

# Organizational→ Diagnosis of Churches

The Statistical Development of the "Natural  
Church Development" Survey and its Relation  
to Organizational Psychology

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# 1 Introduction

More than ten years ago a method for surveying the strengths and weaknesses of churches had been developed by the Institute for Natural Church Development (Germany). Today's version of this survey (which is now being used worldwide) arose from a variety of early forms.

The first version, which is more widely used, was published in 1991 with the title "Der Gemeinde-Test" ("The Church Test") (Schwarz, 1991a). Since 1996 there has existed a new and completely revised survey (the "Church Profile") which is now used to make Church Profiles in the context of Natural Church Development (NCD) (Schwarz, 1996).

Because of the worldwide distribution of today's version, many people are asking for the theological, sociological and statistical background of the questionnaires. In this paper the sociological background of the Church Profile will be explained, and how it is related to organizational theory; in addition, the statistical procedure of the development of the NCD survey will be presented. The theological background, however, can be found in the book "Paradigm Shift in the Church" (Schwarz, 1999).

The starting point of this research was Germany, and therefore a "German perspective" will easily be identified in this paper, especially with regard to the bibliography used. All quotes from the German bibliography were translated by the author. The translation of the technical terms was not easy in all cases, but it is hoped it will nevertheless communicate.

## 2 Organizational diagnosis and organizational development

This section will present the history as well as the current discussion of organizational diagnosis. We will try to define the term "organizational diagnosis" and the term "organizational development" which cannot be separated from the concept of organizational diagnosis.

### 2.1 History

To understand organizational diagnosis and development, it is important to know something about their history. Today's approaches have developed predominantly from four different sources (Cummings & Huse, 1989).

The first major source is the Lab-Training (Laboratory Training) which has the "T-Group" at its center: a small, unstructured group in which the participants learn about relationships, leadership and group dynamics. The beginning of the Lab-Training was seen in summer 1946, when Kurt Lewin and his co-workers at the Research Center for Group Dynamics of the Massachusetts Institute of Technology (MIT) were asked by the Connecticut Interracial Commission and the Committee of Community Interrelations of the American Jewish Congress to train their management. For this training, the first T-Group was formed. On the basis of the experiences made here, the National Training Laboratories (NTL) were founded in Bethel/Maine (Morrow, 1967). In the fifties, NTL began to extend their T-Groups to serve secular companies. Union Carbide, Esso Standard Oil and General Mills were the first companies where this concept was used. It was also in these companies where the term "organizational development" was first used in the work with T-Groups.

The second source is the so-called Survey Research Feedback: Lewin has to be mentioned again here with his Unfreezing-Moving-Refreezing model (1951), and Rensis Likert who developed the Likert Scale (French, 1985). Likert carried out several attitude surveys in companies and researched the effect of the feed-back of gathered data in different situations. So feed-back became an important method of organizational development.

The third source is the Action Research approach which nowadays is an essential constituent of most organizational development projects. The social scientists Collier, Whyte and again Lewin developed this method in the forties. It starts with the gathering of data within an organization ("research"). The data is analyzed, and together with the co-workers of this organization, solutions are developed and implemented ("action"). Then the progress is assessed in a new research phase. Very often, this will continue as an on-going process.

Last but not least, the efforts of the Tavistock Institute in London have to be mentioned. Here, several approaches to improve the productivity and, at the same time, the quality of life at work were developed in the fifties (Rice, 1958). The term "socio-technical systems" was used here for a cluster of methods which took into account both the technical and the human

side of an organization. This approach still influences organizational development concepts today and, for instance, can be found in the quality circle approach.

## **2.2 Definitions**

### **2.2.1 Organizational development**

Since there isn't any uniform understanding of organizational development, innumerable and various, partly contradictory definitions are found in the literature. It isn't easy to gain a clear picture, particularly since organizational development is far more a group of methods than a sharply defined procedure.

Margulies and Raia (1972) offer a definition which is so broad that it could contain everything from market research to industrial espionage. According to their definition, organizational development consists of the "collection of data, a diagnosis of the organization, and active intervention" (p. 287).

Zink (1979, in Gebhardt, 1989) gives a definition of organizational development which "reflects today's state of the art" (Gebhardt, 1989, p. 289): Organizational development is the combination of all approaches "which improve the performance of an organization and the co-operation between organizational groups, and make the work conditions more satisfying for all individuals - by changing the attitudes and the behaviour of individuals and groups, and by changing the organizational structures and technologies." (p. 294)

This definition implies that the co-workers and the organization have a mutual interest in the same goals and that their common fulfillment is, in principle, possible. It starts out from the assumption of the "Happy Case" (Gebhardt, 1989, p. 197) - but this "Happy Case" is "neither the starting point nor the result of empirical findings" (Gebhardt, 1989, p. 189). In reality, there are a lot of conflicts of interest here which are not made an issue or are even covered up. There is a danger that organizational development can become an instrument of power misuse by the management.

Cummings & Huse (1989) see organizational development from the viewpoint of system theory and define it as "a systemwide application of behavioral science knowledge to the planned development and reinforcement of organizational strategies, structures, and process for improving an organization's effectiveness." (p. 1). Therefore organizational development always concerns a whole system, and parts of the organization cannot be viewed in isolation - an assertion which is not contradicted. In addition, Cummings et al. stand up against technical approaches which are purely related to business management or engineering, and confine themselves to the field of social sciences.

The positive aspect of this approach is the focus on micro-concepts such as leadership styles or group dynamics and on macro-concepts such as the relationship between an organization

and its environment; the difficult aspect is the limitation of an interdisciplinary field to a single area.

In the following, we will define - under consideration of the definitions mentioned so far - organizational development as the deliberately and consciously controlled change ("planned change") of an organization from a current status to a desired status in the future.

Organizational development will be understood as a long-term and participative process which shall help the organization to become more effective and flexible so that it can meet the challenges presented by internal and external alterations. Additionally, organizational development aims to humanize the working conditions and reveal the personality of the co-workers of an organization.

The contribution of organizational psychology to organizational development lies primarily in the examination and development of the behaviour of people in organizations, particularly in the interactions between individual - task, individual - individual, individual - group, and individual - organization.

### **2.2.2 Organizational diagnosis**

The prerequisite for organizational development which - as planned change - represents an intervention, is a diagnosis of the organization. According to Cummings & Huse (1989), organizational diagnosis is a co-operative process between the members of an organization and the change agent, in order to collect information, to analyze it, and to pull conclusions from this data for action planning and intervention. It can deal with specific problems (problem-oriented) or with the effectiveness of an organization in general (development-oriented). Organizational diagnosis helps to understand an organization systematically so that adequate interventions can be developed as problem solutions.

From a psychological perspective this definition is too broad (e.g. it could also refer to the economically oriented analysis of the cash flows within an organization). Brandstätter (1977) gives a purely psychological definition: "Organizational diagnostics is the scientific and systematic representation of the procedures of psychological description and psychological analysis of the sociological characteristics and the specific sociological problems of an organization, as well as the forecast and the assessment of individual and sociological consequences of organizational interventions." (p. 44) Psychological organizational diagnosis is therefore part of an extensive system analysis since an historical, economical or technical analysis would also be possible.

Brandstätter posits a narrow relation between organizational theory and organizational diagnosis since the selection of the variables to be measured presupposes a formulated theory. Inadequate theories lead therefore to inadequate questions and surveys.

Alderfer (1977) stresses the importance of the feedback of the data of an organizational diagnosis in his definition and doesn't see organizational diagnosis as the only prerequisite for organizational development but already as part of the change process. Since the activities of an

organizational diagnosis aren't usually constituent of organizational activities, the diagnosis already indicates change. Every phase of the diagnostic process has the tendency to cause change. The feeling that everyone has a common destiny in the organization can be strengthened as a result of the interaction which is implied by the gathering of data. According to Alderfer, the result can be a reduction in the estrangement between the employees and a stimulus for change. In addition, the organizational diagnosis obliges the organization to give attention to the results of the examination.

The purpose of an organizational diagnosis for Alderfer is "to find out whether change seems desirable if there is an understanding of the system accepted by all." (p. 44). Here, the primary objective in the gathering of data is to get valid information about the experiences of the members within the system.



### 3 The current discussion

In this paragraph we will present organizational development and diagnosis separately because the current discussion includes different areas: For organizational diagnosis, it is primarily methods which are considered, while for organizational development, more basic questions are discussed.

#### 3.1 Organizational development

##### 3.1.1 Structural and personal approach

The distinction between the structural and the personal approach is already classic in organizational development. The latter starts out from the assumption that individual development is the primary motor for social and organizational change, and therefore the standards and set of values of the members of an organization must be changed (in organizational development). The structural approach, however, sees the change in attitudes and behaviour of the members as a result of structural change. It is then primarily about the extension of responsibility and possibilities to act (Gebhardt, 1989).

Today, one starts out from the assumption that neither the personal nor the structural approach alone can cause extensive change (e.g. Gebert, 1989; Slesina & Krüger, 1978; Wübbenhorst & Staudt, 1982). While the problem of transfer (implementation of the learned skills and behaviour in everyday life) occurs with the personal approach, the structural approach offers few possibilities to change behaviour practiced for a long time or to create acceptance of the measures of change. The solution can be seen in a combination of both approaches and therefore in the application of business management knowledge as well as social science interventions.

The combination of the structural and the personal approach is also demanded by the interdependence of person and organization: "An individual is never completely included in a social system, but always only with a 'part' of its personality" (Dienstbach, 1972, p. 36). Therefore the differentiation made between sociology as theory of social systems on the one hand and psychology as the theory of personal systems on the other hand is questionable. Sievers (1977, p. 19) states that "interpenetration" is the reason for this necessary combination of the two aspects.

##### 3.1.2 The "scientific character" of organizational development

The problem that organizational development isn't an inferred theory in the scientific sense but rather a "label" behind which a number of various strategies, methods and objectives are hidden, was already touched on in the section "definitions". As a consequence, there is a lot of criticism in the current discussion that many statements which organizational development

experts make are not proven and need to be tested scientifically. Here are a few examples of such unproven statements:

- "Organizational development and change is more easily accepted if people have the possibility to participate."
- "Organizational development must start at the top management level."
- "Change follows the 3 phases of Kurt Lewin (1951): Unfreezing, moving, freezing."

In more than 200 articles on organizational development, quantitative data (Kahn, 1977) is found only in 25% of all cases. Whole bunches of variables ("T-group", "Managerial Grid", "organizational development" ...) are examined as independent variables without being differentiated and examined more exactly. Only few studies relate to the differences between different methods of intervention in organizational development.

Kahn further criticizes that the exploration of organizational development isn't related sufficiently to organizations in general. The literature is too autobiographical, and relates very often only to the experiences of the change agents or training participants. "They recount episodes from training sessions, and these stories often have nothing to do with organizations." (p. 291)

These points make clear that organizational development is not a scientific sub-discipline of psychology or another science, but an application of it. Of course, such an application should be founded scientifically, but here the dilemma between research and applied science is particularly visible. Solutions such as the action research approach remain methodically insufficient if one follows scientific criteria (Blackler, 1989). There are limits to the scientific nature in fundamental research since the matter is very complex; however, these limits aren't of an absolute nature, but rather a question of further research. It is already becoming more difficult in the area of field research: Besides the feasibility, because of the interests of an organization, the evaluation of organizational development interventions meets with large methodological problems (experimental design, control group etc.).

However, if one wants to understand psychology as a social science, then we have to accept: "The question has priority before the method. An important question may not be neglected because the available methods are insufficient." (Brandstätter, 1977, p. 49). One will have to look for other, nevertheless acceptable ways, as long as there aren't any better alternatives.

### **3.1.3 The concept of man in organizational development**

A work like this which deals with organizational development in churches must also deal with the question of the concept of man behind organizational development, since churches are normative organizations (Winter, 1977) and make explicit statements concerning their own conception of man.

Gebhardt (1989) mentions essential elements which outline the conception of man standing behind organizational development: This conception is able to integrate individual differences

between people and their development over time. Behind it stands the picture of the "complex man" (Zink, 1979, p. 1) which consists of a series of single suppositions: This complex man is able to learn and to develop, he is multi-motivated and influenced by experiences and situations. He is seen as a "wholistic person" (Gebhardt, 1989, p. 195) who cannot be divided into isolated components. It is also taken into account that there is not just the one man, but that everybody has an individual personality.

Doppler (1987) mentions further components of the conception of man in organizational development: A person is seen as a responsible subject for whom changes and crises are chances for personal development. Trust and the "principle of hope" are basic elements of organizational development. They make it possible for individuals in organizations to discover new ways and solutions, and to go through the difficult and long processes of learning, trial and error and development.

## **3.2 Organizational diagnosis**

### **3.2.1 Situation-oriented approach**

The measuring of organizational structures is often the basis for decisions with far-reaching consequences for organizational development. The quality of such decisions depends on the quality of the underlying measurements and data. These decisions are based on images of the reality. If the image isn't correct, false assessments and therefore false decisions are made.

Kubicek and Welter (1985) reduce differences between real organizational structures to differences between the situations in which the organizations exist. This must be taken into account for an organizational diagnosis if the behaviour of an organization's members is influenced by changing the structure. The desired new structure has to fit the situation the organization is in, otherwise it will not change the behavior in a way that helps to reach the organization's goals. To be able to make such an organizational diagnosis, several prerequisites must be taken into account (Kubicek and Welter, 1985):

- an operationalized concept of the organizational structure
- an operationalized concept of the situation
- an operationalized concept of individual behavior in organizations
- a theory about the effects of the situation on the organizational structure and the combined effects of the situation and the structure on individual behaviour and efficiency

Therefore, Kubicek and Welter insist that the characteristics of the organizational structure must be defined as variables and they abstain from creating types for certain constellations of characteristics.

### 3.2.2 Phenomenological approach

While the Comparative Organization Research starts with the assumption that organizational structures are objective and can be described likewise by any trained observer (e.g. Weber, 1922), Kubicek et al. (1981) postulate that organizations are perceived and created by different perspectives within social interactions: "Every description of the organizational structure is therefore only a description of a certain perspective. (Kubicek et al. 1981, p. 95).

They further say: "An organization lives through the processes of interaction and communication; it is created by these processes, it is these processes. (Kubicek et al., 1981, p. 95)

If different persons describe the same organization in a different way, then the reason lies in different perceptions and therefore in different realities. "Organizational rules and the social reality of organizations are always socially constructed and can only be reconstructed by seeing different perspectives if essential references to the reality are not lost". (Kubicek & Welter 1985, p. 28).

Also the various perspectives resulting from different roles have to be taken into account:

- from the perspective of the change agents or organizational leaders with their normative goals and intentions
- from the perspective of the persons affected with their ideas of how the organization should look and function

Massarik (1983) also represents a phenomenological approach. He starts with the assumption that there is not only a single organizational structure. The organization and its structure is created by the individual perspectives of the organization's members. As a consequence, he asks the people in his interviews to draw subjective organizational charts. Here the focus can be on the form, the structure of the organization or the organization as a whole. From the following interviews, differentiations can be made.

The Church Profile used within Natural Church Development is based on this phenomenological approach, because in most cases it is not the hard facts, but how the church members perceive these facts that influences their behaviour at church.

## 4 Methods of organizational diagnosis

How does organizational diagnosis work? Which methods are used, and which problems can occur? These questions shall be dealt with in this section.

### 4.1 Process of organizational diagnosis

There are no uniform rules for the process of organizational diagnosis; however, certain phases can be observed in most organizational diagnoses (Cummings & Huse, 1989; Franke & Kühlmann, 1989):

At the beginning is the introduction phase: Generally, an organizational diagnosis starts with a member of the organization (usually one of the decision-makers) seeing a deficit in the organization. As a consequence, he contacts an external or internal change agent. Then it has to be clarified first which targets the organizational diagnosis shall accomplish and which questions must be answered to attain these targets. Who will profit from the diagnosis? Who will be allowed to participate? The roles and the relationship between the change agent and the client have to be negotiated and agreed upon in a contract. Already in this phase a pre-understanding about the organization arises at the diagnostician.

The initial survey phase follows the introduction phase: Here initial information is gathered by using interviewing techniques which are not very structured. Their goal is to define what a custom-tailored survey should look like.

This is what happens in the planning phase: Existing surveys can be used or adapted, or new surveys can be developed in this phase. Considerations about the data processing and the evaluation must be carried out here.

The main survey can then be executed. This will result in the data processing phase: Here it has to be checked whether all instructions for the execution of the survey have been observed; the data is evaluated, and the results will be related to the organization's goals in the interpretation phase. If necessary, additional data will be gathered. The results are summarized and presented to the members of the organization. This represents an essential point of every organizational diagnosis for 3 reasons:

- All organizational members have a right to know what has happened to their data.
- It is important to let them participate in this process because changes can't be made without them.
- The feed-back of the data alone will result in change.

## **4.2 Diagnostic tools used in organizational diagnosis**

Generally, all diagnostic tools used within an organizational diagnosis should fit the criteria of the Classical Test Theory (Brandstätter, 1977; Franke & Kühlmann, 1989). But there are only a few tools which fulfill this requirement. That's why in practice, very often, several tools are used in combination. The most important diagnostic tools are:

### **4.2.1 Observation**

Brandstätter (1977) sees here the advantage of direct access to facts. The observation is relatively flexible, but it has the disadvantage that it can only be standardized in a limited way, so that it is only possible to observe present behaviour, and not past behaviour. There are a lot of well-known observer errors (e.g. Roth, 1987). An observation is good for initial research, however, it shouldn't be used without supplementary procedures.

### **4.2.2 Questionnaires**

Here, a distinction must be made between the surveying of key people and the surveying of normal organizational members (Kubicek et al., 1985). The first alternative means less work, with the second, there is the problem of selecting the right people.

Cummings & Huse (1989) mention easy quantifiability as the main advantage of questionnaires. In addition, it is a cheap procedure. Disadvantages are typical answer tendencies, over-interpretation of data, and the lack of possibility of giving people individual attention. It is also easy to forget important areas of diagnosis. Brandstätter (1977) mentions that questionnaires are highly suitable for tricky questions because of their anonymity.

### **4.2.3 Field experiment**

This possibility of data gathering is hardly mentioned in the literature (an exception is Brandstätter, 1977). If one thinks about the methodological implications of this approach (experimental group and 3 control groups), it is very clear why. Only with this approach, however, is it possible to measure change directly!

### **4.2.4 Interviews**

Also here, the first decision to make is to define who shall be interviewed: All employees, some of them, or only executives. The advantages of interviews can primarily be seen in their adaptability (Cummings & Huse, 1989). Interviews also help to build a trustful relationship to the client, and enable the gathering of qualitative data. A disadvantage is that interviews are relatively expensive, and besides coding and interpretation problems, they come with a series of bias possibilities.

#### 4.2.5 Group discussions

Group discussions are frequently used (Franke & Kühlmann, 1989), but, however, are exposed to even larger problems than are interviews if one uses them for the aim of data gathering. It makes more sense to have group discussions in the context of data feed-back and interpretation, which may result in another diagnostical phase.

#### 4.2.6 Non-reactive measures

Non-reactive measures are, for instance, the analysis of documents such as organizational charts and job descriptions. These measures are "objective" and there is no danger of biases. They usually have a high face validity, too. Unfortunately, it isn't always easy to interpret these measures adequately (Cummings & Huse, 1989). Kubicek et al. (1985) find it problematic that these data are very often old data; in addition, comparisons between organizations are hardly possible since they define their rules in many different ways.

