur without a sense of losing human dignity.

In contrast, a third (32%) of the respondents also reported positive experiences. For instance, it was perceived that professional skills had improved, attitudes toward the suicide question had become less anxious, and the NSPP had promoted the issue in an appropriate manner (35% of all references).

Cross-tabulation in terms of sex showed no major differences between the responses submitted by male and female psychologists. Nor was there any contingency in relation to experiences from the psychological autopsy period (e.g., the number of suicide cases investigated, experiences in treating suicidal patients, participation in training and assessments of the perceived effects of the NSPP: motivation, anxiety, impact on confronting suicidal situations).



Discussion

Evolution of Conceptions of Suicide Prevention in Real-Life Conditions

To my knowledge, this is the first study in which professional involvement in suicide prevention has been the target of investigation and follow-up. The successful completion of the almost 10-year follow-up showed that the goals of the Finnish project to enhance personnel commitment to suicide prevention were achieved, at least as far as this professional group is concerned. But what happened to the prevention paradigm in practice?

The majority of the psychologists (81%) had experienced changes in their prevention conceptions, though many (45%) considered that these shifts merely involved becoming more focused on the topic. The changes seemed to concern a meaningful set of ideas. Of the separate foci, social marginalization as a risk for and predisposing factor in the suicidal process was stressed. This issue was linked to the economic and social distress experienced in Finland at that time, compounded by a high rate of unemployment, which made crisis situations more visible in psychologists' work. The significance of some other risk factors also increased during the follow-up. These included perceived suicide risk, depression, and crises in general.

When interpreted through the study's coding frame, the importance of clinical factors, which were located at the individual level and incorporated the challenge of counteracting an already apparent suicidal risk, increased significantly. The social marginalization focus, on the other hand, reinforced the role of the conditions approach as part of the prevention paradigm. In terms of typology, the role of the care (curative) approach was now stressed as the principal type of action. Kelly [1984] also found that almost 90% of professionals believed that programs focusing on individuals were the best examples of prevention, although they simultaneously endorsed institutional programs (i. e., social action). This approach is close to the concepts of secondary prevention by Caplan [1964], early intervention by Silverman and Felner [1995a], and specific suicide prevention according to the Finnish strategy [1993].

As *explanations* for the perceived changes, the respondents listed several experiences of a professional or private nature, especially job-related factors. Almost half of the respondents (45%) included a description of changes in the circumstances surrounding their work as a kind of contextual explanation and concern about the fate of prevention in society. The changes were mostly perceived as negative (58%) from the viewpoint of possibilities of prevention.

The psychologists did not encounter anything revolutionary new that had changed their thinking. What appeared to have been revolutionary was their experience in the national project, which served as an eye-opener to improve their readiness to perceive certain phenomena in a new way. This may be interpreted as learning and arousal: Individual experiences very different in nature were able to kindle new ideas.

Real-life situations clearly enhanced perceptions of the serious and demanding nature of suicide prevention. The negative changes were also liable to give rise to cynicism and a sense of helplessness. The critical approach remained the only avenue for as many as a fifth of the respondents. Once again we learn that prevention is definitely easier to think about than to implement.

The *method* used in data collection—self-assessments of the previous descriptions—was focused expressly on changes of conceptions. At the time of the study inquiry, the NSPP was over and seemed distant.

The pilot case study showed that people might prefer assessment to a new description of prevention ideas. The good response rate (91%) showed that the request for self-assessment was felt to be appropriate. The procedure made the material concise, but still pertinent. Using relative proportions of ideas in three materials (as percentages of the total number of statements) allowed comparison of three studies irrespective of the different quality of the latest data.

Characteristics of Changes: A Professional Paradigm

The results showed that the psychologists' prevention thinking was characterized by comprehensiveness, comprising multifocused targets, a range of methods, and a process and interactional viewpoint to understanding suicide. The structure of aims that emerged in both of the previous studies generally remained unaltered in this study, in the sense that all aims of prevention still persisted in the subjects' thinking (Figure 2). Despite the curative emphasis, the promotive aim (protective factors) and the conditions approach remained an integral part of suicide prevention for the group, although the role of conditions as a locus of action stayed minor. The comprehensive vision was present in all three studies, and thus it may be considered a permanent paradigm.

