

A Dynamic Model of Work Satisfaction: Qualitative Approaches

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Traditional work satisfaction research is criticized for its personalistic approach in conceptualization and measurement. Its results are doubted because of the artificially high proportions of satisfied. In order to overcome some of these shortcomings, the extended model of different forms of work satisfaction originally proposed by Bruggemann (1974) is validated. Six forms of work satisfaction (progressive, stabilized, resigned satisfaction; constructive, fixated, resigned dissatisfaction) are derived from the constellation of four constituent variables: comparison of the actual work situation and personal aspirations, global satisfaction, changes in level of aspiration, controllability at work. Results from semistructured interviews, a free Q-sort, and a questionnaire for differentiating forms of work satisfaction for 46 nurses provide support for the model. Various methods proved useful in accessing particular aspects of the underlying cognitive and evaluative processes in the formation of different forms of work satisfaction. Implications for personnel management and studies in organizational behavior (performance, intervention strategies) are discussed.

KEY WORDS: job/work satisfaction; dynamic model; person-situation interaction; qualitative methods; nurses.

INTRODUCTION

Twenty years ago, Locke (1976) identified over 3000 studies dealing with different aspects of work satisfaction. In recent years, there was a cut-back in the total amount of papers, however, research activities dealing with work satisfaction are still quite alive until today (see, e.g., Büssing,

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1996; Cranny, Smith, & Stone, 1992; Rusbult, Farrell, Rogers, & Mainous, 1988). Despite this large body of research, there are still major shortcomings in work satisfaction research.⁴

One of these is the loose coupling between theory and measurement. It is a paradoxical situation that while work satisfaction is one of the most frequently studied concepts in work and organizational psychology, it is also one of the most theory-free concepts measured against methodological standards in the field of organizational research (see Sutton & Staw, 1995). “A pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience” (Locke, 1976, p. 1300) or “the achievement of one’s job values in the work situation results in the pleasurable emotional state known as *job satisfaction*” (Locke & Henne, 1986, p. 21) are representative examples for what is understood by work satisfaction. These definitions are useful to form a more general understanding of what is meant by work satisfaction. However, it should be noted that most of them do not provide us with a theory of work satisfaction in the sense of an interrelated set of testable hypotheses developed from the framework of a model.

Furthermore, most studies apparently continue to use comparatively atheoretical attitude based questionnaires to assess work satisfaction. The wide acceptance of this method of work satisfaction measurement and its abundant use in research—almost to an extent that some researchers speak of a “throw-away” variable (Staw, 1984, p. 630)—is one side of the problem.

The other side is the high rate of survey studies on satisfaction levels which find a large proportion of satisfied (ranging from about 60 to 80%) blue collar workers as well as employees. These results seem to be widespread—internationally and across industries, trade, administration, and health-care systems (e.g., see Büssing, 1992; Bunz, Jansen, & Schacht, 1973; Szilagyai & Wallace, 1983; Weaver, 1980).⁵ Yet, for several years, researchers have become more and more critical and speak about the artificial character of traditional work satisfaction results (e.g., see Nord, 1977). Taking into account diverse negative conditions stated in many studies as, for example, accidents, insufficient work conditions, high division of labor and absenteeism, the proneness to distortion by well-known survey effects (e.g., social desirability or cognitive dissonance), as well as the weak correlation

⁴The use of *work* satisfaction instead of *job* satisfaction reflects the larger context of satisfaction at the workplace which we see the concept in, for example, the relationship between work and nonwork processes of socialization at work (see Büssing, 1991; Nicholson, 1996).

⁵For recent reviews of the field including work motivation see, for example, Locke (1984), Thierry and Koopman-Iwema (1984), Griffin and Bateman (1986), Locke and Henne (1986), Six and Kleinbeck (1989), Kleinbeck, Quast, Thierry, and Häcker (1990), Arvey, Carter, and Buerkley (1991), Fischer (1991), Kanfer, (1992), and Büssing (1996). We also find relevant aspects in recent reviews of organizational behavior research (e.g., O’Reilly, 1991; Schneider, 1985; Staw, 1984).

to organizational behavior like, for instance, performance (Iaffaldano & Muchinsky, 1985; Six & Eckes, 1991) positive work satisfaction results in these studies seem superficial in some way.