### 4.3 Statistical quality criteria

Seifert (1978, p. 30) gives an overview about the frequency of the use of certain statistical methods to control the quality of diagnostical questionnaires used in organizations:

Statistical procedure	Frequency of use
Item analysis	226
Test of validity	180
Test of reliability	162
Factor analysis	109
Reproducibility coefficient	30
Coeff. of Scalability	7
Other procedures	13
No information	136

These numbers, however, prove only the good will of the test designers; in practice, the statistical quality criteria usually aren't fulfilled or have only been tested in a very general way (Franke & Kühlmann, 1989). Brandstätter (1977) doesn't see any problem with the reliability of organizational diagnoses if the score of the organization is composed of the mean of many respondents' answers. That is also what Lienert concludes (1989). But in this case it is even more important to define the measured categories very precisely, to train the diagnosticians, and to find the right time for the diagnosis. Generally, a re-test is a good way to check the reliability - if nothing has changed regarding the situation to be tested. But that will normally not be the case with organizations. If there are two parallel indicators, a parallel test could be used to test the reliability, but if this is not the case, the only way that remains is a test of the internal consistency (Kubicek et al., 1985).

The validity often cannot be proved and therefore is frequently accepted as given (Brandstätter, 1977). Validity tests are mostly carried out by using an external criterion or by a comparison of extreme groups (Kubicek et al., 1985). Besides this, a test of the construct validity can be done using a factor analysis.

Brandstätter (1977) comes to the following conclusion in this difficult situation: "It would be unrealistic to allow only such procedures which satisfy the high claims of reliability and validity since no proven standard procedures are available for many diagnostic problems. And: "The best way that almost guarantees good diagnostic results is a combination of holistic, intuitive observations and specialized, precise diagnostic tools." (p. 48)

Franke & Kühlmann (1989) prefer to use new criteria for the quality control. These are deduced from the special characteristics of the "client" (p. 647):

- Simplicity in use and evaluation
- Acceptance
- Anonymity
- Adaptability to special characteristics of the organization
- Use of time, finances and staff
- Amount of additional information

#### **4.4 Selection of the sample**

Before an organizational diagnosis, it must be decided who and how many members of an organization will be questioned. A representative survey result is not automatically guaranteed by questioning all members: Every employee is, depending on his function and position in the hierarchy, informed about his organization to a different extent. This problem of various weightings of the individual employees cannot be solved by a coincidental sample. A stratified sample seems to make more sense: Here, the respondents are chosen randomly from various subgroups of the organization (Cummings & Huse, 1989).

Aiken & Hage (1971) suggest the following strategy: All executive directors and all department heads shall be selected, and in addition, from departments with less than ten people half of the employees, and in departments with more than ten people a third of the employees shall be selected. Maintenance personnel will not be questioned. Aiken & Hage say that all important decision makers must be included to get a complete and realistic picture of the organization, while the people surveyed on the levels of less responsibility can be selected randomly if smaller departments are represented adequately.

#### **4.5 Indicators**

If an organization is to be examined, the questions of interest must be "translated" into indicators, for instance, items on a questionnaire. These subjective or objective indicators can be clustered according to their definition, the character of the diagnostic tool they are part of,



the aggregation niveau, and the level of the statistical quality criteria (Seifert, 1978). Seifert categorizes indicators of organizational diagnosis in terms of what they are measuring:

- Satisfaction and motivation of the members of an organization
- Attitudes of the members of an organization (human relations, values, ...)
- Personal characteristics of the members of an organization
- Job conditions, roles and job descriptions
- Leadership behavior
- Internal and external group relations
- Organizational structure
- Environment of the organization
- Organizational effectiveness and efficiency

This example of a possible categorization of diagnostic indicators in organizations gives a good overview of the variety of aspects of an organization. What it doesn't do is to represent a complete list of all conceivable classification possibilities; bearing in mind all the different types of organizations, such a list is almost impossible to create. In churches, for instance, completely different areas are important compared to administrative or industrial organizations.

## 5 Empirical development of the NCD survey

### 5.1 Introduction

The Natural Church Development (NCD) survey which is used to determine the "Minimum Factor" is a standardized tool: The data gathering is done through reliable and valid questionnaires which are based on the "phenomenological approach" of organizational diagnostics. (For further information about the NCD concept, see Schwarz, 1987, 1990, 1991a, 1991b, 1996, 1999, and Schwarz & Schalk, 1998.)

There were many stages in the development of the questionnaires for the church profile: Interim versions were developed on the basis of theological suppositions and knowledge in church growth and then tested again and again - initially not according to scientific criteria. Since the work of the Institute for Natural Church Development - founded in the 80's - was originally theologically oriented, the need for a sociologically and scientifically based survey was only realized in the course of time. In 1993 the questionnaire became scientific within several phases and was revised on the basis of the classical test theory so that today it satisfies recognized criteria like reliability and validity.

A first study with a sample of 334 respondents from 14 German churches for the whole study and 134 churches for an aspect of the study was carried out in the period from 1991 to 1993 at the Julius-Maximilians University of Würzburg (this study is presented here); with a larger sample of 3,624 respondents from 201 German churches the results received in the first study have been verified by the Institute of Natural Church Development; subsequently, the data of altogether 1,188 churches (34,314 respondents) from 32 countries was analyzed, and the survey was standardized for other languages. In the meantime, the Institute for NCD has gathered data from more than 4,000 churches worldwide (October 1999), and is continuing to analyze these data and to update the national standardizations. The statistical methods shown here have been repeatedly used in the these follow-up studies.

In this paper, the exact results of our first study (which is based on a former questionnaire that has now been modified) are published. The reason why only this "old" data is presented here, but not the results of the follow-up studies, is simple: The data of the international samples gathered in the follow-up studies is used for the computing of the church profiles and for the standardization of these profiles. Since this part of our research has been financed privately (while the first study was financed by the University of Würzburg), and since the sale of the church profiles is the only way for the Institute for Natural Church Development to finance the high costs for research, these data are "protected knowledge" which isn't publicly accessible. Otherwise it would be possible for everybody to do Church Profiles without the software of our Institute. (Therefore, the formula for our Church Profile which is used by our software program is encrypted and protected by a so-called "dongle".) Nevertheless, this report gives enough details for everyone to see how we implemented the statistical development of the questionnaire. The hypotheses confirmed here could be confirmed in the follow-up studies, too.

## 5.2 Description of the questionnaires

It was the target of the study presented here to test if the questionnaires used by the Church Profile (Schwarz, 1991a) fit test criteria such as reliability and validity and to improve the questionnaires if they didn't meet the requirements.

Starting point was the 1991 version of the "lay worker's questionnaire" and the "pastor's questionnaire" (see appendix). Because of the sample available we initially examined primarily the questionnaire for lay workers.

The questionnaire is composed of eight scales ("quality characteristics") which consist of a different number of items each, mostly formulated positively: The scale "Goal-oriented Pastor" (today: Empowering Leadership) has 6 items, "Gift-oriented Ministry" has also 6 items, "Passionate Spirituality" is composed of 13 items, "Functional Structures" of 10 items, "Inspiring Worship Service" of 10 items, "Holistic Small Groups" of 5 items, "Need-oriented Evangelism" of 10 items, and "High Love Quotient" (today: Loving Relationships) of 10 items.

Most of the items have to be rated on a 5 point scale (items 21-70), some on an alternative scale or on a 3 or 6 point scale.

The construction of the questionnaire was carried out in the course of some years from an early form which had been developed because of theoretical considerations and had been arranged under inclusion of international research results (e.g. McGavran, 1990, English original of 1980) without attention to test-theoretical points of view. This early form had been used with 250 churches and had been further developed following face validity. That is how the 1991 version which is tested here was developed.

The instructions for the questionnaires are enclosed in the appendix.

## 5.3 Hypotheses

Four different aspects will be tested. The first two aspects relate to the construct validity, the third aspect relates to the reliability and the last aspect to the criterion validity.

**Hypothesis 1: The eight quality characteristics are measured in the questionnaire on eight scales.**

A number of items will be regarded as a scale if the prerequisites for a Likert scale can be proved. Since the questionnaire originally had been developed in a non-scientific way, and since the items had been assigned to the eight scales following face validity, it is necessary to test if the items do belong to their scales because of a statistical relationship. This would be a prerequisite for the agglutination of the items as done in the survey.

**Hypothesis 2: The eight quality characteristics are provable empirically in the questionnaire and therefore can be reproduced by a factor analysis. The factors must not be independent since this is not demanded by the theory either (Schwarz, 1993).**

Here it will be tested if the eight constructs (quality characteristics) are valid and can be shown in the empirical data, and if the theoretical background of the survey fits with the empirical findings or if the clustering and composition of the items was done arbitrarily.

**Hypothesis 3: The questionnaires make the reliable acquisition of the measured characteristics possible.**

Only a reliable questionnaire allows for the obtaining of results that can be used as a starting point for successful interventions. Therefore it seems particularly important to examine this test characteristic (and to improve it if necessary), since without correct diagnosis no effective church development is possible.

**Hypothesis 4: The score of the eight quality characteristics separates growing churches from non-growing churches significantly.**

One practical use of the Church Profile is to identify factors that are responsible for the growth, stagnation or decline of a church. This study will test this theoretical hypothesis, but without the claim of clarifying cause and effect.

## **5.4 Method**

### **5.4.1 Hypothesis 1:**

To test whether a number of items form a Likert scale, we will compute the part-whole corrected discriminatory power of the items of each sub-scale (Boos-Nünning, 1972). By doing so it can be tested how well an item represents the respective scale. It will be sufficient for a Likert scale if  $r_{it} > 0.3$ . Because of the complexity of organizational characteristics (which will lead to more heterogeneous scales), it seems to be appropriate to choose this criterion which, however, is nevertheless different from bare significance. With the sample used here, significance at the 1 percent level would be reached with  $r_{it} > 0.15$ .

According to Tucker (1946, in Lienert, 1989) there are optimal chances both for the validity and also for the reliability of a test if the coefficients of the discriminatory power vary approximately from 0.3 to 0.8. Therefore,  $r_{it} > 0.3$  also offers itself as lower limit.

However, this value shall represent only a minimum limit in checking this hypothesis. In order to improve the questionnaire an optimal value would be targeted. The hypothesis will be regarded as true if the discriminatory power is higher than 0.3. Items with lower coefficients will be replaced or discarded.

### 5.4.2 Hypothesis 2:

We will extract eight factors - according to our theory - using the principal component analysis (Varimax rotation). The following criteria will be used to check the hypothesis:

- The communality  $h^2$  shall be  $>0.2$ ; this means that the variance explained by the item shall be at least 20%.
- The factor loading purity shall be determined by the Fürntratt criterion ( $a^2/h^2 > 0.5$ ). This will guarantee that more than 50% of the communality is caused by the loading on one factor. Items that do not fit this criterion will not fit the hypothesis.
- All items of one scale shall load on the same factor.

Hypothesis 2 will be regarded as proved for those items that meet all 3 criteria.

### 5.4.3 Hypothesis 3:

The internal consistency will be tested separately for every scale of the Church Profile according to the formula of Cronbach ( $\infty$ ).

Other formulae to check the reliability seem to be inappropriate:

- The formula of Spearman-Brown presupposes that  $s_1 = s_2$ . If this isn't given (and this has to be suspected), the formula over-estimates the reliability. Therefore it shall not be taken into account here.
- The Formula 20 (KR 20) of Kuder and Richardson presupposes equal item intercorrelations and homogeneity (Lienert, 1989) and therefore shall not be used either, so that a sure reliability estimate can be achieved.
- Cronbach's  $\infty$  only presupposes  $\tau$ -equivalence and represents a "lower bound" of the reliability (Kristof, 1983.) Therefore it is the most conservative value for the reliability and the value which will be used in this study.
- The computing of a test-retest reliability doesn't seem adequate either for an organizational diagnosis since the data gathering already represents a kind of intervention which no longer allows a comparable measuring *per se*. Moreover, in many churches a program of church development was implemented after the Church Profile.

According to Lienert (1989), "surveys with a reliability of  $r_{tt} \geq 0.5$  can be used" (p. 309) for the examination of group differences (as is the case when examining churches). Therefore this value shall be valid as the criterion for the confirmation of the hypothesis even if in the case of an improvement of the Church Profile, a clearly higher value is the goal.

Hypothesis 3 will be regarded as proved if all scales have a consistency of at least 0.5.

#### **5.4.4 Hypothesis 4:**

This hypothesis will be tested by comparing two extreme groups (significant differences between the mean values of growing and non-growing churches), and by the correlation with the external criterion "growth" (if this criterion is normally distributed) (Lienert, 1989). So it will be possible to show if the quality characteristics are related to the quantitative aspect of church growth. Statements on cause and effect will not be possible using this method.

### **5.5 Description of the sample**

The examination of the questionnaire is based on data from 14 churches, a total of 334 respondents were questioned. The data was gathered by the Institute for Natural Church Development in the period from 1991 to 1993. The people who were asked to fill in a questionnaire should be in the center of church life; they should have a regular task in their church and be a member of a small group. Data like sex and age of the examined persons weren't collected since this didn't seem to be a relevant question for the study.

In order to test the fourth hypothesis, the size of the sample (14 churches) didn't appear to be large enough. Therefore the data of a total of 134 churches which had been examined by the Institute for Natural Church Development with the same questionnaire was used here. This data had previously been collected, and the churches' scores on the 8 quality characteristics were used, as well as the information about whether these churches have been growing quantitatively or not (growth was defined as an increase in the number of worship service attenders by at least ten per cent within the last 5 years).

The denominational background of the churches was mainly protestant ("State Church" and many different "Free Church" denominations), but some Roman Catholic churches have also been involved.

### **5.6 Results**

#### **5.6.1 Hypothesis 1: Likert scale**

19 of the 70 items did not fulfill the criterion that the discriminatory power coefficient must be higher than 0.3 and are therefore not compatible with the hypothesis. Here is a list of those incompatible items (the number of the items corresponds to the number in the original questionnaire; see appendix):

- Scale 1 (Goal-oriented Pastor): 4, 61, 65, 66 (4 of 6 items)
- Scale 2 (Gift-oriented Ministry): 39 (1 of 6)
- Scale 3 (Passionate Spirituality): 6 (1 of 13)

- Scale 4 (Functional Structures): 1, 2, 8 (3 of 10)
- Scale 5 (Inspiring Worship Service): 36, 54 (2 of 10)
- Scale 6 (Holistic Small Groups): 3, 29 (2 of 5)
- Scale 7 (Need-oriented Evangelism): 11, 51 (2 of 10)
- Scale 8 (High Love Quotient): 12, 24, 55, 70 (4 of 10)

The individual discriminatory power coefficients are indicated in the tables 1-8 on the following pages; the items that didn't fulfill the criterion are in bold print.

**Tab. 1: Scale "Goal-oriented Pastor": Part-whole corrected discriminatory power coefficients of the items on the original questionnaire. Figures in bold are below the criterion  $r_{it}=0.3$ .**

Item No.	$R_{it}$ corr
4	<b>0.002</b>
58	0.349
59	0.378
61	<b>0.112</b>
65	<b>0.272</b>
66	<b>0.195</b>

**Tab. 2: Scale "Gift-oriented Ministry": Part-whole corrected discriminatory power coefficients of the items on the original questionnaire. Figures in bold are below the criterion  $r_{it}=0.3$ .**

Item No.	$R_{it}$ corr
14	0.483
37	0.695
39	<b>0.167</b>
40	0.551
42	0.613
45	0.653



**Tab. 3: Scale "Passionate Spirituality": Part-whole corrected discriminatory power coefficients of the items on the original questionnaire. Figures in bold are below the criterion  $r_{it}=0.3$ .**

Item No.	$R_{it}$ corr
3	0.489
6	<b>0.177</b>
20	0.547
21	0.622
22	0.481
28	0.583
33	0.419
34	0.402
35	0.560
41	0.522
43	0.641
44	0.544
60	0.540

**Tab. 4: Scale "Functional Structures": Part-whole corrected discriminatory power coefficients of the items on the original questionnaire. Figures in bold are below the criterion  $r_{it}=0.3$ .**

Item No.	$R_{it}$ corr
1	<b>0.192</b>
2	<b>0.146</b>
5	0.380
7	0.346
8	<b>0.033</b>
17	0.373
46	0.590
47	0.497
48	0.496
67	0.356

**Tab. 5: Scale "Inspiring Worship Service": Part-whole corrected discriminatory power coefficients of the items on the original questionnaire. Figures in bold are below the criterion  $r_{it}=0.3$ .**

Item No.	$R_{it}$ corr
23	0.563
25	0.536
26	0.629
27	0.486
36	<b>0.202</b>
49	0.469
50	0.421
54	<b>0.220</b>
62	0.497
68	<b>0.254</b>

**Tab. 6: Scale "Holistic Small Groups": Part-whole corrected discriminatory power coefficients of the items on the original questionnaire. Figures in bold are below the criterion  $r_{it}=0.3$ .**

Item No.	$R_{it}$ corr
9	0.393
10	0.303
13	<b>0.196</b>
29	<b>0.267</b>
56	0.329

**Tab. 7: Scale "Need-oriented Evangelism": Part-whole corrected discriminatory power coefficients of the items on the original questionnaire. Figures in bold are below the criterion  $r_{it}=0.3$ .**

Item No.	$R_{it}$ corr
11	<b>0.267</b>
30	0.433
31	0.478
51	<b>0.242</b>
52	0.378
53	0.416
57	0.493
63	0.382
64	0.330
69	0.395

**Tab. 8: Scale "High Love Quotient": Part-whole corrected discriminatory power coefficients of the items on the original questionnaire. Figures in bold are below the criterion  $r_{it}=0.3$ .**

Item No.	$R_{it}$ corr
12	<b>0.162</b>
15	0.329
16	0.356
18	0.528
19	0.481
24	<b>0.163</b>
32	0.306
38	0.384
55	<b>0.248</b>
70	<b>0.237</b>

This partial result already shows that an improvement of the questionnaire would be desirable since some scales do not sufficiently form a Likert scale. The correlations between several items and their respective quality characteristic are too low.

### **5.6.2 Hypothesis 2: Factor structure of the quality characteristics**

A prerequisite for carrying out a factor analysis is that the variables are normally distributed. In addition, 3 times as many respondents as variables should be available (Grund, 1993). Having 70 items and 334 respondents, at least this prerequisite is fulfilled. The examination of the distribution of the variables showed that ten of the 70 items differed from a normal distribution ( $p < 0.05$ ) (item no's. 1, 2, 12, 13, 15, 16, 25, 30, 47, 58). The predominant part is normally distributed, so it seemed acceptable to do a factor analysis and to interpret the results.

The question of whether the *a priori* distribution of the items on the eight scales can be justified, should be checked using a factor analysis. The answers of the 334 respondents on the 70 items have been intercorrelated and factor analyzed. Missing data was replaced by the mean value of all the other respondents of the corresponding variable. Eight factors have been extracted using a principal component analysis with following Varimax rotation. The course of the Eigenvalues over the eight first factors is 14.43, 3.24, 2.43, 2.22, 2.02, 1.93, 1.76 and 1.65 (an overview of all Eigenvalues is shown in tab. 9). These eight factors together explain 42.4% of the total variance. 20 Eigenvalues are  $> 1$ . Due to the given structure of 8 factors we didn't take into consideration a stop criterion, such as the Scree test or the Kaiser criterion. As fig. 1 shows, such a criterion would not have been helpful because too many factors would have had to be extracted.