There were no connections to be seen between the differences in views and the available background information of the group (sex, the number of suicide cases investigated, experiences in treating suicidal patients, participation in training and the perceived effects of the NSPP). This might be partly because of the lack of variance in responses and the small number of the group studied.

The conclusions reflect the general line of thinking among this special group. However, even in this group there were individual differences in the direction of development and in applying the paradigm. It seems that each subject actually applies his/her own paradigm. To confirm the results among psychologists in general, a study directed at a representative sample ought to be conducted.

In this study, psychologists served as representatives of professionals. Further studies will focus on other professional fields.

Feasibility of the Model

As in the two previous studies, the present analysis proved the model for analyzing suicide prevention to be feasible. The model allowed the essential features of promotion and prevention to emerge. Moreover, professional paradigms not explicitly expressed in the responses could be assumed on the basis of the findings. The data could be compiled into meaningful foci: subject matters relevant to prevention. The developmental trend in thinking ("process theory") and the idea of interaction of factors were identified and charted using the aim and location codes. Combinations of foci with other codes were typifiable as approaches (typology). From these descriptive vantage points it was possible to characterize the comprehensiveness of the group's thinking. In addition, individual differences were analyzed using the coding-frame criteria and typology. However, because such codes are conceptual and there always remains an element of interpretation in the coding, the results should be viewed as a qualitative characterization, in which the code frequencies are used as "descriptive scores." The model can be applied as a type of tool for disclosing essentials of prevention in training, planning and for study purposes. The feasibility of the model ought to be tested further by studying the ideas and activities of other professionals and other topics of prevention.

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IV

A model-based analysis of professional practices in suicide prevention

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Aims: The purpose of this study was to investigate what suicide prevention means in terms of practical interventions. Another purpose was to assess the feasibility of a previously developed theoretical model for analysing suicide prevention (1–3). **Methods:** The data consisted of plans for action provided by professionals from five fields ($n=173$) (psychologists [$n=41$], clergy [$n=37$], nurses [$n=34$], social workers [$n=32$], and physicians [$n=29$]) as responses to an inquiry within the National Suicide Prevention Project in Finland. The plans were operationally described and theoretically interpreted using the model. **Results:** The analysis indicated that practice patterns were more or less similar irrespective of the focus of suicide prevention. Neither did clear sectoral or professional profiles of practice appear. Clinical topics, individually focused interventions and curative strategies constituted the main approach. Interventions focused mainly on risk factors, the priorities being life crises, acute risk of suicide, coping of survivors, and a suicide attempt. The bulk of the strategies were aimed at developing professional interventions and skills. **Conclusions:** The model proved to be a feasible tool for differentiating and theoretically interpreting suicide-prevention approaches. The paradigm adopted by the sectors was versatile and comprehensive: the activities were multifocused, all aims of prevention and locations of intervention were included, and a common set of interventions – a “multimethod approach” – was applied. The adoption of the idea of risk as well as of protective factors can be interpreted as reflecting a process theory of suicide development.

Key words: model for analysis, paradigm, prevention theory, suicide prevention.

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INTRODUCTION

Since the challenge laid down by WHO (4), suicide prevention has been a special focus of development activities for the evolution of a better understanding of the nature of suicide and of suicide prevention in practice. Numerous countries now have national programmes. The first country to implement a national suicide prevention project (NSPP) was Finland, from 1987 to 1996. The four-phase project began with psychological autopsy studies of all suicides committed during one year (5), the results and recommendations from which were used to formulate a national strategy. Implementation of the strategy took place in 1992–96 and its evaluation in 1996–97 (6–8).

The project resulted in several studies on the suicide phenomenon, and also created options for investigating suicide prevention as a real-life activity. Despite a wealth of theoretical views and detailed knowledge of risk factors, there is scant information available as to how professionals actually understand and apply them (9). Professionals' views are, however, decisive for suicide prevention efforts in practice.