This paper sets out to analyze these high rates of satisfied persons in traditional work satisfaction research. It will essentially argue that different forms of work satisfaction can be distinguished based on whether personal aspirations are (un)met, and how the resulting work (dis)satisfaction is responded to in terms of changes in personal goal structures and problem-solving behavior. In order to distinguish and validate those forms, data will be presented from three different methods (interview, Q-sort, questionnaire). Additionally, we will show that the dynamic formation of forms of work satisfaction is most adequately measured using the interview method to ask about the process of development over time.

A DYNAMIC VIEW OF WORK SATISFACTION: MODEL AND EMPIRICAL EVIDENCE

Arvey, Bouchard, Segal, and Abraham (1989) estimated the amount of variance in job satisfaction scores explained by the interaction of both person and situational variables between 10 and 20%. The explanatory power of this type of study could be improved, if personalistic, static attitude-based measurement was complemented by methods that are more sensitive to processes involved in the interaction of work situation and person. Following this line of argument it seems to be insufficient to measure work satisfaction solely in quantitative terms, e.g., the amount of satisfaction. Instead, work satisfaction should be looked at in terms of its *quality*, i.e., in order to increase validity, we should focus on specific characteristics of persons' work satisfaction responses that evolve from the interaction process with their work situation. This perspective would allow us not only to examine the relationship between personal aspirations and the actual work situation—a common approach to work satisfaction (for overviews, see Locke, 1984; Thierry & Koopmann-Iwema, 1984)—, but also to trace the reciprocal influence of person and situation variables, i.e., how the actual work situation affects personal aspirations just as the realization of personal goals may influence the work situation. These ongoing processes imply that the formation of work satisfaction is *dynamic*, which is the main reason for using interviews.

This study analyzes a dynamic concept of work satisfaction that was first suggested by Bruggemann (1974). Her concept depends on an interactional view of work satisfaction. Figure 1 summarizes her model of different forms of work satisfaction. The model consists of three core variables: (1) comparison of the actual work situation and personal aspi-