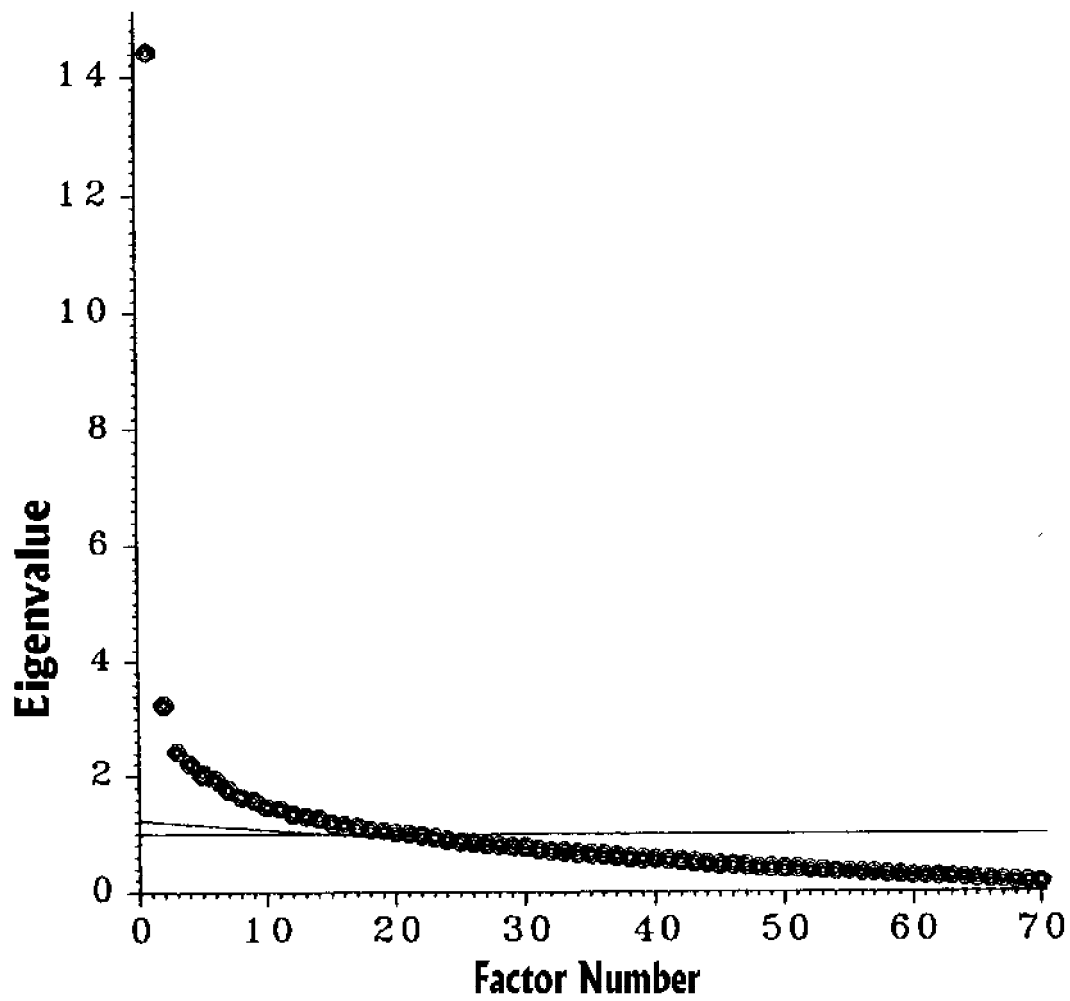


Fig. 1: Course of the Eigenvalues of the original questionnaire (70 items, 334 respondents) with Scree test and Kaiser criterion (Eigenvalue >1).

Table of Eigenvalues

Factor	Eigenvalue	Total of Eigenval.	Var. of Difference	of Eigenvalues Percent	Cum.Var.	Chi-squares	Degrees of freedom	p
								(CHI**2)
1	14.433	14.433	55.567	20.619%	20.619%	9004.7	***	0.000***
2	3.239	17.672	11.194	4.627%	25.246%	5203.9	***	0.000***
3	2.427	20.100	0.812	3.467%	28.714%	4670.0	***	0.000***
4	2.218	22.318	0.209	3.169%	31.883%	4340.5	***	0.000***
5	2.022	24.340	0.197	3.888%	34.771%	4050.2	***	0.000***
6	1.930	26.269	0.092	2.757%	37.528%	3798.6	***	0.000***
7	1.762	28.032	0.168	2.518%	40.045%	3558.4	***	0.000***
8	1.646	29.678	0.117	2.351%	42.397%	3352.3	***	0.000***
9	1.588	31.266	0.058	2.269%	44.666%	3167.8	***	0.000***
10	1.463	32.729	0.125	2.090%	46.755%	2989.3	***	0.000***
11	1.438	34.167	0.025	2.054%	48.810%	2836.5	***	0.000***
12	1.342	35.509	0.095	1.918%	50.727%	2682.4	***	0.000***
13	1.299	36.808	0.043	1.856%	52.583%	2547.6	***	0.000***
14	1.268	38.076	0.031	1.811%	54.394%	2416.8	***	0.000***
15	1.184	39.260	0.084	1.691%	56.085%	2288.1	***	0.000***
16	1.149	40.408	0.035	1.641%	57.726%	2176.5	***	0.000***
17	1.121	41.530	0.028	1.602%	59.328%	2068.6	***	0.000***
18	1.066	42.596	0.055	1.523%	60.851%	1962.7	***	0.000***
19	1.054	43.650	0.012	1.505%	62.357%	1866.7	***	0.000***
20	1.013	44.663	0.040	1.448%	63.804%	1768.7	***	0.000***
21	0.994	45.657	0.019	1.420%	65.225%	1678.9	***	0.000***
22	0.967	46.624	0.027	1.381%	66.606%	1589.4	***	0.000***
23	0.935	47.559	0.032	1.335%	67.941%	1496.5	***	0.000***
24	0.893	48.452	0.041	1.276%	69.217%	1412.0	***	0.000***
25	0.853	49.305	0.041	1.218%	70.435%	1334.8	***	0.000***
26	0.835	50.140	0.018	1.192%	71.628%	1264.8	990	0.000***
27	0.813	50.953	0.021	1.162%	72.790%	1195.9	946	0.000***
28	0.798	51.751	0.015	1.140%	73.930%	1129.0	903	0.000***
29	0.771	52.522	0.027	1.101%	75.031%	1062.4	861	0.000***
30	0.765	53.287	0.005	1.093%	76.125%	999.7	820	0.000***
31	0.718	54.005	0.048	1.025%	77.150%	934.3	780	0.000***
32	0.695	54.700	0.023	0.993%	78.143%	879.4	741	0.000***
33	0.686	55.385	0.009	0.979%	79.122%	827.4	703	0.000***
34	0.686	56.071	0.020	0.951%	80.073%	774.7	666	0.000***
35	0.649	56.720	0.017	0.927%	80.999%	724.3	630	0.005**
36	0.636	57.356	0.012	0.909%	81.909%	675.4	595	0.012*
37	0.614	57.950	0.023	0.876%	82.785%	626.5	561	0.028*
38	0.589	58.539	0.025	0.841%	83.627%	581.1	528	0.054
39	0.570	59.109	0.019	0.815%	84.441%	539.9	496	0.085
40	0.565	59.674	0.005	0.808%	85.249%	501.0	465	0.12
41	0.552	60.226	0.013	0.789%	86.038%	460.4	435	0.19
42	0.538	60.764	0.015	0.768%	86.806%	420.5	406	0.30
43	0.507	61.271	0.031	0.724%	87.530%	381.6	378	0.44
44	0.488	61.759	0.019	0.697%	88.227%	345.2	351	0.52
45	0.472	62.231	0.016	0.674%	88.901%	310.6	325	0.57
46	0.466	62.696	0.006	0.665%	89.566%	290.3	300	0.61
47	0.458	63.154	0.008	0.654%	90.220%	264.0	276	0.69
48	0.424	63.578	0.034	0.605%	90.826%	235.1	253	0.78
49	0.416	63.994	0.008	0.594%	91.420%	213.9	231	0.78
50	0.407	64.401	0.009	0.582%	92.002%	192.6	210	0.80
51	0.403	64.805	0.004	0.576%	92.578%	171.5	190	0.83
52	0.379	65.184	0.024	0.542%	93.120%	148.9	171	0.89
53	0.366	65.550	0.014	0.522%	93.642%	130.9	153	0.90
54	0.350	65.899	0.016	0.500%	94.142%	114.7	136	0.91
55	0.349	66.248	0.001	0.498%	94.640%	100.7	120	0.90
56	0.330	66.578	0.019	0.471%	95.111%	85.0	105	0.92
57	0.327	66.904	0.003	0.467%	95.578%	72.4	91	0.92
58	0.301	67.205	0.026	0.429%	96.007%	58.4	78	0.95
59	0.294	67.499	0.007	0.419%	96.427%	49.6	66	0.93
60	0.280	67.778	0.014	0.400%	96.826%	40.8	55	0.92
61	0.271	68.049	0.009	0.386%	97.213%	33.8	45	0.89
62	0.262	68.311	0.009	0.374%	97.587%	27.4	36	0.85
63	0.259	68.570	0.003	0.370%	97.957%	21.5	29	0.80
64	0.246	68.816	0.013	0.352%	98.309%	14.7	21	0.85
65	0.226	69.042	0.022	0.323%	98.632%	8.5	15	0.90
66	0.217	69.259	0.010	0.310%	98.942%	6.3	10	0.87
67	0.206	69.465	0.010	0.295%	99.236%	2.6	6	0.85
68	0.185	69.650	0.022	0.264%	99.500%	0.5	3	0.93
69	0.179	69.830	0.005	0.256%	99.757%	0.2	1	0.67
70	0.170	70.000	0.009	0.243%	100.000%	0.0	0	

Tab. 9: Eigenvalues, totals of Eigenvalues, differences of Eigenvalues, percentages of variances (individual and cumulated), Chi-squares, degrees of freedom and level of significance of the Chi-squares (\*p<0.05, \*\*p>0.01, \*\*\*p<0.005) for the factor analysis of the original questionnaire (70 items, 334 respondents).

With regard to the structure of the loadings, there isn't any scale which exclusively loads on a single factor. Tab. 10 shows in detail the loadings on the different factors:

Item no \ factor	I	II	III	IV	V	VI	VII	VIII	h <sup>2</sup>
4 zp							0.297		0.320
58 zp		0.512							0.415
59 zp		0.545							0.466
61 zp		0.353							0.400
65 zp	0.468								0.436
66 zp		0.591							0.419
14 gm					0.520				0.417
37 gm						0.646			0.634
39 gm						0.502			0.347
40 gm					0.461				0.551
42 gm					0.585				0.538
45 gm					0.706				0.599
3 ls							0.341		0.386
6 ls								0.437	0.264
20 ls				0.588					0.564
21 ls				0.481					0.526
22 ls					0.669				0.567
28 ls	0.530								0.524
33 ls					0.528				0.425
34 ls	0.528								0.405
35 ls	0.462								0.520
41 ls	0.431								0.387
43 ls	0.475								0.575
44 ls		0.476							0.654
60 ls		0.380							0.504
1 zs								0.290	0.118
2 zs								-0.330	0.326
5 zs								0.451	0.378
7 zs					0.363				0.254
8 zs				-0.277					0.113
17 zs					0.354				0.393
46 zs					0.433				0.552
47 zs							0.391		0.265
48 zs					0.609				0.593
67 zs				0.439					0.397
23 ig	0.598								0.612
25 ig						0.368			0.252
26 ig	0.572								0.594
27 ig	0.520								0.437
36 ig				0.708					0.531
49 ig	0.477								0.471
50 ig	0.534								0.454
54 ig				0.499					0.344
62 ig				0.446					0.519
68 ig		0.669							0.500
9 gk								0.444	0.431
10 gk	0.428								0.400
13 gk								0.478	0.287
29 gk							0.257		0.320
56 gk							0.379		0.310

Item no.\ factor	I	II	III	IV	V	VI	VII	VIII	h <sup>2</sup>
11 be							0.498		0.356
30 be	0.278								0.274
31 be	0.582								0.505
51 be				0.449					0.355
52 be	0.406								0.386
53 be	0.362								0.354
57 be		0.512							0.524
63 be							0.435		0.434
64 be		0.438							0.358
69 be							0.545		0.390
12 hl								0.423	0.342
15 hl			0.501						0.319
16 hl			0.514						0.307
18 hl			0.673						0.550
19 hl			0.668						0.527
24 hl						0.625			0.447
32 hl								0.389	0.404
38 hl						0.401			0.408
55 hl		0.481							0.363
70 hl					0.391				0.339

Tab 10.: Factor analysis of the original test version (70 items, 334 respondents). Item loadings, with communalities (h<sup>2</sup>). zp = Goal-oriented Pastor, gm = Gift-oriented Ministry, ls = Passionate Spirituality, zs = Functional Structures, ig = Inspiring Worship Service, gk = Holistic Small Groups, be = Need-oriented Evangelism, and hl = High Love Quotient. A table that shows all loadings can be found in the appendix.

If one tries to allocate the factors to the scales according to the number of items with a maximal loading on the respective factor, it is striking that these items can be found on several scales at the same time. For instance, the items from factor 1 can be found on the scales "Passionate Spirituality", "Inspiring Worship Service" and "Need-oriented Evangelism". The items from factor 5 can be found on the scales "Gift-oriented Ministry" and "Functional Structures".

Some factors cannot be allocated clearly to a single scale, e.g. factor 4 and 6.

If an allocation of the factors to the scales is attempted, because of a meaning-oriented interpretation of the factors, nothing changes. The allocation given by the maximum number of items is also the most meaningful here.

In addition, there are some keys in understanding the "double scale occupation": The items of the scales "Passionate Spirituality", "Inspiring Worship Service" and "Need-oriented Evangelism" load on the same factor (F1). All three seem connected to each other and therefore cannot be separated in the factor analysis: It is very probable that spirituality influences the attitude to how "inspiring" the worship service is experienced. The worship service respectively influences the "passion". The items on the scale "Need-oriented Evangelism" are formulated in a way that almost requires a good worship service ("I enjoy bringing along my friends ...") or passionate spirituality ("I pray for my friends...").

The scales "Gift-oriented Ministry" and "Functional Structures" load on factor 5. This can be interpreted as a consequence of scale 4 only measuring the extent of being informed about the



church ("Do you know if there are area leaders in your church?") - and not the functionality of the structures. This naturally is connected with someone being an "insider" or co-worker of a church.

For the scale "Holistic Small Groups" it is clearly possible to allocate it to F7 if the second highest loadings are also taken into account. In this case items 9 and 10 load on F7.

With the exception of these restrictions, it is possible to interpret the factors as they have been defined theoretically.

The items 1 and 8 (both "Functional Structures") have a communality  $h^2 < 0.2$  and do not fulfill the criterion defined in the hypothesis (they have not fulfilled the criterion of the Likert scale either).

However, all items fulfill the Fürntratt criterion and have a sufficient factor loading purity. Altogether, hypothesis 2 cannot be fully confirmed: Even if the quality characteristics show up somehow in the factor structure, they cannot be shown there definitively.

### 5.6.3 Hypothesis 3: The internal consistency of the scales

The resulting a-coefficients of the quality characteristics are as follows (Tab. 11):

Scale	Cronbach's Alpha
Goal-oriented Pastor	0.36
Gift-oriented Ministry	0.74
Passionate Spirituality	0.78
Functional Structures	0.48
Inspiring Worship Service	0.70
Holistic Small Groups	0.46
Need-oriented Evangelism	0.61
High Love Quotient	0.49

Tab. 11: Alpha coefficients of the quality characteristics in the original test version. The criterion ( $r > 0.5$ ) is only fulfilled by half of the sub-scales.

Half of the scales do not reach the criterion of 0.5. This means that the internal consistency of these scales is too low for reliable statements about the various aspects of church life. For a correct diagnosis of a church the reliability of the questionnaire is not sufficient, therefore hypothesis 3 must be rejected.

It is important to see that the internal consistency of a scale depends on its homogeneity. However, a too homogeneous scale is hardly desirable for an organizational diagnosis since it would lose much of its practical relevance. An alternative, in order to measure the reliability without homogenizing the test artificially would be the test-retest reliability. It seems to be impossible however, to measure a church twice without seeing any changes in the results between the two measurements besides those resulting from a potential inaccuracy of the questionnaire.

#### 5.6.4 Hypothesis 4: Validity

##### 5.6.4.1 Test of differences of means of extreme groups

Of the 134 churches from the total sample, 50 churches in the category were "not growing", the remaining 84 churches were growing churches. Tab. 12 shows the means and standard deviations of the two groups in the eight quality characteristics as well as the "U"-values and their significance levels:

Quality characteristic	Mean (Non-growing)	Standard deviation (Non-growing)	Mean (Growing)	Standard Deviation (Growing)	"U"-value	Significance of the "U"-Value (p)
Pastor	65.1	9.77	72.1	9.48	1259.0	0.000 ***
Ministry	59.5	9.23	68.5	9.97	1080.0	0.000 ***
Spirituality	59.4	8.32	65.9	9.91	1404.0	0.001 **
Structures	45.6	11.14	56.0	14.28	1199.5	0.000 ***
Service	60.7	8.54	69.8	9.18	979.0	0.000 ***
Small groups	61.5	14.31	70.9	14.88	1350.5	0.000 ***
Evangelism	53.9	13.50	64.7	13.61	1217.5	0.000 ***
Love quotient	60.1	6.40	63.2	7.48	1582.5	0.017*

Tab. 12: Means and standard deviations of the two groups of "growing" and "non growing" as well as U-values and their significances. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.005$ . N=134, 84 growing and 50 non-growing churches.