But how should suicide prevention practices be described? The literature contains several ideas about what is theoretically essential in prevention and the viewpoints whereby it can be described. Based on central theoretical statements in this literature (10), a model for analysing suicide prevention was developed. The model was based on the finding that theoretical arguments were mostly centred on the *timing* of interventions during a suicidal process, the *aim* of interventions and the *location* of the relevant factors. Different models emphasize what they regard as essential by invoking criteria selectively. Caplan's well-known model (11) is based on the aims and timing of interventions, while Cowen's person-system model (12) is based on the location of interventions. In the model presented by Silverman and Felner (13), two criteria – aim and location – are integrated. Each of the four aims (promotion, prevention, early intervention and treatment) are divided into two locations of intervention (individuals and conditions). The dichotomy of promoting positive results vs. reducing negative results of development – called by Albee (14) the competence model and the defect model, respectively – can be regarded as a

central conceptual test of prevention theory (15, 16, 13).

The purposes of the study were:

1. to discover what suicide prevention actually is in practice, and how it can be described and conceptualized according to criteria relevant to prevention theory by:
 - investigating professionals' views of suicide prevention in real-life conditions;
 - interpreting these views using the theoretical criteria embedded in the previously developed model;
 - comparing views of suicide prevention among different fields;
2. to use new data to study the feasibility of the model for analysing suicide prevention.

METHODS

Context

The national strategy document on suicide prevention (17) was distributed widely to health, social and other service units in 1992. In 1992–96 the implementation took the form of comprehensive multisectoral activities throughout the country. To study and to further encourage progress in practical intervention, an intermediate follow-up survey was directed at field professionals in 1993. It included an inquiry about special interventions in suicide prevention.

Given the context and the unique nature of the data and subjects, the study can be regarded as a case study (18, 19).

Subjects

Among the total of their replies ($n=1,786$) to the 1993 survey, 220 professionals reported being involved in a "special intervention". There were some 20 professions involved, working in at least 10 fields, depending on classification. All parts of the country were represented.

Data from the five biggest professional groups and fields represented among the respondents ($n=13$; 33% [$n=57$] males and 67% [$n=116$] females) were chosen for the study. The groups were combinations of professions and fields. Members of "professional" groups (psychologists, social workers, physicians) occupied various fields. In "sectoral groups" (clergy, health care), various professions were included:

- *Psychologists* ($n=41$; 4 males, 37 females) were working in various posts in nine sectors, 73% in health care (of them 24% [$n=10$] in mental health care, 41% [$n=17$] at health centres, and 5% elsewhere) (*psych*).

- *Clergy* ($n=37$; 20 males, 17 females) were parish pastors (46%, $n=17$), deacons (35%, $n=13$), and counsellors and hospital chaplains (19%, $n=7$), all of them employed by the Evangelical Lutheran Church of Finland (*church*).
- *Nurses* ($n=34$; 3 males, 31 females) included specialized nurses (35%, $n=12$) and administrative professionals (29%, $n=10$) working in 11 sectors, the biggest ones being mental health care (47%, $n=16$) and primary health care (26%, $n=9$) (*health*).
- *Social workers* ($n=32$; 8 males, 24 females) were working as social workers (56%, $n=20$) or as other officials in eight sectors, the biggest ones being municipal social services (19%, $n=7$) and voluntary organizations (28%, $n=10$) (*social*).
- *Physicians* ($n=29$, 22 males, 7 females), the "medical sector", were mostly psychiatrists working in nine sectors, mainly (83%) in executive positions; 52% of the sectors involved primary health care ($n=9$) and mental health care ($n=6$), and 34% ($n=10$) involved hospitals or hospital units (*med*).

Aside from in the church sector, there was a notable imbalance of male versus female respondents in the groups. Except for the male-dominated medical group ($t=2.49$, $df=28$, $p<0.02$), there were statistically significantly more female respondents among psychologists ($t=3.97$, $df=40$, $p<0.001$), nurses ($t=3.68$, $df=33$, $p<0.001$) and social workers ($t=2.53$, $df=31$, $p<0.01$). This is in line with the general distribution of the sexes in these professions.