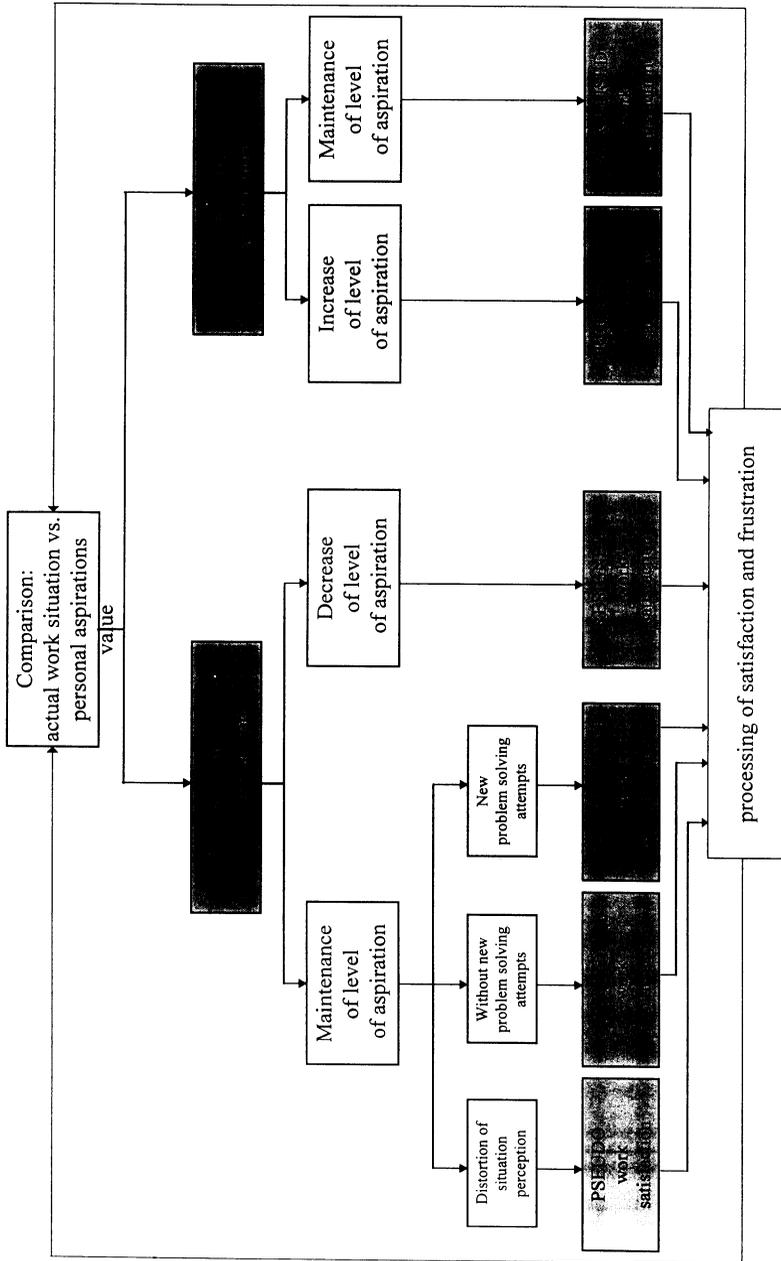


Fig. 1. Different forms of work satisfaction (translated and adapted from Bruggeman et al., 1975, p. 135).

rations, (2) changes in level of aspiration, (3) problem-solving behavior. The *comparison of the actual work situation and personal aspirations* more or less explicitly is the conceptual underpinning of several early definitions of work satisfaction (see, e.g., Adams, 1963; French, Rodgers, & Cobb, 1974; Morse, 1953; Porter & Lawler, 1969). These comparison processes at the workplace are closely linked to the key motivational variable which induces considerable dynamics into the model, namely the level of aspiration. Bruggemann (1974) does not provide a detailed conceptualization of the level of aspiration, indeed she seems to understand it as a set of needs and personal expectations along some dimension of high or low degree. Yet, a model of the structure of *the level of aspiration* in work settings (Büssing, 1991) was developed on the basis of Lewin, Dembo, Festinger, and Sears (1944); it outlines the context factors that influence changes in personal goal structures, which in turn alter the person–situation interaction and the person’s work satisfaction. *Problem-solving behavior* is used as a broad term to describe individuals’ reactions to discrepant relations between personal aspirations and the actual work situation.

According to this model, work satisfaction is developed in the following three-step process: Depending upon the *match between expectations, needs, and motives on the one hand and the work situation on the other*, a person builds up *stabilizing satisfaction* (steady feeling of relaxation as a result of met expectations and needs) or *indistinct dissatisfaction* (feeling of tension as a result of unsatisfied needs and expectations) with her/his work. Moreover, depending upon subsequent *changes in level of aspiration* (the network of personal goals and their determinants) in case of satisfaction or dissatisfaction and subsequent *problem-solving behavior*, six forms of work satisfaction or dissatisfaction can be developed.

In case of indistinct dissatisfaction at the first step, i.e., in case of differences between the actual work situation and personal aspirations, the model suggests two different outcomes for the level of aspiration at the second step: maintenance or decrease. Maintaining one’s level of aspiration in case of indistinct work dissatisfaction can result in three forms (see Fig. 1), of which the pseudo work satisfaction is the most critical one. For further research, Bruggemann (1976) herself disregarded this form as she doubted the possibility of finding valid operationalizations. The model suggests that the two other forms, *fixated* and *constructive work dissatisfaction*, are closely connected with problem-solving behavior a person can mobilize. These individual patterns of problem-solving behavior are relevant variables at the third step on the way of developing different forms of work satisfaction. Both fixated and constructive work dissatisfaction seem to depend largely upon variables like control or social support at work. Constructive dissatisfaction obviously takes a counterpart to resigned work satisfaction.