The significance test of the differences of means was done with the "U"-statistics of Man & Whitney and not with the t-test since this test presupposes the equality of the deviations besides normally distributed variables.  $p < 0.05$  for all quality characteristics, therefore all differences are significant - in most cases even on the 1% level or better. This indicates - as stated in hypothesis 4 - that the survey enables us to distinguish clearly between growing

churches and non-growing churches; therefore the questionnaire is valid. Fig. 2 illustrates this result graphically:

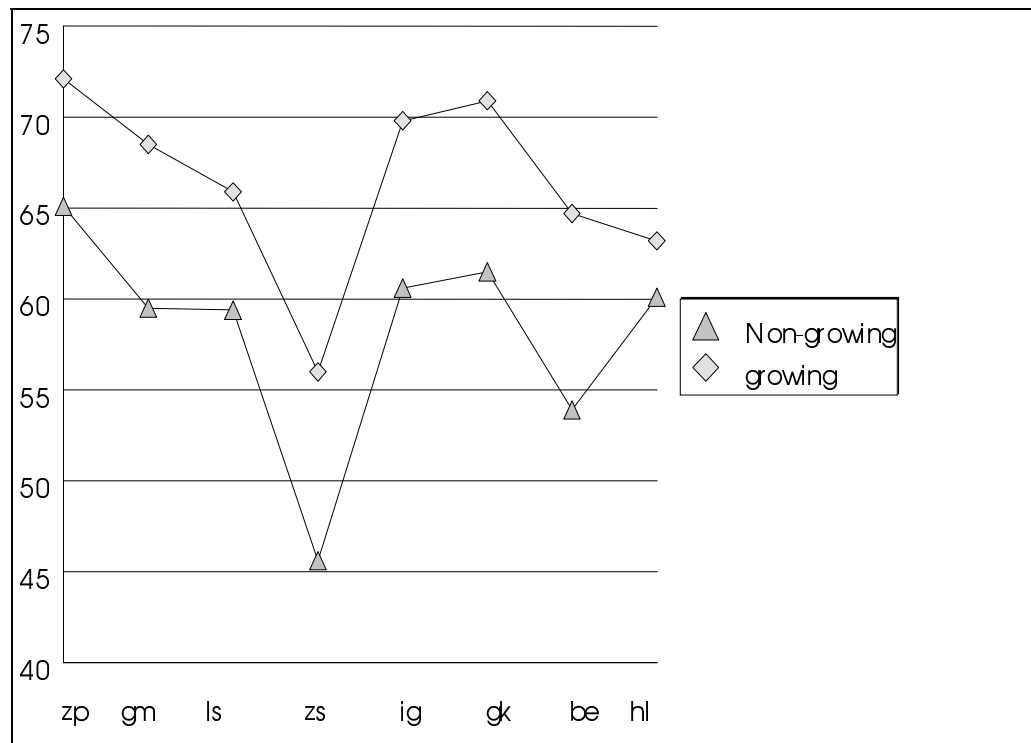


Fig. 2: Graphical representation of the differences of means in the eight quality characteristics (raw scores) between growing and non growing churches. N=134 churches, 50 non-growing and 84 growing churches. zp = goal-oriented pastor, gm = gift-oriented ministry, ls = passionate spirituality, zs = functional structures, ig = inspiring worship service, gk = holistic small groups, be = need-oriented evangelism, and hl = high love quotient.

"The extreme group method has to be rated as only being a rough method of the validation" (Lienert, 1989, p. 283). It doesn't deliver an exact coefficient which would make a statement about the height of the validity either. Therefore a second method for testing the validity was used:

#### 5.6.4.2 Validity coefficient

For a criterion which can be regarded as normally distributed, but where the available information is alternative as it is here, the biserial correlation coefficient is considered to be the best correlative method for validity determination (Lienert, 1989). Therefore, the criterion "growth" has been checked initially if it is normally distributed: With a skewness of -1.11 and an excess of 0.07 the criterion isn't exactly identical with a normal distribution ( $p < 0.005$ ), but it doesn't differ from it fundamentally either. The validation by a correlation is therefore permissible. According to the formula #89a of Lienert (1989) the coefficient  $_{bisr_{tc}}$  is 0.43. This means that the validity is acceptably high. Hypothesis 4 can therefore be regarded as confirmed.

## 5.7 Further development of the questionnaire

### 5.7.1 Initial considerations

The results of the hypotheses 1-3 make it clear that an improvement of the survey would be desirable. At the same time it is clearly difficult to improve such a questionnaire, where the validity is of primary importance, by using conventional item selection. Such a strategy would "lead to very similar items which mutually maximize loadings and discriminatory power. Instead of desired parallel measurements, this will only result in redundant, psychologically superfluous, almost identical items which disturb the respondents. This pseudo-homogenousness can be avoided by preferring certain items that describe the construct very well even if the factor loadings, the factor loading purity, the discriminatory power, the consistency of the scales and distribution of the item characteristics become weaker. This third principle of item selection cannot be replaced by formal criteria." (Fahrenberg, Hampel & Selg, 1989, p. 8).

The difficulty in improving the questionnaire is in raising the value of the item characteristics while preserving the validity. This is particularly problematic because it is impossible to carry out an instant validity check on a new version of the survey; only indications of the validity can be identified.

The following strategy was pursued:

1. Some items have significantly high loadings on a factor that is not identical with the scale they are part of. They will be assigned - if this makes sense - to the scale on which they load according to face validity. This has the advantage that an optimal number of items of the original test will remain.
2. Some items have significantly high loadings on a factor that is not identical with the scale they are part of, but they cannot be reassigned for content reasons. Here it will be tested if they have another loading on the factor that is identical with their scale, and if this loading fulfills the Fürntratt criterion. If this is the case, the item will be accepted because the theoretical background of the quality characteristics does not necessarily need a simple structure and independent factors.
3. New items will be formulated and will complete the original item pool so that even after item selection a sufficient number of items will remain. In order to stay as near as possible to the constructs developed by Schwarz, only items will be taken which can be derived directly from his publications (1987, 1990, 1991a, 1991b, 1993). Items that only just missed the criteria will be re-formulated and included in the questionnaire in both versions.
4. Finally, the revised questionnaire will be tested through an item analysis and a factor analysis with a new sample (hypothesis 1-3); an item selection will follow. The validity of the new questionnaire will be tested by interpreting the factor structure (construct validity), by a correlation of the old with the new questionnaire (internal validation), a profile analysis and an

estimation of the validity from the root of the reliability (which is, according to Lienert, 1989, possible for questionnaires that are logically valid). Considerations for a standardization of the test will be examined at the end of this report.

### **5.7.2 Questionnaire**

The interim version of a new questionnaire, developed by following the steps 1-3 outlined above, is printed in the appendix. It contains a total of 127 "old", redrafted, re-assigned and newly formulated items. The scale "Goal-oriented Pastor" has 14 items, "Gift-oriented Ministry" has 12, "Passionate Spirituality" has 16, "Functional Structures" has 14, "Inspiring Worship Service" has 17, "Holistic Small Groups" has 19, "Need-oriented Evangelism" has 18 and "High Love Quotient" has 17 items.

### **5.7.3 Description of the sample**

The questionnaire was given to all small group members of a German church. Not only 30, but as many people as possible were given the questionnaire. The criterion that everyone has to belong to the core of the church was not taken into account this time to maximize the size of the sample. 68 of the 100 questionnaires distributed were returned and analyzed as follows. Differences in age and sex have neither been registered nor utilized.

### **5.7.4 Results**

#### *5.7.4.1 Item analysis*

Items which had a part-whole corrected discriminatory power of below 0.3 have been sorted out and discarded. In addition, every scale should at least have an internal consistency of 0.5 (Cronbach's alpha).

In the revised version of the questionnaire, the following items have been left because they fulfilled the criteria (In parentheses: the part-whole corrected discriminatory power. The numbering of the items is the same as that of the final test! To make it easier to compare, the characteristics of the old questionnaire version are also given. For the skewness and the excess, the significance levels are: \* $p < 0.05$ , \*\* $p < 0.01$  and \*\*\* $p < 0.005$ . The analysis has been made with the German items!):

## Goal-oriented Pastor

- |   |        |
|---|--------|
| 8. Our pastor has an inspiring optimism.  | (0.51) |
| 15. Our pastor prefers to do the work himself rather than to delegate it to others.                                     | (0.74) |
| 24. Many Christians are involved in preparing our worship services.   | (0.50) |
| 30. Our pastor concentrates on the tasks in the church for which he is gifted.  | (0.61) |
| 34. Our pastor looks for help from lay workers to complement those points for which he himself is not specially gifted. | (0.72) |
| 40. Our pastor prefers to evade conflicts.  | (0.72) |
| 50. Our pastor has too much work.   | (0.59) |
| 59. Our pastor gives a lot of church members the opportunity to help in organizing the church service.                  | (0.69) |

### *Reliability (Cronbach's $\alpha$ )*

original scale: 0.357

after revision: 0.837

### *Part-whole corrected discriminatory power (average)*

original scale: 0.218

after revision: 0.610

### *Skewness*

original scale: -4.8 \*\*

after revision: 0.3

### *Excess*

original scale: -6.3 \*\*

after revision: 0.1

### **Gift-oriented ministry**

1. I know my spiritual gifts.	(0.58)
9. I enjoy the tasks I do in the church fellowship.	(0.72)
16. I feel that the church supports me in my task.	(0.71)
25. It is my experience that God obviously uses my work for building the church.	(0.81)
31. The tasks I perform in my church are in accordance with my gifts.	(0.67)
35. I feel my task in the church is a great challenge.	(0.65)
45. I know what value my work has in the total work of the church.	(0.76)

#### *Reliability (Cronbach's $\alpha$ )*

original scale: 0.742

after revision: 0.874

#### *Part-whole corrected discriminatory power (average)*

original scale: 0.527

after revision: 0.698

#### *Skewness*

original scale: -4.4 \*\*

after revision: -0.2

#### *Excess*

original scale: -6.9 \*\*

after revision: -0.3

## Passionate spirituality

- |   |        |
|---|--------|
| 2. I know that other church members pray for me regularly.  | (0.42) |
| 12. I enjoy reading the Bible on my own.  | (0.44) |
| 26. I experience the transforming influences faith has in the different areas of my life (e. g. profession, family, spare time etc.). | (0.53) |
| 32. I am enthusiastic about my church.  | (0.53) |
| 36. The Word of God is the most important authority in the decisions of my everyday life.   | (0.58) |
| 46. Our pastor is a spiritual example to me.  | (0.41) |
| 53. Very often I have reason to thank God for his work in my life.  | (0.55) |
| 57. I firmly believe that God will act even more powerfully in our church in the coming years.  | (0.54) |
| 60. I often tell other Christians when I have experienced something from God.   | (0.65) |
| 63. People in our church are highly motivated to do church work.  | (0.56) |

### *Reliability (Cronbach's $\alpha$ )*

original scale: 0.781  
after revision: 0.743

### *Part-whole corrected discriminatory power (average)*

original scale: 0.502  
after revision: 0.522

### *Skewness*

original scale: -4.2 \*\*  
after revision: 0.1

### *Excess*

original scale: -7.1 \*\*  
after revision: 0.4



## Functional structures

- |   |        |
|---|--------|
| 3. I am fully informed about our church's plan for church growth.                                     | (0.77) |
| 13. I know which goals our church will pursue in the coming years.                                    | (0.80) |
| 17. It is my impression that the structure of our church hinders church life rather than promotes it. | (0.53) |
| 27. The activities of our church are characterized by successful planning and organization.           | (0.41) |
| 41. In our church we try new things very often.   | (0.57) |
| 47. I could write down the organizational structure in my church.                                     | (0.56) |
| 54. The lay workers of our church are trained frequently.   | (0.61) |

### *Reliability (Cronbach's $\alpha$ )*

original scale: 0.484

after revision: 0.824

### *Part-whole corrected discriminatory power (average)*

original scale: 0.341

after revision: 0.770

### *Skewness*

original scale: -4.3 \*\*

after revision: 0.9

### *Excess*

original scale: -6.9 \*\*

after revision: -0.8

## Inspiring Worship Service

4. Attending the worship service is an inspiring experience for me.	(0.49)
11. I enjoy listening to the sermons in the worship service.	(0.52)
18. I feel that the church service has a positive influence on me.	(0.71)
21. I feel that the sermon in the worship service speaks to my personal situation.	(0.58)
42. The music in the church services helps me to worship God.	(0.44)
48. Our worship services are creative.	(0.45)
51. Our worship service is prepared by a team.	(0.46)
58. Optimal care is given to our children during our church services.	(0.53)
64. I'm often bored in the worship service.	(0.53)

### *Reliability (Cronbach's $\alpha$ )*

original scale: 0.700

after revision: 0.766

### *Part-whole corrected discriminatory power (average)*

original scale: 0.428

after revision: 0.522

### *Skewness*

original scale: -3.9 \*\*

after revision: -1.4

### *Excess*

original scale: -6.6 \*\*

after revision: 0

## Holistic Small Groups

5. I am a member of a group in my church where it is possible to talk about personal problems. (0.67)
19. I am a member of a group in my church in which others will pray with me and for me if needed. (0.79)
22. I am a member of a group in our church in which we talk about spiritual questions. (0.57)
28. I enjoy my small group very much. (0.77)
37. I am a member of a small group in my church in which I feel at home. (0.82)
62. In the small group of our church to which I belong, we spend lots of time on things which are irrelevant to me. (0.47)
67. The personal relationships in my small group are excellent. (0.53)
68. In my small group we have trust towards one another. (0.60)
69. I can be as active as I like in my small group. (0.73)
70. In the groups to which I belong, it is easy for newcomers to be integrated in the group's life. (0.70)

### *Reliability (Cronbach's $\alpha$ )*

original scale: 0.461

after revision: 0.887

### *Part-whole corrected discriminatory power (average)*

original scale: 0.298

after revision: 0.665

### *Skewness*

original scale: -8.9 \*\*

after revision: -1.7

### *Excess*

original scale: -4.9 \*\*

after revision: -0.1

## Need-oriented evangelism

- |   |        |
|---|--------|
| 6. I know that programs exist in our church which are particularly applicable to nonchristians. | (0.60) |
| 33. Our church has particular activities for those who are new in faith.                        | (0.59) |
| 38. People having newly come to faith find friends in our church quickly.                       | (0.57) |
| 43. It is my impression that the evangelistic activities in our church lack imagination.        | (0.55) |
| 49. Creative evangelistic activities aren't our strength.                                       | (0.47) |
| 52. When new people visit church events, we approach them openly and lovingly.                  | (0.61) |
| 55. In our church the question of evangelism is discussed at all possible opportunities.        | (0.44) |
| 61. New vistors are welcomed warmly.  | (0.52) |
| 65. Evangelism is an important topic in our church.   | (0.70) |
| 66. The communication in our church is characterized by religious jargon.                       | (0.41) |

### *Reliability (Cronbach's $\alpha$ )*

original scale: 0.614  
after revision: 0.818

### *Part-whole corrected discriminatory power (average)*

original scale: 0.381  
after revision: 0.545

### *Skewness*

original scale: -0.5  
after revision: 1.0

### *Excess*

original scale: -7.6 \*\*  
after revision: -0.5

## High Love Quotient

- |  |        |
|--|--------|
| 7. It is difficult for me to show my feeling to other Christians.  | (0.58) |
| 10. I find it very positive if people laugh in our church.   | (0.51) |
| 14. I find it easy to tell other Christians about my feelings.   | (0.51) |
| 20. In our church it is possible to talk with other people about feelings and problems.                              | (0.66) |
| 23. I would describe the relationships which I have within the church as quite superficial.                          | (0.58) |
| 29. There is a lot of joy and laughter in our church.  | (0.50) |
| 39. The atmosphere of our church is strongly influenced by praise and compliments.                                   | (0.57) |
| 44. When someone in our church does a good job I tell them.  | (0.56) |
| 56. When someone in our church has a different opinion from me, I prefer to be silent rather than to endanger peace. | (0.40) |

### *Reliability (Cronbach's $\alpha$ )*

original scale: 0.489

after revision: 0.774

### *Part-whole corrected discriminatory power (average)*

original scale: 0.319

after revision: 0.540

### *Skewness*

original scale: 0.3

after revision: 0.8

### *Excess*

original scale: -7.1 \*\*

after revision: -0.4

The new questionnaire is composed of eight scales with altogether 70 items. The new scales have a higher "unity of meaning" than those of the old questionnaire (the lowest discriminatory power is 0.4, the highest is 0.82). This confirms that it makes sense to cluster the items as done already.

The reliability, measured as internal consistency, is clearly higher than that of the original questionnaire. A reliable testing of a church, using the NCD Church Profile is now possible.

#### *5.7.4.2 Factor analysis*

The factor analysis can only be of a subordinate significance in this study because it presupposes at least three times as many respondents as variables. This is not fulfilled with 70 items and 68 respondents, so the factor analysis was not consulted for the item selection. It was nevertheless executed as a pilot study, to gain a first impression about the factor structure of the new questionnaire and its validity.

Again, we carried out a principal component analysis followed by Varimax rotation. We then extracted eight theory driven factors without taking the Scree test or the Kaiser criterion into account. The course of the Eigenvalues of these eight factors is 17.88, 6.49, 4.16, 3.55, 2.88, 2.63, 2.48 and 2.31. These eight factors explain together 59.7% of the total variance which is approx. 20% more than at the original test form. 19 Eigenvalues are >1 (see tab. 13).

Table of Eigenvalues (tab. 13):

Factor	Eigen- value	Total of Eigenval.	Var. of Diff.	Eigenv. Percent	Cum. Var.	Chi squares	Deg. of freedom	p (Chi <sup>2</sup> )
--------	-----------------	-----------------------	------------------	--------------------	-----------	----------------	--------------------	-----------------------

1	17.878	17.878	49.122	25.181%	25.181%	0.0	0	-
2	6.492	24.370	11.387	9.143%	34.324%	0.0	0	-
3	4.157	28.527	2.334	5.855%	40.179%	0.0	0	-
4	3.550	32.077	0.607	5.000%	45.179%	0.0	0	-
5	2.878	34.954	0.672	4.053%	49.232%	0.0	0	-
6	2.634	37.588	0.244	3.710%	52.941%	0.0	0	-
7	2.476	40.064	0.158	3.488%	56.429%	0.0	0	-
8	2.308	42.372	0.169	3.250%	59.679%	0.0	0	-
9	2.017	44.390	0.290	2.841%	62.520%	0.0	0	-
10	1.778	46.168	0.239	2.505%	65.025%	0.0	0	-
11	1.683	47.850	0.096	2.370%	67.395%	0.0	0	-
12	1.565	49.415	0.118	2.204%	69.599%	0.0	0	-
13	1.384	50.799	0.181	1.949%	71.548%	0.0	0	-
14	1.373	52.172	0.011	1.934%	73.481%	0.0	0	-
15	1.214	53.386	0.159	1.710%	75.192%	0.0	0	-
16	1.173	54.559	0.042	1.652%	76.843%	0.0	0	-
17	1.116	55.674	0.057	1.571%	78.414%	0.0	0	-
18	1.097	56.771	0.018	1.545%	79.960%	0.0	0	-
19	1.017	57.788	0.080	1.432%	81.392%	0.0	0	-
20	0.902	58.691	0.114	1.271%	82.663%	0.0	0	-
21	0.873	59.564	0.029	1.230%	83.893%	0.0	0	-
22	0.845	60.409	0.028	1.191%	85.084%	0.0	0	-
23	0.782	61.191	0.063	1.101%	86.185%	0.0	0	-
24	0.739	61.931	0.043	1.041%	87.226%	0.0	0	-
25	0.665	62.595	0.074	0.936%	88.162%	0.0	0	-
26	0.629	63.224	0.036	0.886%	89.048%	0.0	0	-
27	0.585	63.810	0.044	0.824%	89.873%	0.0	0	-
28	0.577	64.387	0.008	0.813%	90.686%	0.0	0	-
29	0.526	64.912	0.052	0.740%	91.426%	0.0	0	-
30	0.515	65.427	0.011	0.725%	92.151%	0.0	0	-
31	0.474	65.901	0.041	0.667%	92.818%	0.0	0	-
32	0.441	66.342	0.033	0.621%	93.439%	0.0	0	-
33	0.399	66.741	0.042	0.562%	94.001%	0.0	0	-
34	0.382	67.122	0.017	0.537%	94.538%	0.0	0	-
35	0.354	67.477	0.027	0.499%	95.038%	0.0	0	-
36	0.331	67.808	0.023	0.467%	95.504%	0.0	0	-
37	0.306	68.114	0.025	0.431%	95.935%	0.0	0	-
38	0.278	68.392	0.028	0.391%	96.326%	0.0	0	-
39	0.265	68.656	0.013	0.373%	96.699%	0.0	0	-
40	0.247	68.904	0.018	0.348%	97.047%	0.0	0	-
41	0.214	69.118	0.033	0.302%	97.349%	0.0	0	-
42	0.203	69.321	0.011	0.286%	97.635%	0.0	0	-
43	0.189	69.510	0.014	0.266%	97.901%	0.0	0	-
44	0.170	69.680	0.019	0.240%	98.141%	0.0	0	-
45	0.156	69.837	0.014	0.220%	98.362%	0.0	0	-
46	0.143	69.980	0.013	0.202%	98.564%	0.0	0	-
47	0.136	70.116	0.007	0.192%	98.755%	0.0	0	-
48	0.127	70.243	0.009	0.179%	98.934%	0.0	0	-
49	0.110	70.354	0.016	0.156%	99.090%	0.0	0	-
50	0.096	70.450	0.015	0.135%	99.225%	0.0	0	-
51	0.082	70.531	0.014	0.115%	99.340%	0.0	0	-
52	0.079	70.611	0.002	0.112%	99.451%	0.0	0	-
53	0.067	70.677	0.013	0.094%	99.545%	0.0	0	-