Data

Among other questions in the inquiry, the respondents were asked to describe "activities or development projects your sector/unit is implementing or going to carry out, the essential purpose of which is suicide prevention. By project we mean any planned intervention such as developing practices, experiments, special projects etc.". The detailed questions were: (1) The name of the project? Topic? (2) The starting point? (3) The purpose? The goal? (4) What was done to reach the goal? Methods? Freely formulated responses to these questions formed the raw data for this study.

Data example. *Respondent*: Chief Medical Officer. Public health federation of municipalities. *Topic*: Monitoring of aftercare in suicide attempts. *Starting point*: Nationwide suicide project and a notion that suicide attempts are quite common. *Aim*: To chart the situation and enhance aftercare in suicide attempts. *Methods*: Systematic treatment of suicide attempters. Preliminary information is gathered at the emergency clinic; the clinic or hospital inpatient ward refers to a mental health centre.

Reports provided by the respondents ($n=173$) included:

- 226 statements referring to focus (1.3 per respondent);
- 215 statements referring to a strategy for action (1.2);
- 371 statements referring to method (2.1);
- 207 aims of prevention (interpreted) (1.2);
- 175 timings of intervention (interpreted) (1.0);
- 207 locations of intervention (interpreted) (1.2).

Method of analysis

This was a qualitative study, which was both theory based and data based: deductive and inductive approaches were integrated. In the analysis a pre-prepared frame – a model applied before in three previous studies (1–3) was used as an organizing scheme (19, 20). The subcategories of the main concepts were based on the data. When coding the present data, the subcategories created on the basis of the data in the first study (1) were used as a starting point.

The action plans were analysed by coding each idea about prevention using the model categories. In each response, each statement on focus, strategy, or method was assigned to a relevant subcategory and ideas were using the codes of timing, aim, and location (subcategories).

The procedure for establishing categories and assuring the reliability of the coding was qualitative in nature (20). The final subcategories were merged with the present data using a four-part iterative coding procedure carried out by two researchers: a preliminary coding of a sample of items by the co-researcher and author, inter-rater comparison of codings, and discussion for improving definitions of subcategories, a second coding of the data by the co-researcher and the final coding by the author. The code subcategories are presented in the Results section.

Coding frame. In the model, presented as a coding frame (Figure 1), two kinds of codes were included: practical, descriptive codes categorizing the data on an operational level, and theoretical, conceptual ones based on interpretation.

Descriptive codes. The key concept in the analysis is that of the focus, i.e. the subject matter targeted by the described interventions (“what?”). *Strategy* and *method* (“how?”) are other descriptive codes.

Conceptual codes. *Timing* (“when?”) refers to the phase of the suicidal process implied in the prevention idea. For example, is the idea to intervene before or after the manifestation of clear symptoms in individuals? The *aim* of intervention (“for what purpose?”) refers to the intended effect on the target. For example, is the intervention supposed to decrease risk factors or

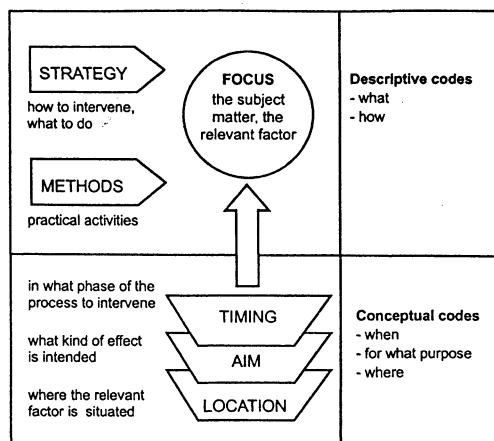


Fig. 1. A coding frame for suicide prevention.

to increase protective factors? *Location* of a focus (“where?”) refers to the “level” on which the targeted foci are situated. For example, are matters individual or connected with circumstances?