Table I. Different Forms of Work Satisfaction According to Bruggemann (1974)

<p><i>Pseudo work satisfaction:</i> A person feels dissatisfied with the work. Facing unsolvable problems or frustrating conditions at work and maintaining one's level of aspiration, for example because of a specific achievement motivation or because of strong social norms, a distorted perception or a denial of the negative work situation may result in a pseudo work satisfaction.</p>
<p><i>Fixated work dissatisfaction:</i> A person feels dissatisfied with the work. Maintaining the level of aspiration a person does not try to master the situation by problem solving attempts. While frustration tolerance prevents defence mechanisms necessary efforts for problem solving seem beyond any possibility. Therefore, the individual gets stuck with his problems and pathological developments cannot be excluded.</p>
<p><i>Constructive work dissatisfaction:</i> A person feels dissatisfied with the work. While maintaining the level of aspiration a person tries to master the situation by problem solving attempts on the basis of sufficient frustration tolerance. Moreover, available action concepts supply for goal orientation and motivation for altering the work situation.</p>
<p><i>Resigned work satisfaction:</i> A person feels indistinct work dissatisfaction and decreases the level of aspiration in order to adapt to negative aspects of the work situation on a lower level. By decreasing the level of aspiration a person is able to achieve a positive state of satisfaction again.</p>
<p><i>Progressive work satisfaction:</i> A person feels satisfied with the work. By increasing the level of aspiration a person tries to achieve an even higher level of satisfaction. Therefore, a "creative dissatisfaction" with respect to some aspects of the work situation can be an integral part of this form.</p>
<p><i>Stabilised work satisfaction:</i> A person feels satisfied with the work, but is motivated to maintain the level of aspiration and the pleasurable state of satisfaction. An increase of the level of aspiration is concentrated on other areas of life because of little work incentives.</p>

A decrease in level of aspiration should lead to a positive state of satisfaction (*resigned work satisfaction*). The high percentage of satisfied workers often found in attitudinal studies can frequently be explained by a more or less large proportion of workers who have passively resigned from their work situation.

In case of stabilizing satisfaction at the first step, *progressive* or *stabilized work satisfaction* result depending on the increase or maintenance of the level of aspiration (for further description, see Table I).

The model of different forms of work dis(satisfaction) adopted in this paper departs from the original model in three ways. *First*, we include the problem-solving behavior in our paper insofar as we analyzed both quantitative data and qualitative data from interviews and a free Q-sort. That means, we looked at how representatives of dissatisfied forms responded to self-reported problematic situations at work, for instance, by attempting to change the situation in the case of the constructive dissatisfied. In order not to overstretch the scope of this paper, we abstained from a rigorous analysis of problem-solving behavior in this paper (for a concept to deal with problem-solving behavior in the context of the model of different forms of work satisfaction, see Büssing & Bissels, forthcoming).

Second, on theoretical grounds, Büssing (1991, 1992) suggested *controllability at work* as a fourth variable to the original model, arguing that per-

Table II. Differentiation of Six Different Forms of Work Satisfaction Depending on the Configuration of the Four Constituent Variables (after Büssing, 1991)

Comparison: actual work situation vs. personal aspirations	Global (dis)satisfaction	Level of aspiration	Controllability of work situation	Forms of work (dis)satisfaction
=/+ ^a	+ ^c	↑	High	Progressive satisfaction
=/+	+	↔	High	Stabilized satisfaction
- _b	- ^d	↓	Low	Resigned satisfaction
-	- ^e	↓	Low	Resigned dissatisfaction
-	-	↔	Low	Fixed dissatisfaction
-	-	↔	High	Constructive dissatisfaction

^aCongruent or positive relationship of the actual work situation and personal aspirations.

^bIncongruent, negative relationship of the actual work situation and personal aspirations.

^cStabilizing satisfaction.

^dIndistinct dissatisfaction.