Factor | Eigen- | Total of | Var. of Eigenv. | Cum. Var. | Chi | Deg. of | p (Chi<sup>2</sup>)  
value Eigenval. Diff. Percent squares freedom

54	0.057	70.735	0.009	0.081%	99.626%	0.0	0	-
55	0.054	70.789	0.003	0.076%	99.702%	0.0	0	-
56	0.047	70.836	0.007	0.066%	99.769%	0.0	0	-
57	0.039	70.875	0.008	0.056%	99.824%	0.0	0	-
58	0.032	70.908	0.007	0.046%	99.870%	0.0	0	-
59	0.023	70.931	0.009	0.033%	99.903%	0.0	0	-
60	0.018	70.949	0.005	0.026%	99.929%	0.0	0	-
61	0.016	70.965	0.002	0.023%	99.951%	0.0	0	-
62	0.011	70.976	0.005	0.015%	99.967%	0.0	0	-
63	0.010	70.987	0.001	0.015%	99.981%	0.0	0	-
64	0.006	70.993	0.005	0.008%	99.990%	0.0	0	-
65	0.004	70.997	0.001	0.006%	99.996%	0.0	0	-
66	0.002	70.999	0.002	0.003%	99.998%	0.0	0	-
67	0.001	71.000	0.001	0.002%	100.000%	0.0	0	-

The factor matrix of the new test form (tab. 14) has a much clearer structure than the one of the original test form (tab. 9):

Item no.\ factor	I	II	III	IV	V	VI	VII	VIII	h <sup>2</sup>
8 zp						0.484			0.618
15 zp		0.770							0.646
24 zp		0.574							0.637
30 zp		0.595							0.555
34 zp		0.676							0.620
40 zp		0.655							0.531
50 zp		0.684							0.615
59 zp		0.678							0.611
1 gm				0.568					0.557
9 gm				0.575					0.461
16 gm				0.679					0.687
25 gm				0.739					0.662
31 gm				0.566					0.596
35 gm				0.617					0.595
45 gm				0.789					0.707
2 ls							0.404		0.462
12 ls	0.498								0.485
26 ls								0.534	0.626
32 ls				0.492					0.594
36 ls					0.453				0.513
46 ls						0.619			0.682
53 ls								0.610	0.592
57 ls								0.478	0.548
60 ls					0.550				0.658
63 ls				0.493					0.583



Item no.\ factor	I	II	III	IV	V	VI	VII	VIII	h <sup>2</sup>
3 zs				0.693					0.730
13 zs				0.665					0.719
17 zs		0.525							0.584
27 zs				0.499					0.465
41 zs				0.532					0.587
47 zs				0.642					0.563
54 zs				0.480					0.419
4 ig			0.716						0.550
11 ig			0.556						0.573
18 ig			0.697						0.708
21 ig			0.588						0.671
42 ig			0.615						0.694
48 ig							0.733		0.740
51 ig							0.484		0.582
58 ig			0.422						0.430
64 ig			0.606						0.534
5 gk	0.772								0.675
19 gk	0.780								0.713
22 gk	0.639								0.526
28 gk	0.688								0.745
37 gk	0.807								0.759
62 gk	0.557								0.724
67 gk	0.581								0.680
68 gk	0.741								0.685
69 gk	0.706								0.701
70 gk				0.453					0.549
6 be		0.610							0.657
33 be		0.640							0.563
38 be						0.442			0.679
43 be		0.517							0.637
49 be		0.325							0.294
52 be				0.433					0.538
55 be						0.621			0.501
61 be		0.433							0.524
65 be		0.593							0.709
66 be								-0.651	0.537
7 hl					0.672				0.613
10 hl					0.507				0.506
14 hl					0.679				0.509
20 hl	0.437								0.524
23 hl					0.494				0.535
29 hl				0.459					0.647
39 hl						0.442			0.679
44 hl					0.507				0.629
56 hl					0.664				0.515

Tab. 14.: Factor analysis of the new test version (70 items, 68 respondents). Item loadings, with communalities (h<sup>2</sup>). zp = goal-oriented pastor, gm = gift-oriented ministry, ls = passionate spirituality, zs = functional structures, ig = inspiring worship service, gk = holistic small groups, be = need-oriented evangelism, and hl = high love quotient. A table that shows all loadings can be found in the appendix.

The items of the scale "Goal-oriented Pastor" load very clearly on factor 2; even the first item (#8) which loads on factor 6 has its second highest loading on factor 2. Nevertheless, factor 2 is also the target of the scale "Need-oriented Evangelism": Almost all items of this scale load on this factor; the items 38 and 52 with the second highest loading.

The items of "Gift-oriented Ministry" have all their loadings on factor 4, but so has "Functional Structures" (with one exception). Again, this may be a consequence of being well informed as a lay leader of a church. Likewise, passionate spirituality cannot be clearly assigned to one factor. However, it seems to be reasonable to suggest that this is an area which influences the whole church life and not only a part of it.

"Inspiring Worship Service" loads exclusively on factor 3. "Holistic Small Groups" loads exclusively on factor 1; item 70 loads on factor 2 with its second highest loading.

Despite the restricted meaningfulness of a factor analysis with only 68 respondents, this result gives a first impression that the clustering of the items into eight scales can be empirically justified - perhaps with the exception of the scale "Passionate Spirituality".

Concerning the other criteria, all items fulfill the Fürntratt criterion. In addition,  $h^2$  is always  $>0.2$ .

All these results support the construct validity of the NCD Church Profile.

#### *5.7.4.3 Further indications of the validity*

##### *a. The inner validity*

Lienert (1989, p. 258) speaks about "inner validity" if a test correlates with other tests that are known as valid for the same characteristics. Since the original form of the Church Profile can be regarded as valid, this suggests that the new version has to correlate closely with the old one if it is also valid with regards to the growth of a church. Here we can only check the validity using the data of one single church because that is our only sample. Of course, for a precise statement many more churches would have to be taken into account.

The scores of the quality characteristics for the original and the new test version in this one church are as follows:

Quality characteristic	old score	new score
Pastor	62	57
Ministry	60	53
Spirituality	62	66
Structures	60	51
Worship Service	69	69
Small Groups	78	67
Evangelism	55	58
Love Quotient	49	63

Tab. 15: Scores of the quality characteristics of the original and the new version of the Church Profile in a German church.  $N_{\text{original}} = 67$ ,  $N_{\text{new}} = 68$ .

Spearman's coefficient of rank correlations for the scores of the original and the new version of the Church Profile is  $r=0.55$  which indicates a high relation for validation purposes. However, because the sample is too small, the level of significance is not very high:  $\alpha=0.18$ .

#### b. Analysis of the test profile

Unlike the correlative attempt of the inner validation, the analysis of the test profile is suitable for the comparison of two single profiles as well. The index of similarity by DuMas (1946) will be used here:

$$R=2[(S/T)-0.5]$$

with  $T=S+D$ . S is the number of the profile segments where the grade of the profiles is codirectional. D is the number of the profile segments where the grade of the profiles is reverse.

Fig. 3 shows the two profiles:  $S=5$ ,  $D=2$ ,  $T=7$  which results in  $r=0.43$ . For a validity coefficient, this is quite high. Therefore, we have here another indication of the validity of the new test version even if both versions are not identical.

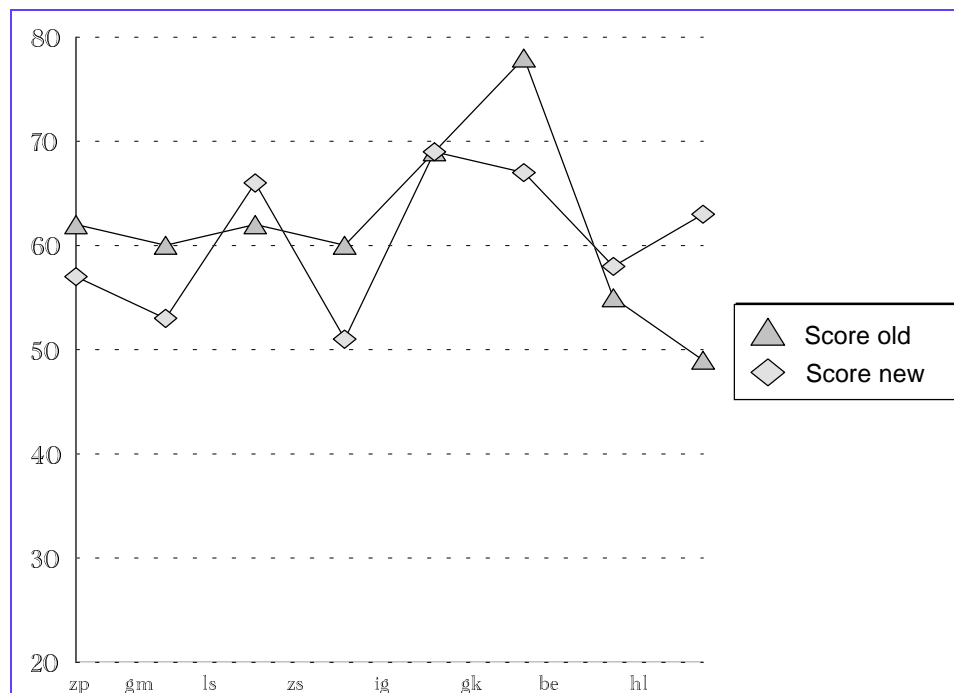


Fig. 3: Profile scores of a German church (original and new version of the questionnaire).  $N_{\text{original}} = 67$ ,  $N_{\text{new}} = 68$ . zp = goal-oriented pastor, gm = gift-oriented ministry, ls = passionate spirituality, zs = functional structures, ig = inspiring worship service, gk = holistic small groups, be = need-oriented evangelism, and hl = high love quotient.

### c. Estimation of the validity from the reliability

If one wants to validate the scales of a test individually, and if the test is logically valid, then it is possible to estimate the validity coefficient from the reliability: "Then the validity coefficient is equal to the root of the reliability coefficient." (Lienert, 1989, p. 374). The original test version was developed according to logical ("face") validity, so it seems to be suitable to estimate the validity of the new version from its reliability. But one should not wrongly conclude that the validity of the new version is higher than that of the original version, even if the coefficients are significantly higher due to the higher reliability of the new version.

The validity coefficients estimated from the reliability are as follows: "Goal-oriented Pastor" 0.91; "Gift-oriented Ministry" 0.93; "Passionate Spirituality" 0.86; "Functional Structures" 0.91; "Inspiring Worship Service" 0.88; "Holistic Small Groups" 0.94, "Need-oriented Evangelism" 0.9; and "High Love Quotient" 0.88. Taking into account the value of these validity coefficients it does not seem plausible to compare them directly with the results of the procedures mentioned before.

### **5.7.5 Considerations concerning standardization**

No standardization was used in the original version of the survey. This deficit was eliminated on the questionnaire used since 1996, to make the scores of the single quality characteristics comparable with each other. This was particularly necessary because the Church Profile serves as the basis of an intervention which was initiated as a result of the identification of the respective minimum factor. However, the minimum factor is not automatically the lowest raw score of a scale since these results are not directly comparable with each other. Since a standardization sample was lacking, no standardization could be done during this first study, but it was completed later on.

Since the raw scores of the Church Profile so far had been in the area between 0 and 100, it seemed to make sense to use standard norms within a similar range. This is why T-scores ( $m=50$ ,  $s=10$ ) would be a good choice. (Later, we decided to use  $s=15$  to have a broader dispersion of the scores.)

### **5.7.6 The pastor's questionnaire**

In principle, the same procedure as used with the lay workers questionnaire had to be used with the pastor's questionnaire: Item analysis with computing of the discriminatory power and internal consistency, factor analysis to define the factor structure and validation by using an external criterion with regard to the four hypotheses. The new version has to be standardized and weighted before defining a formula that could be used to sum up the pastor's scores with the lay workers scores. The reliability of the scale can be used to define a weight (Lienert, 1989, p. 384):  $W=r/(1-r)$ . For this first study, this procedure was not used.

## **5.8 Conclusion**

As a result of this first study it was possible to develop a reliable tool to measure eight qualitative aspects of a church. Several indications for the validity of this survey were identified. What could not be achieved here was the final validation of the questionnaire, the standardization, and the definition of a formula to combine both, the pastor's and the lay workers questionnaires. These have been the subject of further studies.

## 6 Bibliography

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## 7 Appendix

- Original questionnaire for lay workers (in German)
- Questionnaire for the pastor (in German)
- Interim version of the questionnaire for lay workers (in German)
- New revised version of the questionnaire for lay workers (in German)
- Factor matrix of the original test version
- Factor matrix of the new test version

**Original questionnaire for lay workers (in German)**

## Gemeindeprofil – Fragebogen für engagierte Gemeindeglieder

Indem Sie die folgenden Fragen beantworten, helfen Sie uns, weitere Aufschlüsse darüber zu bekommen, was die Stärken und Schwächen unserer Gemeinde sind. Es ist wichtig, daß Sie *alle* Fragen beantworten, indem Sie Ihr Kreuz in eines der angegebenen Kästchen setzen. Wenn bei einer bestimmten Frage keine der angegebenen Alternativen 100prozentig mit Ihrer Auffassung übereinstimmt, kreuzen Sie die Antwort an, die *am ehesten* Ihrer Meinung entspricht. Denken Sie bei der Beantwortung der Fragen an unsere Gemeinde, wie sie sich *derzeit* aus Ihrer Sicht darstellt.

Die Daten werden in Deutschland vom Ökumenischen Gemeinde-Institut (Hamburg) und in der Schweiz vom Institut Koinonia (Buchs/Zürich) anonym ausgewertet. Bitte geben Sie den ausgefüllten Bogen wieder der Person zurück, über die Sie ihn erhalten haben.

Herzlichen Dank für Ihre Mitarbeit!  
Ihre Gemeinde

Bitte beantworten Sie die folgenden Fragen mit ja oder nein.

1. Wenn ich bei meiner Aufgabe in der Gemeinde Probleme habe, kenne ich den richtigen Ansprechpartner, der mir weiterhilft.

☐ Ja ☐ Nein

2. Ich halte es für gefährlich, im Blick auf geistliche Dinge zu planen und zu organisieren.

☐ Ja ☐ Nein

3. Ich weiß, daß andere Gemeindeglieder regelmäßig für mich beten.

☐ Ja ☐ Nein

4. Ich bin sicher: Unser Pastor wird so lange wie irgend möglich in unserer Gemeinde bleiben.

☐ Ja ☐ Nein

5. Ich bin über einen Plan, den unsere Gemeinde für den Gemeindeaufbau hat, informiert.

☐ Ja ☐ Nein

6. Ich habe einen persönlichen Seelsorger.

☐ Ja ☐ Nein

7. Ich habe für meine Aufgabe eine schriftliche Aufgabenbeschreibung.

☐ Ja ☐ Nein

8. Als ich meine Aufgabe übernahm, wurde mir gesagt, für welchen Zeitraum ich dafür zuständig sei.

☐ Ja ☐ Nein

9. Ich habe in der Gemeinde eine Gruppe, in der es möglich ist, sich über persönliche Probleme auszutauschen.

☐ Ja ☐ Nein

10. Es ist das erklärte Ziel unserer Kleingruppen, daß sie sich durch Zellteilung vervielfältigen.

☐ Ja ☐ Nein

11. Ich weiß, daß unsere Gemeinde Programme hat, die speziell Nichtchristen ansprechen.

☐ Ja ☐ Nein

12. Wenn ich ein Problem habe, weiß ich mindestens einen Menschen, der mir seelsorgerlich helfen kann.

☐ Ja ☐ Nein

13. Ich habe eine Gruppe in der Gemeinde, in der es regelmäßig gemeinsames Gebet und Austausch über geistliche Fragen gibt.

☐ Ja ☐ Nein

Bitte beantworten Sie die folgenden Fragen, indem Sie das jeweils zutreffende Kästchen ankreuzen:

14. Kennen Sie Ihre geistliche(n) Gabe(n)?

☐ Ja ☐ Nein ☐ Bin unsicher

15. Wie viele freundschaftliche Kontakte haben Sie zu anderen Gemeindegliedern?

☐ 1-2 ☐ 3-4 ☐ 5-6

☐ 7-8 ☐ 9 und mehr

16. Wieviel Zeit verbringen Sie wöchentlich etwa – außerhalb gemeindlicher Veranstaltungen – mit Freunden aus der Gemeinde?

☐ Weniger als 1 ☐ 1-2 Std. ☐ 2-3 Std.

☐ 4-5 Std. ☐ Mehr als 5 Std.

17. Wissen Sie, ob es für die einzelnen Arbeitsbereiche in der Gemeinde so etwas wie einen Bereichsleiter gibt?

☐ Ja, für alle ☐ Ja, für einige ☐ Ist mir nicht bekannt

18. Wie oft wurden Sie von anderen Gemeindegliedern (nicht Verwandten) innerhalb der letzten zwei Monate zum Essen oder Kaffeetrinken eingeladen?

☐ Gar nicht ☐ 1 mal ☐ 2-3 mal

☐ 4-5 mal ☐ Mehr als 5 mal

19. Wie oft haben Sie andere Gemeindeglieder (nicht Verwandte) innerhalb der letzten zwei Monate zum Essen oder Kaffeetrinken eingeladen?

☐ Gar nicht ☐ 1 mal ☐ 2-3 mal

☐ 4-5 mal ☐ Mehr als 5 mal

20. Welchen Prozentsatz Ihres Brutto-Einkommens (bzw. Taschengeldes, Bafög etc.) geben Sie etwa für christliche Zwecke?

☐ Weniger als 1 Prozent ☐ 1-4 Prozent

☐ Etwa 5 Prozent ☐ 6-9 Prozent

☐ 10 Prozent ☐ Mehr als 10 Prozent

## Die folgende Aussage trifft ...

auf mich zu:

	sehr oft	oft	manchmal	selten	nie	
21						Ich lese persönlich gerne die Bibel.
22						Meine Aufgabe in der Gemeinde empfinde ich als eine große Herausforderung.
23						Der Besuch unseres Gottesdienstes ist für mich eine inspirierende Erfahrung.
24						Es fällt mir schwer, einem anderen Christen Zuneigung zu zeigen.
25						Es macht mir Spaß, im Gottesdienst den Predigten zuzuhören.
26						Ich erlebe, daß mich der Gottesdienst aufbaut.
27						Ich spüre, daß die Predigt im Gottesdienst meine persönliche Situation anspricht.
28						Wenn ich einen Gottesdienst besuche, erwarte ich, daß Gott mich persönlich anspricht.
29						In der gemeindlichen Kleingruppe, zu der ich gehöre, fühle ich mich rundum wohl.
30						Ich bringe meine Freunde (bzw. Kollegen, Verwandte), die Jesus noch nicht kennen, gerne in die Gemeinde mit.
31						Ich bete für meine Freunde, Kollegen und Verwandten, die Christus noch nicht kennen, daß sie zum Glauben kommen.
32						Es fällt mir leicht, meine Probleme und Gefühle mit anderen Christen zu teilen.
33						Ich erlebe meine gemeindliche Mitarbeit als eine wenig aufregende Routinearbeit.
34						Zeiten des Gebets sind für mich eine inspirierende Erfahrung.
35						Ich erlebe, welche verwandelnden Auswirkungen der Glaube auf die unterschiedlichsten Lebensbereiche hat (z.B. Beruf, Familie, Freizeit etc.).
36						Für mich ist die „Sonntagspflicht“ das wichtigste Motiv, den Gottesdienst zu besuchen.