In the analysis, a further mode of categorization, a *typology*, was applied. In the previous studies (1, 2), cross-tabulations between subcategories of foci and strategy showed that the foci could be grouped into four meaningful clusters (“approaches”) referring to different ideas in suicide prevention. A response was recorded in an approach category if one or more focus ideas belonging to that category were included. A respondent could have contributed more than one approach. The approaches are characterized in the Results section.

Analysis. The unit of analysis was the individual response as an entity. In this study, the texts rather than the respondents were the focus. In terms of the respondents, no data other than the sector, profession, and sex were available.

The coding method generated frequency counts of the number of references to each subcategory. Frequency counts and the number of respondents were not equal: a respondent could name either several items belonging to a certain category, or none at all. The frequency counts are presented either as a percentage of the total number of statements, or as the number of the subjects having made a reference to that main category.

A computer software tool for analysing qualitative data, WPindex (21), was used in the coding and item analysis, and the SSPS-programme (22) for cross-tabulation and the chi-square test. *T*-tests were used to examine differences in relative proportions of choices between the groups (23).

RESULTS

Views of suicide prevention according to the descriptive codes

Ideas on suicide prevention (*focus*) concentrated clearly on a few topics, some referring to substantial focus ideas and some to strategies presented expressly as methodological foci. The first six foci ($n=146$) covered 65% of the total number of focus ideas.

The priorities of the main focus ideas were fairly congruent between sectoral groups. Apart from some sectoral interests, no statistically significant differences in proportions of foci appeared. Certain topics were hardly referred to at all. At that time (1993) there was very little interest in, for example, depression as a risk factor. The range of focus ideas included in action plans in the medical sector was narrowest.

Four key *strategies* mentioned in the plans, those of improving services, professional skills, curative attitude, and care practices, covered 72% ($n=154$) of all strategies mentioned. The seven most frequently mentioned strategies ($n=198$) covered 92% of all strategies mentioned (the four above-mentioned plus increasing low-threshold services, collaboration between sectors and support for certain groups).

All groups favoured highly similar key strategies. Nonetheless, a few significant differences between the groups emerged. Health care seemed to be the main advocate of low-threshold services (chi-squared =

14.41, $df=4$, $p<0.01$). The church was significantly less concerned with improving services than other sectors (chi-squared = 16.42, $df=4$, $p<0.01$). Recognizing risk groups was a strategy mainly in the medical sector (chi-squared = 15.38, $df=4$, $p<0.01$).

The *method* most frequently reported (25% of responses) was to tackle concrete activities, such as starting a new care procedure or appointing a group for planning. Roughly half of the action plans focusing on suicidal crisis, suicide attempters and survivors were practical plans; 81% of all solutions focusing on crisis situations were practical activities, whereas for example the focus of preventive mental health work remained more on a planning level, with only 35% of methods being practical interventions.

The range of methods was not very wide. Five methods – practical interventions, training for professionals, networking, public information, and encountering people – covered 85% of all the methods mentioned. The priorities were much the same in each group. However, compared with the other sectors the church sector applied the method of encountering people (chi-squared = 16.04, $df=4$, $p<0.01$) significantly more and networking (chi-squared = 9.32, $df=4$, $p<0.05$) significantly less.

Moreover, there was almost no difference between strategies and methods applied in connection with different focus ideas. A sort of multimethod approach was applied: usually several strategies and methods,

Table I. Focus ideas in suicide prevention projects as percentages of the number of ideas in different groups