^eManifesting dissatisfaction.

ceived controllability of one's work situation serves as a primary means to regulate the person-work interaction, and, therefore, influences the development of forms of work satisfaction; this function also reflects the prominent role that the concept of control at work often plays in work psychological studies (e.g., Frese & Zapf, 1994; Ganster & Fusilier, 1989; Parker, 1993; Sauter, Hurrell, & Cooper, 1989; Wall, Jackson, & Mullarkey, 1995).

Third, the extension of the model by Büssing (1991) was empirically supported by the fact that studies performed by the first author's work group during the 1980s had repeatedly found clusters which could not be solely interpreted in terms of the original forms of work satisfaction proposed by Bruggemann. These clusters represented, for example, a form called *resigned dissatisfaction*, i.e., persons who did not manage to attain satisfaction by reducing their level of aspiration like the resigned satisfied group (see Table I), but whose dissatisfaction is manifesting.

Considering these three aspects, we propose an extension of the original model that leads to the following taxonomy: comparison of the actual work situation and personal aspirations, indistinct/manifesting dissatisfaction vs. stabilizing satisfaction, changes in level of aspiration, and perceived controllability at work, resulting in six forms of work satisfaction. For instance, a congruent configuration of the actual work situation and personal aspirations (=), stabilizing satisfaction (+), an increase in level of aspiration (↑) and high controllability of work conditions (high) is classified as progressive work satisfaction (Table II). Since testable hypotheses about both the differentiation and prediction of forms of work satisfaction can be derived from this extended model, it may assume the status of a theory (see Bacharach, 1989; Sutton & Staw, 1995).

This article pursues two objectives:

First, it attempts to validate the modified and extended model of different forms of work satisfaction originally proposed by Bruggemann (1974). The authors will do so by analyzing the three core variables (comparison of the actual work situation and personal aspirations, global (dis)satisfaction and changes in level of aspiration) as well as the role of controllability at work as a fourth variable, with the configuration of all four variables constituting the different forms of work satisfaction.

Second, new methods for differentiating forms of work satisfaction (interview, Q-sort) will be presented. However, it is not primarily intended to assess their methodical quality in terms of rigorous psychometric criteria; rather we aim to show the contribution of different methodological approaches in revealing facets of work satisfaction. For this analysis, both qualitative and quantitative methods were employed to measure different forms of work satisfaction.

METHOD

Participants

Data of 46 nurses (27 females, 19 males) from three German psychiatric hospitals were analyzed. One interview could not be analyzed for technical reasons. Sixteen participants worked as (deputy) ward nurses, and 30 as regular registered nurses. Average job tenure was 9.8 years. Age varied between 24 and 50 years (mean age was 32.7 years); 25 participants were married, 13 single, seven divorced, and one lived apart. Nineteen participants received an equivalent to high-school education, and 27 completed secondary education. Participants were recruited on a voluntary basis. The interviews were conducted during working time, the questionnaire was to be filled out after the interview; all subjects were paid for their participation.

Procedure

Data were collected by three methods with varying degrees of standardization and openness, i.e., both qualitative (semistructured interviews, free Q-sort procedure) and quantitative methods (AZK) were employed to measure different forms of work satisfaction.

Semistructured Interviews

The interviews were conducted teamwise (one interviewer and one co-interviewer). Before conducting the interviews, a training had to be com-

pleted; it consisted of information on interview methodology, listening to and discussing comparable interviews, and conducting trial interviews with subsequent feedback during the pilot study. The co-interviewer's job, among others, was to protocol the course of the interview, summarize main results, and manage the technical/logistic side of the interview (e.g., tape-recording, catering during breaks, etc.). Before the round of interviews started, participants were questioned on their occupational biography. Additionally, participants filled in a questionnaire gathering sociodemographic and further occupational data. In conducting the interviews, the interviewers attempted to maintain informality while covering a standard set of questions.