## Die folgende Aussage trifft ...

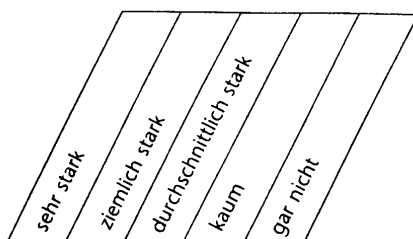
sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht
------------	----------------	------------------------	------	-----------

auf mich zu:

37					Die Aufgaben, die ich in der Gemeinde wahrnehme, machen mir Freude.
38					Die Beziehungen, die ich zu anderen Mitarbeitern habe, würde ich (im Durchschnitt) als relativ kühl bezeichnen.
39					Ich fühle mich von den Aufgaben, die ich in der Gemeinde wahrnehme, überfordert.
40					Ich fühle mich in meiner Aufgabe von meiner Gemeinde unterstützt.
41					Das Wort Gottes ist in meinen alltäglichen Entscheidungen die wichtigste Autorität.
42					Ich erlebe, daß Gott meine Mitarbeit sichtbar zum Aufbau der Gemeinde benutzt.
43					Ich glaube fest daran, daß Gott in unserer Gemeinde in den nächsten Jahren noch sehr viel stärker wirken wird.
44					Ich bin von meiner Gemeinde begeistert.
45					Die Aufgaben, die ich in der Gemeinde wahrnehme, entsprechen meinen Gaben.
46					Ich weiß, welche Ziele unsere Gemeinde in den nächsten Jahren verfolgt.
47					Ich kann in wenigen Worten zusammenfassen, was das Besondere unserer Gemeinde ist.
48					Ich weiß, welchen Stellenwert meine Aufgabe im Gesamtkonzept der Gemeinde hat.
49					Es macht mir Spaß, Außenstehende in unseren Gottesdienst mitzubringen.
50					Die Musik in unseren Gottesdiensten hilft mir dabei, Gott anzubeten.
51					Mir fällt es schwer, in wenigen Sätzen zusammenfassen, was mir der Glaube bedeutet.
52					Ich möchte dazu beitragen, daß neue Leute zum Glauben und zur Gemeinde finden.
53					Ich arbeite daran, meine Beziehungen zu den Menschen, die Christus noch nicht kennen, zu vertiefen.



## Die folgende Aussage trifft ...



**... auf unsere  
Gemeinde zu:**

	sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht	
54						In unseren Gottesdiensten sind nur selten neue Gesichter zu sehen.
55						In unserer Gemeinde wird viel gelacht.
56						In den Gruppen, zu denen ich gehöre, fällt es neuen Besuchern leicht, sich in das Gruppenleben zu integrieren.
57						Wenn sich in unserer Gemeinde ein Mensch für Christus entscheidet, helfen ihm andere Christen bei den ersten Schritten im Glauben.
58						Unser Pastor ist dafür bekannt, daß er Konflikten lieber aus dem Wege geht.
59						Von unserem Pastor geht ein ansteckender Optimismus aus.
60						Wenn ein Gemeindeglied sich offensichtlich auf einem falschen Weg befindet (moralische Verfehlungen, Passivität etc.), wird es liebevoll, aber entschieden korrigiert.
61						Neuen Ideen steht unser Pastor generell skeptisch gegenüber.
62						In unseren Gottesdiensten werden neue oder seltene Besucher freundlich begrüßt.
63						Ich habe den Eindruck, daß in unserer Gemeinde die evangelistischen Aktivitäten oft phantasielos sind.
64						Wenn neue Besucher gemeindliche Veranstaltungen besuchen, begegnen wir ihnen offen und liebevoll.
65						Unser Pastor scheint sich in unserer Gemeinde wohlfühlen.
66						Unser Pastor macht die Arbeit lieber selbst, als sie an andere zu delegieren.
67						Ich halte unsere Gemeinde für traditionalistisch.
68						In die Gestaltung unserer Gottesdienste sind viele Christen aktiv einbezogen.
69						In unserer Gemeinde wird die Frage der Evangelisation bei allen möglichen Gelegenheiten thematisiert.
70						Es prägt die Atmosphäre in unserer Gemeinde, daß wir uns häufig loben und Komplimente machen.

## **Questionnaire for the pastor (in German)**

## Gemeindeprofil - Fragebogen für den Pastor

Bitte füllen Sie diesen Fragebogen gewissenhaft aus. Es ist wichtig, *alle* Fragen zu beantworten, indem Sie in die jeweiligen Spalten ausfüllen bzw. Ihr Kreuz in eines der angegebenen Kästchen setzen. Wenn bei einer bestimmten Frage keine der angegebenen Alternativen 100prozentig mit Ihrer Auffassung übereinstimmt, kreuzen Sie die Antwort an, die *am ehesten* Ihrer Meinung entspricht. Alle Daten werden von uns anonym ausgewertet.

1. Name der Gemeinde:

2. Denomination:

3. Mitgliederzahl:

4. Name und Anschrift des Pastors, der diesen Bogen ausfüllt:



5. Telefon-Nummer:

6. Geburtsdatum des Pastors:

7. Art seiner Ausbildung:

8. Handelt es sich um eine Stadt- oder Landgemeinde?

☐ Stadtgem. ☐ Landgem. ☐ Sonstiges:

9. Seit wann sind Sie als Pastor in dieser Gemeinde?

19

10. Zu den Gottesdiensten kommen derzeit im Durchschnitt  Personen (Summe aller Gottesdienst-

besucher inkl. Kinder, die zwischen Samstagabend und Sonntagabend die Gemeinde besuchen).

11. Der durchschnittliche Gottesdienstbesuch (Art des Zählens siehe oben) in den letzten fünf Jahren war folgender (falls keine exakten Zählungen zur Hand, bitte realistische Schätzungen):

vor einem Jahr:

vor zwei Jahren:

vor drei Jahren:

vor vier Jahren:

vor fünf Jahren:

12. In unserer Gemeinde gibt es  Gottesdienste pro Woche.

13. In unserer Gemeinde gibt es insgesamt  Kleingruppen (Hauskreise, Gebetskreise, Bibelgruppen etc.).

14. Unter welchen der folgenden Schlagworte könnten Sie sich am ehesten wiederfinden? (Kreuzen Sie bitte alle Worte an, die in etwa auf Sie zutreffen.)

<input type="checkbox"/> Evangelikal	<input type="checkbox"/> Pfingstlich
<input type="checkbox"/> Pietistisch	<input type="checkbox"/> Charismatisch
<input type="checkbox"/> Liberal	<input type="checkbox"/> "Dritte Welle"
<input type="checkbox"/> Liturgisch	<input type="checkbox"/> Politisch engagiert
<input type="checkbox"/> Sonstiges:	<input type="text"/>

15. Welche der folgenden Charismen würden Sie als Ihre Gaben bezeichnen?

<input type="checkbox"/> Leitung	<input type="checkbox"/> Glaube
<input type="checkbox"/> Seelsorge	<input type="checkbox"/> Organisation
<input type="checkbox"/> Hirtendienst	<input type="checkbox"/> Lehren
<input type="checkbox"/> Evangelisation	
<input type="checkbox"/> Sonstiges:	<input type="text"/>

16. Haben Sie bisher irgendwelche Arbeitsmaterialien für den Gemeindeaufbau eingesetzt?

☐ Ja\* ☐ Nein

\*Wenn ja, welche?

Bezeichn. der Materialien	Wer hat damit gearbeitet?
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

17. Was ist Ihr größter Wunsch für Ihre Gemeinde? (Bitte in einem Satz formulieren!)


18. Die fünf Fragen bzw. Probleme, die Ihrer Meinung nach in Ihrer Gemeinde am dringlichsten gelöst werden müßten, sind folgende (Bitte in der Reihenfolge der Bedeutung listen):

1.

2.

3.

4.

5.

Bitte beantworten Sie die folgenden Fragen, indem Sie das jeweils zutreffende Kästchen ankreuzen:

19. Wieviel Prozent Ihrer Gottesdienstbesucher setzen Ihrer Einschätzung nach gezielt ihre Gaben für den Gemeindeaufbau ein?

<input type="checkbox"/> Weniger als 10 %	<input type="checkbox"/> 10-25 %
<input type="checkbox"/> 25-40 %	<input type="checkbox"/> Etwa 50 %
<input type="checkbox"/> 60-80 %	<input type="checkbox"/> Mehr als 80 %

20. Wieviel Prozent Ihrer Gottesdienstbesucher sind etwa in gemeindliche Kleingruppen integriert?

<input type="checkbox"/> Weniger als 10 %	<input type="checkbox"/> 10-25 %
<input type="checkbox"/> 25-50 %	<input type="checkbox"/> 50-75 %
<input type="checkbox"/> Mehr als 75 %	

21. Wieviel Zeit verbringen Sie selbst ungefähr täglich im Gebet?

<input type="checkbox"/> Weniger als 10 Min.	<input type="checkbox"/> 10-30 Min.
<input type="checkbox"/> 30-60 Min.	<input type="checkbox"/> 60-120 Min.
<input type="checkbox"/> Mehr als 120 Min.	

Bitte beantworten Sie die folgenden Fragen mit ja oder nein.

22. Von meinem Persönlichkeitstyp her handle ich am liebsten aus dem Augenblick heraus, ohne große Planung.

<input type="checkbox"/> Ja	<input type="checkbox"/> Nein
-----------------------------	-------------------------------

23. Für Menschen, die neu zum Glauben gekommen sind, gibt es in unserer Gemeinde spezielle Angebote, die ihnen bei den ersten Schritten im Glauben helfen.

<input type="checkbox"/> Ja	<input type="checkbox"/> Nein
-----------------------------	-------------------------------

24. Wir haben eine Gemeindebroschüre gedruckt, in der sich die Gemeinde vorstellt (gefragt ist hier *nicht* nach einem Gemeindebrief!).

<input type="checkbox"/> Ja*	<input type="checkbox"/> Nein
------------------------------	-------------------------------

(\* Wenn ja, bitte ein Exemplar beilegen!)

25. Ich habe einen schriftlich formulierten Plan für die nächsten Schritte im Gemeindeaufbau.

<input type="checkbox"/> Ja	<input type="checkbox"/> Nein
-----------------------------	-------------------------------

26. Es gibt zumindest eine Gruppe in der Gemeinde, deren Arbeit ganz speziell auf Außenstehende konzentriert ist.

<input type="checkbox"/> Ja	<input type="checkbox"/> Nein
-----------------------------	-------------------------------

27. Über die Zahl der Gottesdienstbesucher wird in unserer Gemeinde Buch geführt.

<input type="checkbox"/> Ja	<input type="checkbox"/> Nein
-----------------------------	-------------------------------

28. Die Leiter der Arbeitsbereiche unserer Gemeinde treffen sich regelmäßig (= mindestens monatlich) zur Beratung.

<input type="checkbox"/> Ja	<input type="checkbox"/> Nein
-----------------------------	-------------------------------

29. Unsere Gemeinde hat sich zum Ziel gesetzt, ganz bestimmte Zielgruppen zu erreichen.

<input type="checkbox"/> Ja*	<input type="checkbox"/> Nein
------------------------------	-------------------------------

\* Wenn ja, welche Zielgruppen?

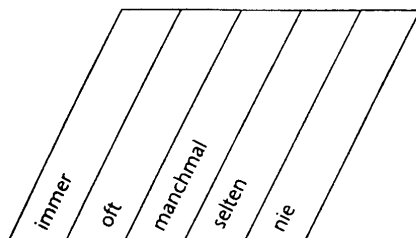
## Die folgende Aussage trifft ...

sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht
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... auf mich zu:

30					Die Gemeindearbeit macht mir Spaß.
31					Ich glaube, daß enge persönliche Beziehungen des Pastors zu seinen Gemeindegliedern eine Gefahr sind.
32					Ich bin überzeugt: Gott möchte, daß unsere Gemeinde wächst.
33					Für die einzelnen Arbeitsbereiche unserer Gemeinde habe ich Bereichsleiter eingesetzt.
34					Ich halte es für gefährlich, sich in der Gemeinde viel um das „Sich-Wohlfühlen“ zu kümmern.
35					Mir sind die persönlichen Probleme des engeren Mitarbeiterkreises bekannt.
36					Ich berate meine Arbeit regelmäßig mit einem „ortsfremden Mitarbeiter“ (z.B. Gemeindeberater, Pastorenkollege etc.).
37					Gemeindliche Statistiken sind mir persönlich unsympathisch.
38					Es beunruhigt mich, daß in meinem Verantwortungsbereich Menschen ohne Christus ewig verloren sind.
39					Ich gehöre zu den Menschen, die am liebsten alles selber machen.
40					Mir ist bekannt, welche Christen in unserer Gemeinde die Gabe der Evangelisation haben.
41					Ich empfinde die Gemeindearbeit als eine Last.
42					Mir ist es wichtig, zu jedem Gemeindeglied eine möglichst intensive persönliche Beziehung zu haben.
43					Freundschaftliche Beziehungen in unseren Kleingruppen werden von mir bewußt gefördert.
44					Mir ist es wichtig, den Mitarbeitern regelmäßig Lob und Anerkennung auszusprechen.
45					Mir fällt es schwer, mit Kritik umzugehen.

## Die folgende Aussage trifft ...



**... auf unsere  
Gemeinde zu:**

	immer	oft	manchmal	selten	nie	
46						Die Gemeindeleitung unterstützt die einzelnen Christen in ihrem evangelistischen Engagement.
47						Die ehrenamtlichen Mitarbeiter unserer Gemeinde werden für ihre Aufgaben geschult.
48						Wir achten darauf, daß Mitarbeiter langfristig nur solche Aufgaben wahrnehmen, die ihren Gaben entsprechen.
49						Wenn ein Mitarbeiter eine Aufgabe übernimmt, geben wir ihm eine schriftliche Aufgabenbeschreibung.
50						Unsere Gemeinde reagiert auf Veränderungen skeptisch.
51						Das gemeindeleitende Gremium (Älteste, Presbyterium, Kirchenvorsteher etc.) unterstützt aktiv Evangelisation und Gemeindeaufbau.
52						Die Leiter von gemeindlichen Gruppen oder Arbeitsbereichen haben jeweils einen „Co-Leiter“.
53						Vor bzw. nach dem Gottesdienst gibt es in unserer Gemeinde Angebote zum geselligen Beisammensein.
54						In unserer Gemeinde werden die Aufgaben vergeben, ohne daß ein zeitliches Limit gesetzt wird.
55						Während der Gottesdienste gibt es in unserer Gemeinde eine Kinderbetreuung.
56						Die Leiter der Gemeindegruppen werden für ihre Aufgabe geschult.
57						In unserer Gemeinde wird es bewußt gefördert, daß sich Kleingruppen durch Teilung vervielfältigen.
58						Wir legen Wert darauf, daß Neubekehrte in einen evangelistischen Dienst einbezogen werden.
59						Unsere Gottesdienste ziehen Außenstehende an.
60						Die Pflege von Beziehungen zu einzelnen Gemeindegliedern ist mir wichtiger, als mich mit Planungs- und Organisationstätigkeiten zu befassen.

**Interim version of the questionnaire for lay workers (in German)**

# Gemeindeprofil - Fragebogen für engagierte Gemeindeglieder

An der Entwicklung dieses Fragebogens habt Ihr - dank Eurer Mithilfe durch das Ausfüllen des ersten Fragebogens vor einigen Wochen - wesentlich Anteil. Dafür möchte ich Euch ganz herzlich danken!

Jetzt geht es in die zweite Runde: Dieser verbesserte Fragebogen muß nämlich noch einmal überprüft werden, so daß ich "schlechte" Fragen 'rausschmeißen kann. Dann ist es endlich auch möglich, Aussagen über unsere Gemeinde zu machen.

Damit das möglich ist, möchte ich Dich bitten, diesen Fragebogen ausgefüllt bis zum \_\_\_\_\_ an Deinen Hauskreisleiter (nur ausnahmsweise an mich direkt) zu geben, der die Bögen an mich weiterleitet. Die Auswertung erfolgt natürlich anonym.

Wichtig: Wenn bei einer bestimmten Frage keine der angegebenen Alternativen 100prozentig mit Deiner Auffassung übereinstimmt, dann kreuze die Antwort an, die *am ehesten* Deiner Meinung entspricht.

Vielen Dank für Deine Mühe!

Christoph Schalk

Bitte beantworten Sie folgende Fragen, indem Sie die Möglichkeit ankreuzen, die am ehesten Ihrer Auffassung entspricht:

1. Wieviele freundschaftliche Kontakte haben Sie zu Menschen, die sich selbst nicht als Christen bezeichnen würden?

☐ Keine      ☐ 1-2      ☐ 3-5      ☐ 6-10      ☐ mehr als 10

2. Wissen Sie, ob es für die einzelnen Arbeitsbereiche in der Gemeinde so etwas wie einen Bereichsleiter gibt?

☐ Ja, für alle.      ☐ Ja, für einige.      ☐ Ist mir nicht bekannt.

3. Wieviele freundschaftliche Kontakte haben Sie zu anderen Gemeindegliedern?

☐ 1-2      ☐ 3-4      ☐ 5-6      ☐ 7-8      ☐ 9 und mehr

4. Wieviel Zeit verbringen Sie wöchentlich etwa - außerhalb gemeindlicher Veranstaltungen - mit Freunden aus der Gemeinde?

☐ Weniger als 1 Std.      ☐ 1-2 Stdn.      ☐ 2-3 Stdn.      ☐ 4-5 Stdn.      ☐ Mehr als 5 Stdn.

5. Wie oft wurden Sie von anderen Gemeindegliedern (nicht Verwandten) innerhalb der letzten zwei Monate zum Essen oder Kaffeetrinken eingeladen?

☐ Gar nicht      ☐ 1 mal      ☐ 2-3 mal      ☐ 4-5 mal      ☐ Mehr als 5 mal

6. Wie oft haben Sie andere Gemeindeglieder (nicht Verwandte) innerhalb der letzten zwei Monate zum Essen oder Kaffeetrinken eingeladen?