	TOTAL	PSYC	CHURCH	HEALTH	SOCIAL	MED
	($n=226$)	($n=54$)	($n=46$)	($n=46$)	($n=44$)	($n=36$)
Focus idea	%	%	%	%	%	%
1 Life crisis, traumatic experiences	42	19	24	22	15	16
2 Acute risk of suicide, serious crisis	37	16	15	15	15	16
3 Preventive mental health work	23	10	15	4	11	11
4 Providing services	18	8	2	13	13	5
5 Survivors	15	7	6	13	9	2
6 Suicide attempters	11	5	7	0	2	5
7 Alcohol problem	9	4	2	2	2	9
8 Social exclusion	8	4	2	2	7	2
9 Coping, well-being	8	4	0	2	7	0
10 Psychiatric illness	7	3	4	0	4	7
11 Suicide risk factors (knowledge)	7	3	4	7	0	0
12 Debriefing (other than suicide)	7	3	4	4	2	5
13 Parenthood, healthy development of children	6	3	4	0	2	7
14 Life skills	5	2	2	2	4	2
15 Debriefing (other than next of kin)	5	2	0	2	11	5
16 Values, attitudes	4	2	2	2	2	2
17 Professional skills	4	2	0	7	0	2
18 Belonging, social relationships	3	1	4	2	0	0
19 Mental health, crises, coping: common knowledge	3	1	2	0	0	5
20 Three categories less than three statements (depression, somatic illness, other)	4	2	2	0	0	0
	100	100	100	100	100	100

though more or less of the same set, were adopted when planning a project, irrespective of the topic.

Views of suicide prevention according to the conceptual codes

While all the *aim* categories were applied in the various projects, those of intermediate professional purposes (6), reducing risk of a suicidal process (3), and reducing acute suicide risk (4) proved to be dominant (70%, $n=145$). Nevertheless, interventions aimed at enhancing protective factors were also represented (10%). As in the previous study (1), codings in the categories of aim and *timing* proved to be highly interrelated.

There were no significant differences in how the groups adopted the aims. However, the aim of reducing acute suicide risk (4) was most commonly adopted in the medical sector.

In terms of *location* nearly all "levels" were adopted when targeting interventions. Nevertheless, a third of the activities were focused on the individual level (1–3). If professional services are considered as individually focused interventions, 59% ($n=122$) of preventive ideas concerned the individual level. No significant differences appeared between groups in terms of the priority of locations.

Typology: approaches. In elaborating a typology, three approaches emerged. Ideas referring to the *critical approach* defined in earlier analysis (1) did not appear in this material.

The *care approach* concerned foci such as life crisis, acute suicide risk, suicide attempt, psychiatric illnesses,

alcohol problems, and survivors, as well as intermediate topics such as providing services, especially debriefing.

The *conditions approach* concerned social exclusion, healthy development and well-being, social relationships, and especially preventive mental health work.

The *cultural-educational approach* concerned parenthood and the healthy development of children, common life skills, values, and attitudes to seeking help.

Cross-tabulation of the approaches as dichotomies (adopted/not) with subcategories of the other codes showed that the approaches could be characterized from the viewpoint of all other codes as well (1).

This characterization of suicide prevention also showed the views in different fields to be fairly similar in nature. Irrespective of the sector, the main approach was the care approach. A fifth of all focus ideas represented the conditions approach and 10% the cultural-educational approach. However, a nearly significant difference appeared in the case of the cultural-educational approach – while the social sector applied this approach in 20% of its projects, the medical sector was not at all inclined to this approach. Standardization of sex proved the difference to be insignificant. There was a statistically significant difference between male and female respondents in only one major respect: women were more often in favour of the cultural-education approach.

DISCUSSION

The data used in this study shed light on a little-known area of suicide prevention: activities launched in the field by different sectors on their own initiative in real-life conditions. The data constitute a unique sample of interventions deployed by the most active agents in the public service arena. The authenticity of the data suggests that the impression of the emergence of common professional interests in suicide prevention is a valid one. The simple method of analysis based on indexing the main ideas according to a coding frame proved to be an adequate procedure.

The results give a clear picture of suicide prevention activities undertaken in the fields represented in the study. Some dozen foci were enough to cover the essential content of suicide prevention. Interventions concentrated mainly on risk factors of suicide, with the priorities being life crisis, acute risk of suicide, coping of survivors, and suicide attempt. Professional foci, providing services, and organizing preventive mental health work proved to be important. Many common topics were missing, e.g. the idea of depression as a risk factor was not considered relevant even by psychiatrists.