Among other variables, these questions operationalized the constituent variables of the model. Participants were asked to give a detailed description of their working situation (actual work situation). This block of questions was followed by a section aimed at different aspects of personal aspirations. These comprised externally set goals,⁶ e.g., tasks or organizational goals on the one hand (e.g., "Do you have to follow prescribed guidelines when you are performing your tasks?"), and self-set personal goals on the other hand (personal aspirations). Furthermore, participants were asked to assess the (in)compatibility of personal goals with working conditions and externally set goals ("How do you reconcile your personal aspirations with the working conditions?"); they were also supposed to report results and consequences of such comparison processes. Interviewers also addressed dynamics in the level of aspiration, i.e., changes in individual personal goals at work. Another section of the standard set of questions referred to the participants' overall work satisfaction, for which they were asked to outline the aspects determining satisfaction respectively dissatisfaction [overall (dis)satisfaction]. Finally, controllability at work (e.g. "Do you think you can influence or change your work situation?") was measured using a concept-specific, flexible module of questions that enabled interviewers to react more adequately to situational demands during the interview; additionally, certain topics within the standard set of questions were marked for optional use of this module. Besides these work-related issues, the interview also covered nonwork issues in their relation to work, for instance spare time activities, family demands, and so on. This part of the interview, too, was guided by a standard set of questions similarly structured as in the part concerned with work-related issues (first results concerning the work/nonwork relationship are reported elsewhere, see Büssing, 1995).

⁶Goals assigned by an external agent reflect a personal value of a person only if these goals are subjectively redefined as tasks and more or less accepted as personal goals (for detail see Hackman, 1970; Hacker, 1986).

*Free Q-Sort Procedure*⁷

At the end of the interview section on work-related issues, participants were to choose freely from seven statements on forms of work satisfaction that were printed on cards.⁸ Six of these statements were derived from the AZK-items by Bruggemann (1976). An additional form of work dissatisfaction, resigned dissatisfaction, was included on empirical grounds as reported above. For each form the statements combined the relevant constituent variables. For instance, progressive satisfaction was operationalized by “I am satisfied (satisfaction), the work has fulfilled my needs and personal goals (congruence between the actual work situation and personal aspirations), and beyond that I set myself new, long-term goals for the future (increase in level of aspiration).” In contrast to the standardized answering of the AZK, participants were asked to comment on relevant situations applying to their choices, to rank their choices in order of importance and, finally, to report changes of forms of work satisfaction which occurred during the last few weeks or months. Note that this study will not introduce the free Q-sort procedure as a psychometrically fully developed method in its own right; rather we employ it to demonstrate its contributions in revealing facets of work satisfaction.

*Work Satisfaction Questionnaire-Short Form (AZK)*⁹

The participants completed a standardized questionnaire. The core items of the AZK (Bruggemann, 1976) were part of this questionnaire (for wordings, see Table V). These items belong to two categories: degree/intensity and dynamics of satisfaction. Apart from one item for measuring overall satisfaction (aspect of degree) and one item for psychological well-being at work (aspect of intensity) the AZK consists of two items for evaluating changes in level of aspiration (first dynamic aspect) and seven items considering different forms of satisfaction (second dynamic aspect). The original AZK includes five of the six forms presented above (see Fig. 1); pseudo satisfaction is disregarded as already dealt with.

During the last couple of years, there have only been few research activities investigating the model of different forms of work satisfaction (for

⁷The complete wordings of the cards are available on request from the first author.

⁸This procedure departs from the common practice of prescribing the relative frequencies of categories (degrees of approval or disapproval along a rating scale), into which cards have to be sorted; yet it is a well-established procedure among the wide range of applications of Q-sorts, e.g., see Block, 1977; Minsel & Heinz, 1983).

⁹Items of the AZK are taken from Büssing (1992) and given in Table V. They were translated from German into English by the first two authors.

an overview, see Büssing, 1992). All of these studies used the “Arbeitszufriedenheits-Kurzfragebogen” (AZK; Work Satisfaction Questionnaire-Short Form) developed by Bruggemann (1976) and, therefore, these studies adopted a quantitative approach to the model. The results of cluster and subsequent discriminant analysis of the AZK variables were interpreted as different forms of work satisfaction.