☐ Gar nicht      ☐ 1 mal      ☐ 2-3 mal      ☐ 4-5 mal      ☐ Mehr als 5 mal

Seite 1



## Die folgende Aussage trifft...

	sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht	...ZU.
7						Unser Pastor ist dafür bekannt, daß er Konflikten lieber aus dem Wege geht.
8						Ich kenne meine geistlichen Gaben.
9						Ich weiß, daß andere Gemeindeglieder regelmäßig für mich beten.
10						Ich bin über einen Plan, den unsere Gemeinde für den Gemeindeaufbau hat, informiert.
11						Der Besuch unseres Gottesdienstes ist für mich eine inspirierende Erfahrung.
12						Ich habe in der Gemeinde eine Gruppe, in der es möglich ist, sich über persönliche Probleme auszutauschen.
13						Ich weiß, daß unsere Gemeinde Programme hat, die speziell Nichtchristen ansprechen.
14						Es fällt mir schwer, einem anderen Christen Zuneigung zu zeigen.
15						Von unserem Pastor geht ein ansteckender Optimismus aus.
16						Die Aufgaben, die ich in der Gemeinde wahrnehme, machen mir Freude.
17						Ich unterstütze die Gemeinde finanziell gerne und großzügig.
18						Es gibt für die einzelnen Arbeitsbereiche in der Gemeinde so etwas wie Bereichsleiter.
19						Es macht mir Spaß, im Gottesdienst den Predigten zuzuhören.
20						Es ist das erklärte Ziel unserer Kleingruppen, sich durch Zellteilung zu vervielfältigen.
21						Ich bringe meine Freunde (bzw. Kollegen, Verwandte), die Jesus noch nicht kennen, gern in die Gemeinde mit.
22						Von einer liebevollen Atmosphäre kann man in unserer Gemeinde nicht gerade sprechen.
23						Unser Pastor scheint sich in unserer Gemeinde wohlfühlen.
24						Ich fühle mich von den Aufgaben, die ich in der Gemeinde wahrnehme, überfordert.
25						Ich lese persönlich gerne die Bibel.
26						Ich weiß, welche Ziele unsere Gemeinde in den nächsten Jahren verfolgt.
27						Die Predigt stellt einen geistlichen Höhepunkt in unseren Gottesdiensten dar.
28						Die Zahl der gemeindlichen Kleingruppen nimmt ständig zu.
29						Ich bete für meine Freunde, Kollegen und Verwandte, die Jesus noch nicht kennen, daß sie zum Glauben kommen.
30						Es fällt mir leicht, meine Gefühle mit anderen Christen zu teilen.
31						Unser Pastor macht die Arbeit lieber selbst als sie an andere zu delegieren.
32						Ich fühle mich in meiner Aufgabe von meiner Gemeinde unterstützt.
33						Wenn ich einen Gottesdienst besuche, erwarte ich, daß Gott mich persönlich anspricht.

Seite 2

## Die folgende Aussage trifft...

	sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht	...zu.
34						Es fällt mir leicht, jemandem den Zweck unserer Gemeinde zu erklären.
35						Ich erlebe, daß mich der Gottesdienst aufbaut.
36						Ich habe eine Gruppe in der Gemeinde, in der andere bei Bedarf mit mir und für mich beten.
37						Mir fällt es schwer, in wenigen Sätzen zusammenzufassen, was mir der Glaube bedeutet.
38						In unserer Gemeinde kann man sich über Gefühle und Probleme austauschen.
39						Wenn ein Gemeindeglied sich offensichtlich auf dem falschen Weg befindet (moralische Verfehlungen, Passivität etc.), wird es vom Pastor liebevoll, aber entschieden korrigiert.
40						Meine Aufgaben in der Gemeinde überfordern mich.
41						Zeiten des Gebets sind für mich eine inspirierende Erfahrung.
42						Uneffektive Angebote unserer Gemeinde werden nicht künstlich am Leben erhalten.
43						Ich spüre, daß die Predigt in Gottesdienst meine persönliche Situation anspricht.
44						Ich habe eine Gruppe in der Gemeinde, in der wir über geistliche Fragen reden.
45						Ich möchte dazu beitragen, daß neue Leute zum Glauben und zur Gemeinde finden.
46						Die Beziehungen, die ich zu anderen Gemeindegliedern habe, würde ich (im Durchschnitt) als relativ kühl bezeichnen.
47						In die Gestaltung unserer Gottesdienste sind viele Christen aktiv einbezogen.
48						Ich erlebe, daß Gott meine Mitarbeit sichtbar zum Aufbau der Gemeinde benutzt.
49						Ich erlebe, welche verwandelnden Auswirkungen der Glaube auf die unterschiedlichsten Lebensbereiche (z. B. Beruf, Familie, Freizeit etc.) hat.
50						Die Aktivitäten unserer Gemeinde zeichnen sich durch gelungene Planung und Organisation aus.
51						Für mich ist die "Sonntagspflicht" das wichtigste Motiv, den Gottesdienst zu besuchen.
52						In der gemeindlichen Kleingruppe, zu der ich gehöre, fühle ich mich rundum wohl.
53						Ich arbeite daran, meine Beziehungen zu den Menschen, die Christus noch nicht kennen, zu vertiefen.
54						In unserer Gemeinde wird viel gelacht.
55						Unser Pastor konzentriert sich auf die Aufgaben in der Gemeinde, für die er begabt ist.
56						Die Aufgaben, die ich in der Gemeinde wahrnehme, entsprechen meinen Gaben.
57						Ich bin von meiner Gemeinde begeistert.

## Die folgende Aussage trifft...

sehr stark  
ziemlich stark  
durchschnittlich stark  
kaum  
gar nicht

...zu.

58						Ich habe den Eindruck, daß die Strukturen unserer Gemeinde das Gemeindeleben eher behindern als fördern.
59						Ich gehe in den Gottesdienst, weil sich das so gehört.
60						Ich habe eine Gruppe in der Gemeinde, in der es regelmäßig gemeinsames Gebet und Austausch über geistliche Fragen gibt.
61						Unsere Gemeinde hat Veranstaltungen, die extra auf Menschen abgestimmt sind, die dem Glauben fern stehen.
62						Ich empfinde es als sehr positiv, wenn in unserer Gemeinde gelacht wird.
63						Unser Pastor sucht dort, wo er selbst nicht so sehr begabt ist, die Ergänzung durch andere Mitarbeiter.
64						Meine Aufgabe in der Gemeinde empfinde ich als große Herausforderung.
65						Das Wort Gottes ist in meinen alltäglichen Entscheidungen die wichtigste Autorität.
66						Die Gruppen in unserer Gemeinde werden in der Regel nur von einer Person geleitet.
67						Es macht mir Spaß, Außenstehende in unseren Gottesdienst mitzubringen.
68						Ich habe eine Kleingruppe in der Gemeinde, in der ich mich zu Hause fühle.
69						Menschen, die neu zum Glauben gefunden haben, haben bald gute Freunde in unserer Gemeinde.
70						Es prägt die Atmosphäre in unserer Gemeinde, daß wir uns häufig loben und Komplimente machen.
71						Unser Pastor geht Konflikten lieber aus dem Weg.
72						Ich erlebe meine gemeindliche Mitarbeit als eine wenig aufregende Routinearbeit.
73						Ich bin mir sicher, daß andere Gemeindeglieder regelmäßig für mich beten.
74						In unserer Gemeinde wurde schon öfters etwas Neues ausprobiert.
75						Die Musik in unseren Gottesdiensten hilft mir dabei, Gott anzubeten.
76						In den Gruppen, zu denen ich gehöre, fällt es neuen Besuchern leicht, sich in das Gruppenleben zu integrieren.
77						Ich habe den Eindruck, daß in unserer Gemeinde die evangelistischen Aktivitäten oft phantasielos sind.
78						Wenn jemand in unserer Gemeinde etwas gut macht, dann sage ich ihm das.
79						Ich würde unseren Pastor als zielorientiert bezeichnen.
80						Ich weiß, welchen Stellenwert meine Aufgabe im Gesamtkonzept der Gemeinde hat.
81						Unser Pastor ist für mich ein geistliches Vorbild.
82						Ich könnte die Organisationsstruktur unserer Gemeinde aufzeichnen.
83						Unsere Gottesdienste sind ideenreich und kreativ gestaltet.

## Die folgende Aussage trifft...

sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht
------------	----------------	------------------------	------	-----------

...zu.

84					Wenn sich in unserer Gemeinde ein Mensch für Christus entscheidet, helfen ihm andere Christen bei den ersten Schritten im Glauben.
85					Kreative evangelistische Aktivitäten sind nicht unsere Stärke.
86					Soziale Aktionen spielen in unserer Gemeinde eine große Rolle.
87					Unser Pastor ist überarbeitet.
88					Ich habe für meine Aufgabe(n) eine schriftliche Aufgabenbeschreibung.
89					Gebet hat in unserer Gemeinde einen hohen Stellenwert.
90					In unserer Gemeinde hört man oft den Satz "Das haben wir schon immer so gemacht und deshalb bleibt das auch so".
91					Unser Gottesdienst wird von einem Team vorbereitet.
92					Menschen, die neu zum Glauben gefunden haben, werden in unseren gemeindlichen Kleingruppen offen aufgenommen.
93					Wenn neue Besucher gemeindliche Veranstaltungen besuchen, begegnen wir ihnen offen und liebevoll.
94					Ich tue mich leicht, Leuten in unserer Gemeinde, die sich mir gegenüber falsch verhalten haben, zu vergeben.
95					Ich glaube, daß sich unser Pastor in der Gemeinde wohl fühlt.
96					Ich habe oft einen Grund, für Gottes Wirken in meinem Leben zu danken.
97					Die Mitarbeiter in unserer Gemeinde werden regelmäßig geschult.
98					In unseren Gottesdiensten werden neue oder seltene Besucher freundlich begrüßt.
99					In unserer Gemeinde gibt es nur <i>eine</i> Sorte von Kleingruppen (z. B. Hauskreise).
100					In unserer Gemeinde wird die Frage der Evangelisation bei allen möglichen Gelegenheiten thematisiert.
101					Wenn jemand in der Gemeinde anderer Meinung ist als ich, dann schweige ich lieber als daß ich den Frieden gefährde.
102					Unser Pastor kümmert sich um die leitenden Mitarbeiter der Gemeinde mehr als um die restlichen Gemeindeglieder.
103					Ich glaube fest daran, daß Gott in unserer Gemeinde in den nächsten Jahren noch sehr viel stärker wirken wird.
104					Für Kinder ist während unserer Gottesdienste optimal gesorgt.
105					Die Größe der Kleingruppe (Teilnehmerzahl), zu der ich gehöre, be- hagt mir nicht.
106					Ich habe manchmal ein schlechtes Gewissen, weil ich zu wenig zur Evangelisation in unserer Gemeinde beitrage.
107					Die Beziehungen, die ich zu anderen Mitarbeitern habe, würde ich (im Durchschnitt) als relativ kühl bezeichnen.
108					Unser Pastor gibt vielen Gemeindegliedern die Möglichkeit, den Got- tesdienst mitzugestalten.
109					Ich bezeuge oft vor anderen Christen, daß ich etwas mit Gott erlebt habe.

## Die folgende Aussage trifft...

	sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht	
110						Neuen Besuchern unserer Gemeinde begegnen wir herzlich.
111						In der gemeindlichen Kleingruppe, zu der ich gehöre, verbringen wir viel Zeit mit Dingen, die mir nichts bringen.
112						Die Atmosphäre in unserer Gemeinde ist von leidenschaftlichem Engagement geprägt.
113						Ich langweile mich öfter mal im Gottesdienst.
114						Evangelisation ist in unserer Gemeinde ein wichtiges Thema.
115						Der Leitungsstil meines Kleingruppenleiters gefällt mir.
116						Die Musik in unserem Gottesdienst ist ziemlich melancholisch.
117						Der Umgangston in unserer Gemeinde ist von frommem Jargon geprägt.
118						Die Beziehungen der Leute in meiner Kleingruppe untereinander sind ausgezeichnet.
119						Der Ablauf unseres Gottesdienstes ist unabänderlich.
120						Ich finde es in jedem Fall richtig, einem Nichtchristen ins Gesicht zu sagen, daß er verloren geht, wenn er sich nicht bekehrt.
121						In meiner Kleingruppe hat man Vertrauen zueinander.
122						Vor oder nach dem Gottesdienst ist geselliges Beisammensein möglich.
123						In meiner Kleingruppe kann ich mich so einbringen, wie ich das möchte.
124						Die Leiter unserer Kleingruppen werden regelmäßig geschult.

...zu.

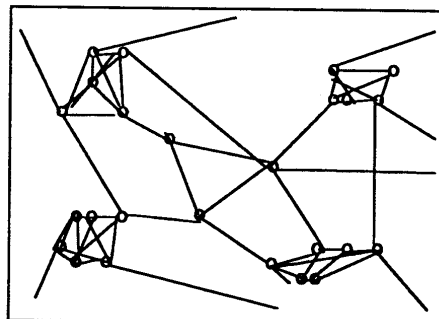
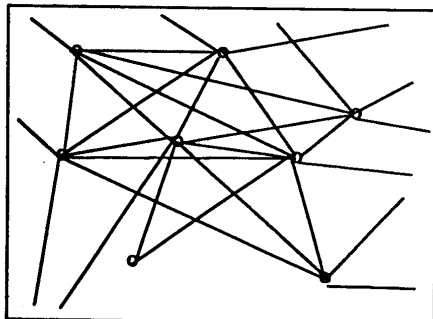
125. Kennen Sie Ihre geistlichen Gaben?

☐ Ja ☐ Nein ☐ Bin unsicher

126. Welchen Prozentsatz Ihres Brutto-Einkommens (bzw. Taschengeldes, Bafög etc.) geben Sie etwa für christliche Zwecke?

☐ Weniger als 1% ☐ 1-4% ☐ Etwa 5% ☐ 6-9% ☐ 10% oder mehr

127. Die Struktur unserer Gemeinde entspricht  eher  dem Bild ☐ links ☐ rechts.



Seite 6

**New revised version of the questionnaire for lay workers (in German)**

# Gemeindeprofil - Fragebogen für engagierte Gemeindeglieder

Indem Sie die folgenden Fragen beantworten, helfen Sie uns, weitere Aufschlüsse darüber zu bekommen, was die Stärken und Schwächen unserer Gemeinde sind. Es ist wichtig, daß Sie *alle* Fragen beantworten, indem Sie Ihr Kreuz in eines der angegebenen Kästchen setzen. Wenn bei einer bestimmten Frage keine der angegebenen Alternativen 100prozentig mit Ihrer Auffassung übereinstimmt, kreuzen Sie die Antwort an, die am *ehesten* Ihrer Meinung entspricht. Denken Sie bei der Beantwortung der Fragen an unsere Gemeinde, wie sie sich *derzeit* aus Ihrer Sicht darstellt.

Die Daten werden in Deutschland vom Ökumenischen Gemeinde-Institut (Emmelsbüll) und in der Schweiz vom Institut Koinonia (Buchs/Zürich) anonym ausgewertet. Bitte geben Sie den ausgefüllten Bogen wieder der Person zurück, über die Sie ihn erhalten haben.

Herzlichen Dank für Ihre Mitarbeit!  
Ihre Gemeinde

## Angaben zur Person:

- ☐ Pastor oder Mitglied der Gemeindeleitung
- ☐ sonstige Leitungsaufgabe in der Gemeinde
- ☐ Mitarbeiter der Gemeinde (irgendeine Aufgabe)
- ☐ ohne Aufgabe in der Gemeinde

Alter: \_\_\_\_\_ Geschlecht: ☐ männlich ☐ weiblich

Ich bin seit \_\_\_\_\_ Jahren Christ.

Bitte beantworten Sie folgende Fragen, indem Sie die Möglichkeit ankreuzen, die am ehesten Ihrer Auffassung entspricht:

## Die folgende Aussage trifft...

	sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht	...ZU.
1						Ich kenne meine geistlichen Gaben.
2						Ich weiß, daß andere Gemeindeglieder regelmäßig für mich beten.
3						Ich bin über einen Plan, den unsere Gemeinde für den Gemeindeaufbau hat, informiert.
4						Der Besuch unseres Gottesdienstes ist für mich eine inspirierende Erfahrung.
5						Ich habe in der Gemeinde eine Gruppe, in der es möglich ist, sich über persönliche Probleme auszutauschen.
6						Ich weiß, daß unsere Gemeinde Programme hat, die speziell Nichtchristen ansprechen.
7						Es fällt mir schwer, einem anderen Christen Zuneigung zu zeigen.
8						Von unserem Pastor geht ein ansteckender Optimismus aus.
9						Die Aufgaben, die ich in der Gemeinde wahrnehme, machen mir Freude.
10						Ich empfinde es als sehr positiv, wenn in unserer Gemeinde gelacht wird.
11						Es macht mir Spaß, im Gottesdienst den Predigten zuzuhören.
12						Ich lese persönlich gerne die Bibel.
13						Ich weiß, welche Ziele unsere Gemeinde in den nächsten Jahren verfolgt.
14						Es fällt mir leicht, meine Gefühle mit anderen Christen zu teilen.
15						Unser Pastor macht die Arbeit lieber selbst als sie an andere zu delegieren.
16						Ich fühle mich in meiner Aufgabe von meiner Gemeinde unterstützt.
17						Ich habe den Eindruck, daß die Strukturen unserer Gemeinde das Gemeindeleben eher behindern als fördern.
18						Ich erlebe, daß mich der Gottesdienst aufbaut.
19						Ich habe eine Gruppe in der Gemeinde, in der andere bei Bedarf mit mir und für mich beten.
20						In unserer Gemeinde kann man sich über Gefühle und Probleme austauschen.
21						Ich spüre, daß die Predigt in Gottesdienst meine persönliche Situation anspricht.
22						Ich habe eine Gruppe in der Gemeinde, in der wir über geistliche Fragen reden.
23						Die Beziehungen, die ich zu anderen Gemeindegliedern habe, würde ich (im Durchschnitt) als relativ kühl bezeichnen.
24						In die Gestaltung unserer Gottesdienste sind viele Christen aktiv einbezogen.
25						Ich erlebe, daß Gott meine Mitarbeit sichtbar zum Aufbau der Gemeinde benutzt.
26						Ich erlebe, welche verwandelnden Auswirkungen der Glaube auf die unterschiedlichsten Lebensbereiche (z. B. Beruf, Familie, Freizeit etc.) hat.



## Die folgende Aussage trifft...

sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht
------------	----------------	------------------------	------	-----------

...ZU.

27						Die Aktivitäten unserer Gemeinde zeichnen sich durch gelungene Planung und Organisation aus.
28						In der gemeindlichen Kleingruppe, zu der ich gehöre, fühle ich mich rundum wohl.
29						In unserer Gemeinde wird viel gelacht.
30						Unser Pastor konzentriert sich auf die Aufgaben in der Gemeinde, für die er begabt ist.
31						Die Aufgaben, die ich in der Gemeinde wahrnehme, entsprechen meinen Gaben.
32						Ich bin von meiner Gemeinde begeistert.
33						Unsere Gemeinde hat Veranstaltungen, die extra auf Menschen abgestimmt sind, die dem Glauben fern stehen.
34						Unser Pastor sucht dort, wo er selbst nicht so sehr begabt ist, die Ergänzung durch andere Mitarbeiter.
35						Meine Aufgabe in der Gemeinde empfinde ich als große Herausforderung.
36						Das Wort Gottes ist in meinen alltäglichen Entscheidungen die wichtigste Autorität.
37						Ich habe eine Kleingruppe in der Gemeinde, in der ich mich zu Hause fühle.
38						Menschen, die neu zum Glauben gefunden haben, haben bald gute Freunde in unserer Gemeinde.
39						Es prägt die Atmosphäre in unserer Gemeinde, daß wir uns häufig loben und Komplimente machen.
40						Unser Pastor geht Konflikten lieber aus dem Weg.
41						In unserer Gemeinde wurde schon öfters etwas Neues ausprobiert.
42						Die Musik in unseren Gottesdiensten hilft mir dabei, Gott anzubeten.
43						Ich habe den Eindruck, daß in unserer Gemeinde die evangelistischen Aktivitäten oft phantasielos sind.
44						Wenn jemand in unserer Gemeinde etwas gut macht, dann sage ich ihm das.
45						Ich weiß, welchen Stellenwert meine Aufgabe im Gesamtkonzept der Gemeinde hat.
46						Unser Pastor ist für mich ein geistliches Vorbild.
47						Ich könnte die Organisationsstruktur unserer Gemeinde aufzeichnen.
48						Unsere Gottesdienste sind ideenreich und kreativ gestaltet.
49						Kreative evangelistische Aktivitäten sind nicht unsere Stärke.
50						Unser Pastor ist überarbeitet.
51						Unser Gottesdienst wird von einem Team vorbereitet.