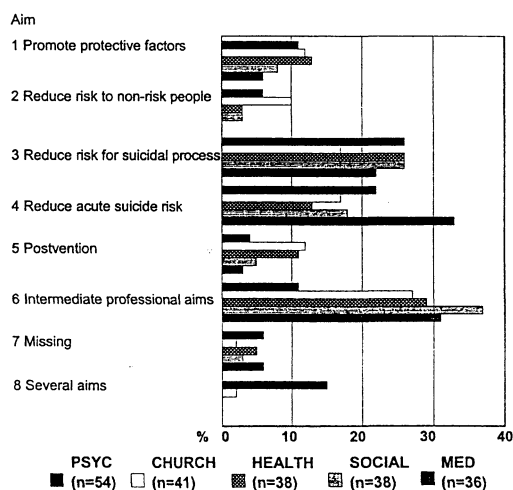
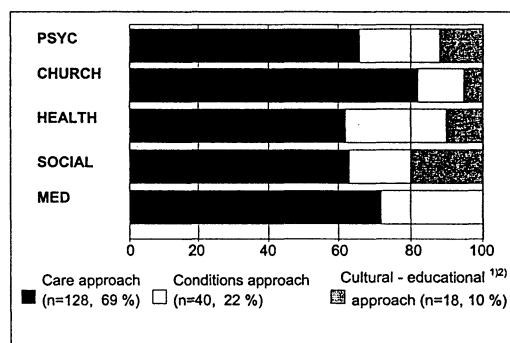


Fig. 2. Aims of suicide prevention as percentages of the number of choices ($n=207$) in different groups.

Table II. Location of interventions as percentages of the number of choices in different groups

Location	TOTAL (n=207)	PSYC (n=54)		CHURCH (n=43)		HEALTH (n=40)		SOCIAL (n=36)		MED (n=34)	
		%	%	%	%	%	%	%	%	%	%
1 Individual level (problems)	67	32	43	23		35		25		32	
2 Individual level (coping, skills)	2	1	0	2		0		3		0	
3 Individual level (social skills)	1	0	2	0		0		0		0	
4 Group level (survivors)	14	7	6	12		10		3		3	
5 Group level (other risk groups)	23	11	13	16		3		11		12	
6 Population level	27	13	15	7		18		17		9	
7 Circumstances (family, close)	7	3	6	2		0		6		3	
8 Circumstances (other contexts)	9	4	2	0		10		6		6	
9 Circumstances (social, economic)	0	0	0	0		0		0		0	
10 Circumstances (cultural)	4	2	4	2		3		0		0	
11 Professional level (skills, know-how)	23	11	4	19		10		17		9	
12 Professional level (providing services)	29	14	7	14		13		14		26	
13 Not codable	1	0	0	2		0		0		0	
		100	100	100		100		100		100	



1) $\chi^2=9.09$, $df=4$, $p<0.06$
 2) $\chi^2=6.82$, $df=1$, $p<0.01$ (female-male difference)

Fig. 3. Approaches as percentages of the number of choices ($n=186$) in different groups.

The range of strategies and methods used was familiar. Enhancing the effectiveness of basic professional know-how seemed to have been adopted as the goal in each sector. The main strategies varied from improving services and professional skills and increasing curative attitude, to improving care practices. Methods varied from interventions, training, and public information, to encountering people. Both this study and the evaluation survey in 1996 (7) indicated that inter-sectoral collaboration and networking were discovered as useful "new" strategies. The large number of practical interventions was an encouraging finding in accord with the aims of the national project. The 1996 survey confirmed that the activities included in this study were intended as serious efforts: after four years 73% of them were still continuing and a third had been adopted as part of everyday work.

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A kind of field-based operational definition of suicide prevention can be deduced from the data as follows: Suicide prevention means:

- helping people in *crisis situations*, especially by providing services, improving professional skills, enhancing a curative attitude, organizing practical interventions, training professionals, and increasing interaction between people and professionals;
- helping people in a *suicidal crisis*, especially by improving professional skills, improving services, organizing interventions, ensuring patient care, training professionals, networking, public information;
- developing *preventive mental health work*, especially by organizing activities, collaboration between sectors, networking, public information, training, and concrete interventions;
- *increasing the efficiency of services*, especially by improving professional skills, organizing activities, implementing concrete interventions, and networking;
- providing support to *survivors* (postvention), especially by enhancing a curative attitude, organizing concrete interventions, and increasing interaction between people and professionals;
- providing care for *suicide attempters*, especially by ensuring proper care, concrete interventions, and investigations.