Since the AZK, so far, is the only method to measure different forms of work satisfaction we incorporated it into our study. Again, this was done to illustrate this questionnaire’s advantages and limitations in analyzing forms of work satisfaction.

Data Analysis

Semistructured Interviews

The interviews were analyzed following the method of qualitative inquiry as developed by Miles and Huberman (1984). Initially, passages in the transcribed original interviews were systematically marked and broadly assigned to the various concepts in our study. At the second step, the passages were analyzed in a more detailed fashion before we condensed and paraphrased them into concept-related core statements (first level of condensation). Thirdly, the marked and paraphrased material of each interview was sorted by concepts (second level of condensation). Finally, the results of the interpretative analysis of the interview material were enriched by both the results from the questionnaire and the free Q-sort procedure. At the third level of condensation, all of this information was integrated into a so-called synopsis, which presents a concise 6–8 pages long, conceptually structured overview for each participant.

Measures were taken to increase objectivity and reliability. The initially marked transcripts were read by more than one interviewer. Codings were compared, corrected and in case of disagreement interviewers discussed the critical cases. Raters agreed in more than 98% of codings (neither systematic reasons for disagreement, nor a significant number of disagreements were noted). Concerning the variables relating to work satisfaction no significant number of disagreements was noted.

Synopses were analyzed by the first two authors independently of each other. The authors’ task was to assess the dominant trend in participants’ responses on each of the constituent variables (rate of agreement on each variable was more than 92%). The final classification of participants into different forms of work satisfaction was guided by the following decision rules:

- The decision on the dominance of either congruent or incongruent relationships of the *actual work situation and personal aspirations* was reflected in (a) the total number of congruences and incongruences, and (b) the weighting of the importance¹⁰ of areas in which (in)congruences were found.
- *Global work (dis)satisfaction* was decided on in a three-step procedure; in the first place, we considered the reported overall satisfaction in the interview; as a secondary source of information we focused on those parts of both the cards presented in the free Q-sort procedure and the AZK-items which reflected satisfaction in order to either support the judgement reached so far or to dissolve ambiguities.
- The decision on *changes in the level of aspiration* was based on both total number of reported increases, decreases or invariances in the level of aspiration and their numerical relation; the authors judged conservatively, i.e., any inconclusive constellation of increases, decreases and invariances was marked as ambivalent.
- *Controllability vs. uncontrollability* at work was decided on analyzing (a) the total number of instances of (un)controllability, and (b) the weighting of areas for which (un)controllability was reported.

The small number of disagreements in the authors' judgments were discussed and the discussion was critically commented by an additional team member until a unanimous decision could be reached.

Free Q-Sort

Two analysts independently assessed all chosen statements for each participant; then, they compared the rankings. The interrater reliability was 98.5%. With respect to the few disagreements, a third rater was co-opted to reach a final decision.

Work Satisfaction Questionnaire-Short Form (AZK)

The authors tried to re-construct the differentiation of forms of work satisfaction performing a cluster analysis (*k*-means clustering) with the core items of the AZK. Instead of cross-validation, the cluster solutions were

¹⁰Responses that pertained to the contents of the work (e.g., required qualifications), social aspects at work (e.g., team working), or working conditions (e.g., shiftwork) were ranked highest; aspects of the organizational context such as pay, training, job security, career prospects, etc. received a medium ranking, while various aspects such as fringe benefits, speed of working, pursued concepts in public health, organizational information policy, adequate rooms, appliances, and furniture were weighed lowest.

Table III. Empirically Found Forms of Work (Dis)satisfaction and Their Origin in Different Models

Origin of forms of work (dis)satisfaction		
Bruggemann model (1974)	Extended model by Büssing (1991)	Empirical evidence only
Progressive satisfaction (10) ^a		Satisfaction with constructive/fixated elements (7)
Stabilized satisfaction (5)	-	Satisfaction with a reduced level of aspiration (3)
Resigned satisfaction (3)		
Constructive dissatisfaction (7)	Resigned dissatisfaction (8)	-
Fixated dissatisfaction (3)		

^aIn parentheses the number of participants classified into a particular form of work (dis)satisfaction.

subjected to a subsequent discriminant analysis using jackknife classification method to avoid classification bias (Lachenbruch, 1975). Common psychometric properties (e.g., internal consistency, stability) only partially apply to the AZK, since it is rather a collection of singular items than a coherent scale, and the underlying concept of forms of work satisfaction implies instability of forms over time.