## Die folgende Aussage trifft...

	sehr stark	ziemlich stark	durchschnittlich stark	kaum	gar nicht	...zu.
52						Wenn neue Besucher gemeindliche Veranstaltungen besuchen, begegnen wir ihnen offen und liebevoll.
53						Ich habe oft einen Grund, für Gottes Wirken in meinem Leben zu danken.
54						Die Mitarbeiter in unserer Gemeinde werden regelmäßig geschult.
55						In unserer Gemeinde wird die Frage der Evangelisation bei allen möglichen Gelegenheiten thematisiert.
56						Wenn jemand in der Gemeinde anderer Meinung ist als ich, dann schweige ich lieber als daß ich den Frieden gefährde.
57						Ich glaube fest daran, daß Gott in unserer Gemeinde in den nächsten Jahren noch sehr viel stärker wirken wird.
58						Für Kinder ist während unserer Gottesdienste optimal gesorgt.
59						Unser Pastor gibt vielen Gemeindegliedern die Möglichkeit, den Gottesdienst mitzugestalten.
60						Ich bezeuge oft vor anderen Christen, daß ich etwas mit Gott erlebt habe.
61						Neuen Besuchern unserer Gemeinde begegnen wir herzlich.
62						In der gemeindlichen Kleingruppe, zu der ich gehöre, verbringen wir viel Zeit mit Dingen, die mir nichts bringen.
63						Die Atmosphäre in unserer Gemeinde ist von leidenschaftlichem Engagement geprägt.
64						Ich langweile mich öfter mal im Gottesdienst.
65						Evangelisation ist in unserer Gemeinde ein wichtiges Thema.
66						Der Umgangston in unserer Gemeinde ist von frommem Jargon geprägt.
67						Die Beziehungen der Leute in meiner Kleingruppe untereinander sind ausgezeichnet.
68						In meiner Kleingruppe hat man Vertrauen zueinander.
69						In meiner Kleingruppe kann ich mich so einbringen, wie ich das möchte.
70						In den Gruppen, zu denen ich gehöre, fällt es neuen Besuchern leicht, sich in das Gruppenleben zu integrieren.

## Factor matrix of the original version of the test:

Item-Nr.	1.Fakt	2.Fakt	3.Fakt	4.Fakt	5.Fakt	6.Fakt	7.Fakt	8.Fakt	Kommun
1	0.081	0.062	0.019	0.014	0.106	0.088	0.062	0.290*	0.118
2	0.166	0.164	-0.048	0.236	0.260	-0.063	-0.186	-0.330	0.327
3	0.247	-0.049	0.127	0.267	0.276	-0.066	0.341	0.196	0.386
4	0.197	-0.012	0.079	-0.277	0.028	0.167	0.297	-0.285	0.320
5	0.061	0.052	0.063	0.118	0.264	-0.224	0.174	0.451*	0.378
6	0.124	-0.058	0.069	-0.097	0.115	-0.144	-0.075	0.437*	0.264
7	0.112	0.019	-0.017	0.022	0.363*	-0.137	0.296	0.052	0.254
8	0.031	0.011	-0.060	-0.277*	-0.028	-0.078	0.147	0.055	0.113
9	0.188	0.136	0.060	0.165	0.066	-0.043	0.379	0.444	0.431
10	0.428	0.034	-0.096	0.128	0.287	-0.090	0.314	0.035	0.400
11	0.140	0.006	-0.122	0.116	0.246	-0.001	0.498*	0.013	0.356
12	0.153	0.133	-0.084	0.000	0.313	0.116	0.052	0.423*	0.342
13	0.087	0.094	0.113	0.128	0.097	0.040	-0.078	0.473*	0.287
14	0.262	0.027	-0.013	0.228	0.520*	0.072	0.056	0.131	0.417
15	-0.075	0.058	0.501*	-0.109	-0.076	0.081	0.132	0.132	0.319
16	0.078	-0.050	0.514*	-0.121	0.126	0.021	-0.059	0.001	0.307
17	-0.117	0.180	0.044	0.349	0.354	-0.152	0.271	0.042	0.393
18	0.081	0.190	0.673*	0.050	0.070	-0.076	0.109	0.172	0.550
19	0.086	-0.004	0.668*	0.113	0.246	-0.005	0.008	0.001	0.527
20	0.263	0.024	0.150	0.588*	0.297	-0.047	0.067	0.177	0.564
21	0.385	-0.016	-0.020	0.481	0.219	-0.023	0.193	0.309	0.562
22	0.193	0.049	0.147	0.176	0.669*	-0.158	-0.039	0.018	0.567
23	0.598*	0.393	-0.022	-0.120	0.185	0.224	0.005	-0.017	0.612
24	0.027	-0.096	0.067	-0.121	0.129	0.625*	0.104	0.008	0.447
25	0.021	0.216	0.067	0.110	0.010	0.368*	-0.228	-0.019	0.252
26	0.572*	0.447	-0.041	-0.064	0.155	0.158	-0.074	0.081	0.594
27	0.520*	0.351	-0.005	-0.038	0.089	0.146	-0.093	0.067	0.437
28	0.530*	-0.018	0.059	0.277	0.279	0.084	0.024	0.278	0.524
29	0.256	0.111	0.171	-0.197	0.204	0.104	0.257	0.237	0.320
30	0.278	0.139	0.234	0.182	-0.162	0.033	0.220	0.117	0.274
31	0.582*	0.077	0.187	0.215	0.032	-0.020	0.214	0.179	0.505
32	0.164	-0.148	0.314	0.019	0.169	0.271	-0.051	0.389	0.404
33	0.101	0.070	-0.038	0.137	0.528*	0.273	0.003	0.193	0.425
34	0.528*	-0.033	0.054	0.052	0.080	0.175	0.055	0.280	0.405
35	0.462	0.018	0.037	0.204	0.305	0.265	0.241	0.204	0.520
36	0.018	0.002	-0.027	0.708*	0.084	0.090	0.019	0.113	0.531
37	0.240	0.176	0.185	0.097	0.646*	0.197	0.029	0.213	0.634
38	0.086	0.187	0.274	0.160	0.293	0.401	0.086	0.103	0.408
39	0.108	0.089	-0.128	0.176	-0.035	0.502*	0.163	-0.025	0.347
40	0.234	0.422	0.182	0.115	0.461	0.082	0.173	0.149	0.551
41	0.431	-0.019	0.114	0.150	0.226	0.072	0.279	0.176	0.387
42	0.270	0.064	0.192	0.125	0.585*	0.057	0.160	0.197	0.539
43	0.475	0.166	0.051	0.379	0.329	-0.070	0.175	0.180	0.575
44	0.374	0.476	0.089	0.073	0.454	0.016	0.224	0.135	0.654
45	0.078	0.101	0.022	0.097	0.706*	0.184	0.125	0.158	0.599

ITEM-Nr.		1.FAKT	2.FAKT	3.FAKT	4.FAKT	5.FAKT	6.FAKT	7.FAKT	8.FAKT		KOMMUNITÄT
46		0.119	0.316	0.153	0.214	0.433	-0.160	0.248	0.308		0.552
47		0.099	-0.073	0.022	0.183	0.204	0.146	0.391*	-0.004		0.265
48		0.083	0.246	0.155	0.135	0.609*	0.146	0.247	0.174		0.593
49		0.477	0.180	0.313	0.157	0.208	0.080	0.170	-0.099		0.471
50		0.534*	0.325	0.068	-0.010	0.099	-0.217	0.016	0.027		0.454
51		0.232	-0.072	0.034	0.449*	0.122	0.242	0.104	-0.092		0.355
52		0.406	0.095	0.352	0.256	0.141	-0.013	0.004	-0.048		0.386
53		0.362	-0.021	0.287	0.205	0.242	0.003	0.195	-0.039		0.354
54		0.067	0.034	-0.120	0.499*	0.104	0.019	0.241	-0.076		0.344
55		0.113	0.481*	0.238	0.187	0.054	0.140	-0.029	-0.057		0.363
56		0.040	0.197	0.198	0.044	0.090	0.271	0.379	0.057		0.310
57		0.235	0.512*	0.037	0.179	0.249	0.061	0.317	0.085		0.524
58		0.184	0.512*	-0.120	0.132	0.142	0.180	-0.155	0.104		0.415
59		0.186	0.545*	-0.082	-0.109	0.269	-0.094	0.073	0.171		0.466
60		0.231	0.380	-0.011	0.344	0.357	-0.110	0.146	0.163		0.504
61		-0.247	0.353	-0.058	0.046	-0.028	0.297	-0.210	0.276		0.400
62		0.263	0.289	0.052	0.446	0.294	0.051	0.275	0.004		0.519
63		0.179	0.385	0.016	0.018	-0.151	0.202	0.435	0.030		0.434
64		0.155	0.438*	0.176	0.043	0.015	0.219	0.245	-0.032		0.358
65		0.468*	0.334	-0.115	-0.071	0.197	-0.024	0.218	0.015		0.436
66		-0.140	0.591*	0.084	0.093	0.063	-0.168	0.034	0.017		0.419
67		0.087	0.363	-0.080	0.439	0.156	-0.025	0.138	0.123		0.397
68		0.125	0.669*	0.069	-0.128	-0.034	0.005	0.116	0.017		0.500
69		0.022	0.229	0.148	0.002	0.133	-0.010	0.545*	-0.007		0.390
70		0.096	0.322	0.196	-0.089	0.391	-0.028	0.041	-0.156		0.339
Varianz		5.36	4.59	2.62	3.61	5.66	2.18	3.06	2.60		29.676
Varianz-%		7.65%	6.55%	3.75%	5.16%	8.08%	3.11%	4.37%	3.71%		42.39%

The stars (\*) indicate to which factor a variable mainly belongs to.

## Factor matrix of the new version of the test:

Item-Nr. (neu)	1.Fakt	2.Fakt	3.Fakt	4.Fakt	5.Fakt	6.Fakt	7.Fakt	8.Fakt	Kommun
1	0,339	-0,059	-0,18	0,568*	0,043	0,025	+0,096	0,32	0,557
2	0,254	0,068	0,179	0,176	-0,062	0,34	0,404	0,218	0,462
3	0,254	0,154	0,264	0,693*	0,054	0,164	0,237	-0,071	0,73
4	0,036	0,084	0,716*	0,106	0,034	0,013	-0,119	-0,037	0,55
5	0,772*	-0,02	0,105	-0,017	-0,08	0,131	0,202	0,05	0,675
6	0,425	0,61*	-0,016	0,127	0,132	0,092	-0,226	0,107	0,657
7	0,068	0,091	-0,109	0,117	0,672*	-0,067	0,342	-0,042	0,613
8	-0,144	0,411	0,167	0,33	0,181	0,484	-0,037	0,15	0,618
9	0,113	0,054	0,128	0,575*	-0,034	-0,107	-0,289	-0,055	0,461
10	0,037	0,252	0,308	0,196	0,507*	-0,15	-0,158	0,065	0,506
11	0,096	0,117	0,556*	0,1	-0,115	0,371	0,124	0,256	0,573
12	0,498*	0,179	-0,014	0,28	0,345	-0,03	0,075	0,029	0,485
13	0,173	0,263	0,168	0,665*	0,008	0,171	0,195	-0,289	0,719
14	0,085	-0,012	0,128	0,009	0,679*	0,102	0,061	0,1	0,509
15	-0,053	0,77*	0,134	0,071	-0,072	0,121	-0,058	0,059	0,646
16	0,196	0,11	0,243	0,679*	0,218	0,116	-0,232	-0,043	0,687
17	-0,062	0,525	0,223	0,211	0,213	0,288	-0,022	-0,284	0,584
18	0,02	0,24	0,697*	0,295	0,226	0,039	0,149	0,046	0,708
19	0,78*	-0,005	0,199	0,203	0,106	-0,063	-0,026	0,088	0,713
20	0,437	0,387	0,056	0,355	0,152	0,165	0,048	-0,037	0,524
21	0,268	0,047	0,588*	0,015	0,204	0,392	0,17	0,165	0,671
22	0,639*	-0,1	0,031	0,222	0,021	-0,145	-0,189	0,03	0,526
23	0,191	0,009	0,052	0,49	0,494	-0,031	0,097	-0,034	0,535
24	-0,033	0,574*	-0,083	0,126	0,029	0,5	0,181	-0,01	0,637
25	0,099	-0,033	0,103	0,739*	0,112	0,152	0,046	0,237	0,662
26	0,136	0,109	0,154	0,11	0,508	0,017	-0,123	0,534	0,626
27	0,206	0,273	0,206	0,499*	0,071	-0,05	0,218	0,046	0,465
28	0,688*	0,009	0,063	0,312	0,065	0,069	0,402	0,007	0,745
29	0,182	0,419	-0,089	0,459	0,332	-0,009	0,226	0,243	0,647
30	-0,159	0,595*	0,241	0,031	-0,027	-0,059	0,275	0,193	0,555
31	0,372	-0,056	0,017	0,566*	0,138	-0,095	-0,281	-0,166	0,596
32	-0,042	0,254	0,401	0,492	0,137	0,212	0,082	0,232	0,594
33	0,262	0,64*	-0,051	0,191	0,085	0,164	-0,012	0,106	0,563
34	-0,17	0,676*	0,173	0,035	-0,04	0,195	0,245	-0,063	0,62
35	0,037	0,104	0,15	0,617*	0,131	0,342	-0,181	0,113	0,595
36	0,396	0,16	0,2	-0,015	0,453	0,18	-0,009	0,231	0,513
37	0,807*	0,007	0,164	0,193	0,145	-0,049	0,025	0,141	0,759
38	0,224	0,347	-0,11	0,218	0,222	0,442	0,435	0,121	0,679
39	0,308	0,194	0,068	0,417	0,41	0,317	0,123	0,074	0,6
40	0,018	0,655*	0,233	0,119	0,022	-0,021	-0,155	0,097	0,531
41	0,29	0,342	-0,155	0,532	0,158	-0,021	0,203	-0,106	0,587
42	-0,126	0,248	0,615*	0,323	-0,056	-0,344	0,081	0,075	0,694
43	0,09	0,517	-0,085	0,058	0,209	0,292	-0,178	-0,437	0,637
44	0,464	0,064	0,117	0,318	0,507	0,02	0,184	-0,055	0,629
45	0,034	-0,085	0,039	0,789*	0,14	0,207	-0,095	0,06	0,707

46	-0,058	0,068	0,445	0,258	0,133	0,619*	-0,07	0,06	0,682	
47	0,269	-0,031	0,059	0,642*	0,01	-0,112	0,247	-0,033	0,563	
48	0,05	0,321	0,162	0,149	0,184	0,109	0,733*	-0,052	0,74	
49	0,139	0,325	0,058	0,049	0,197	0,295	0,165	-0,101	0,294	
50	0,034	0,684*	0,176	-0,152	0,131	-0,167	0,207	-0,063	0,615	
51	0,153	0,472	0,209	-0,212	0	0,093	0,484	0,064	0,583	
52	0,163	0,312	-0,026	0,433	0,397	0,163	0,063	-0,196	0,538	
53	0,14	0,071	0,063	0,194	0,382	0,075	0,044	0,61*	0,592	
54	0,226	0,283	0,136	0,48*	0,107	0,158	0,052	-0,003	0,419	
55	0,137	0,213	-0,023	0,031	-0,145	0,621*	0,126	-0,115	0,501	
56	-0,105	-0,118	0,118	0,123	0,664*	-0,019	-0,081	-0,115	0,515	
57	0,042	0,127	0,455	0,095	0,148	0,222	-0,117	0,478	0,548	
58	0,092	0,227	0,422	0,134	0,09	0,222	0,313	-0,136	0,43	
59	-0,122	0,678*	0,081	0,095	0,018	0,166	0,165	-0,258	0,611	
60	0,277	0,038	0,036	0,228	0,55	0,139	-0,008	0,452	0,658	
61	0,137	0,433	0,089	0,424	0,321	-0,098	-0,066	-0,117	0,524	
62	0,557	0,079	0,328	0,002	0,387	0,301	-0,146	-0,196	0,724	
63	0,062	0,229	-0,014	0,493	0,289	0,388	0,204	0,085	0,583	
64	0,264	0,065	0,606*	0,163	0,158	-0,194	0,038	-0,057	0,534	
65	0,144	0,593	-0,199	0,146	0,048	0,494	0,079	-0,151	0,709	
66	-0,058	0,235	-0,004	0,157	0,222	0,124	0,023	-0,651*	0,573	
67	0,581	0,271	-0,34	0,223	0,073	0,219	0,194	0,111	0,68	
68	0,741*	0,017	-0,158	0,121	0,115	0,275	-0,077	0,026	0,685	
69	0,706*	-0,116	0,161	0,346	0,08	0,141	-0,133	0,023	0,701	
70	0,406	0,289	-0,104	0,453	0,029	-0,13	0,201	0,16	0,549	
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Varianz	!	7,22	7,4	4,51	8,54	4,74	3,87	3,18	2,91	42,371
Varianz-%		10,16	10,42	6,36	12,03	6,68	5,45	4,48	4,1	59,68

The stars (\*) indicate to which factor a variable mainly belongs to.

## About the author

Christoph Schalk directs the international Partnership and Consultant Network of the Institute for Natural Church Development. He is also the Research Director of the Institute, and develops resources for church development.

In 1993 he completed his studies in psychology at the Julius Maximilians University, Würzburg, with a M.A. (Dipl.-Psych.) in organizational psychology (main subjects: organizational diagnosis, organizational development, personnel selection and personality research).

Since 1994 he has worked as a consultant for organizational development, mostly for churches and church organizations.

From 1995 to 1997 he edited the magazine of the German Church Growth Association (AGGA) together with Christian A. Schwarz and Kai S. Scheunemann. Since 1997 he has been the chief editor of this magazine.

In 1996 he started "ACTS", a training center for prospective church planters, leaders and consultants.

Christoph Schalk led the international research project of the Institute which was started in 1994 and carried out in 32 countries worldwide, and developed a scientifically valid and reliable tool to diagnose the strengths and weaknesses of churches.

He wrote several books, such as "The Implementation Guide to Natural Church Development" (co-authored with Christian A. Schwarz) which has been translated into many languages, "Das Gaben-Netzwerk", a strategic resource for the implementation of gift-oriented ministry in churches, and "Leichter leben lernen" which is one of the NCD workbooks.