According to the aim criterion, the primary idea in prevention was recognizing the risk of suicide: intervening in a suicidal process or acute suicide risk. Nevertheless, promotive aims (enhancing protective factors) were present in all sectors, too. The most

important of all aims were, however, intermediate professional purposes (e.g. know-how, methods).

An observation worth noting is the great homogeneity of interventions and the priority of strategies and methods in planning as compared with foci and aims. More or less the same sets of methods were applied irrespective of the topic. Developing methods was often adopted expressly as an intermediate focus without connection to any focus idea. This approach may be problematic; starting with methods entails a risk of poor differentiation of substance (focus) and purposes (what kind of effect is intended). This, in turn, is often why opportunities are missed for evaluation: if you do not know what your aim was, you cannot know whether you reached it.

According to the typology, two-thirds of interventions represented the *care approach*. Typical of this approach were clinical foci and mainly individually focused risk-detecting interventions. This paradigm is close to Caplan's (11) concept of secondary prevention (24), and to the common medical model (1). In Silverman and Felner's model (13, 1), the emphasis is on the categories of preventing individual vulnerabilities and early intervention. However, the *conditions approach* and the *cultural-educational approach* also occurred. For this reason, the paradigm of prevention in this group may be judged to be comprehensive: activities were multifocused and all aims and locations of intervention were included, by and large. Adopting the concept of risk and the presence of protecting factors can be interpreted as reflections of a multifactorial process theory of suicidal development. Although individual factors and patients/clients were the main location of activities, factors connected with circumstances, or even cultural-educational factors, were also recognized as possible foci of activities.

A rather unexpected result was the lack of discrete sectoral profiles. With only minor exceptions, the activities seemed to form a common pattern and, consequently, a common paradigm for the sectors. The main features of the prevention paradigm in each sector were a focus on risk factors and on individual patients/clients, and a sort of professional strategy. The fact that the groups remained heterogeneous as far as professions or the actual working sectors were concerned proved to be unimportant from the perspective of the results.

However, given several unifying factors, the similarities in interventions might not be surprising. Training organized by the project and wide distribution of the national strategy provided the same basic information to everybody. Nevertheless, in the national strategy even sector-specific challenges were recommended. Further, client-centred care giving is a common mode of professional culture in the field of public services.

The conclusion that for all topics and all actors there may be a common set of interventions – “a multimeethod approach” – may also be a practical necessity owing to the common assortment of methods available. In addition, the data used in this study were more about collaborative unit plans than personal professional ideas. A more person-focused study is needed to confirm the nature of professional paradigms in different professions. A wide recognition of the risk factors involved presumably increases the effectiveness of certain essential interventions in suicide prevention. At the same time, it means neglecting the potentials of the unique foci and modes of intervention presented by the different roles of the professions and sectors in society. So opportunities for developing views of prevention broader than the “clinical paradigm” may fail to be introduced.

The study produced an encouraging finding, in accordance with the previous studies, concerning the feasibility of the model. Using the viewpoints embedded in the model the action plans could be differentiated, and the structure of suicide prevention disclosed, described, and interpreted. The results may be interpreted according to criteria relevant to prevention theory and prevention paradigms characterized. Proportions of different views could be compared. Activities could be compared with theoretical models (11, 13). In addition, a further mode of practical characterization – a typology – could be formed. The coding frame is, however, conceptual and the analysis is based on interpretation. This means that coding tends to “overinterpret” the data: many viewpoints revealed by the model are only implicit in the data. This suggests, for example, that the respondents were not necessarily aware of the theoretical underpinnings of their plans. This is, however, a facet of the viability of the model: it helps to recognize theoretically essential features in practices. All in all, the model proved worth of further elaboration in connection with research, practical planning, and education.

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