RESULTS

The results from the semistructured interview represent the basis for our distinction between forms of work satisfaction.

Semistructured Interviews

The analysis of interviews yielded eight distinguishable forms of work satisfaction on the basis of the taxonomy of the four constituent variables presented above. As shown in Table III, six of these empirically found forms conform to predictions of both the original model and its extended version by Büssing, whereas two forms (satisfied with constructive/fixated elements and satisfaction with a reduced level of aspiration) do not have an explicit theoretical underpinning. The following section portrays representative cases for the various forms starting with forms of work satisfaction.

Forms of Work Satisfaction

A prototypical case of *progressive satisfaction* is that of Robert Miller,¹¹ a male nurse, who changed jobs recently. He reports numerous congruences

¹¹All names mentioned in this paper are pseudonyms.

between the actual work situation and personal aspirations, for instance with respect to team working, social climate, nursing activities, activity/decision latitude, and autonomy:

At the moment my work, that is the actual work I do, meets my personal goals . . . that I'm on this particular ward and that I enjoy very much the way I work. But surely there are still things that can be improved.

This quotation also indicates that incongruences exist. However, they are limited to certain situations or areas of work and do not affect the global work satisfaction judgment:

I'm dissatisfied if I can't get through to a patient. When I notice: he [the patient] is not willing to do something or I'm not able to . . . somehow . . . care for him . . . The crucial factor [for satisfaction] simply is that things have been the way I always imagined them to be on a ward like this. And most of all, that my professional ideal is realised much better than before.

Robert reports only few long-term goals in his new job (e.g., good medical and psychological patient care), although he expresses his intention to develop them fairly soon. Short- and medium-term goals are outlined for example studying internal medicine and becoming ward nurse. With the exception of staffing, he perceives controllability in most other areas of work, for instance with respect to his work load, communication with relatives and his work tasks.

Stabilized satisfied participants predominantly display congruences between the actual work situation and personal aspirations; occurring incongruences are related to past situations or were located in areas of minor importance, e.g., adequate furniture and room. Almost unanimously they express unequivocal work satisfaction as well as they perceive controllability at work. In contrast to progressive satisfied, these participants primarily intend to maintain their current work situation, mention only few long-term goals and, instead, entertain various ambitions in their private lives (e.g., family or hobbies) as for example Irene Fischer. Irene is divorced with a 6-year-old child and works 20 hours a week at the admission ward of a psychiatric hospital for children and juveniles:

I see my job like this: to accompany the adolescents as long as I'm on duty. To notice whenever someone has got problems in eating his food, personal hygiene or tidying up his room and to offer them to talk. Nothing more, nothing less . . . I would never work full time here. Because it's too long and because I couldn't justify neglecting my child . . . Nowadays I can say I want everything to remain as it is for me right now.

Seven of our participants were classified as *satisfied with constructive/fixated elements*. In contrast to the group of progressive satisfaction, all of these nurses mention several incongruences between the actual work situation and personal aspirations for example conflicts with hospital management, long-term rebuilding, and insufficient staffing. However, these no-

table incongruences do not affect their global work satisfaction. Apparently, for most of these nurses, satisfaction with their work tasks, contact with patients, and teamwork outweigh the dissatisfactory incongruences. Again, this group of participants displays a high level of aspirations at work naming long-term goals, but also describing how they adapted their level of aspiration to circumstances or how they maintained it despite worsening working conditions. A high degree of controllability at work (e.g., with regard to the work situation as a whole and its changeability) is reported by four nurses. Our analyses indicate, however, that the other three nurses perceive their work rather as uncontrollable, particularly in those areas for which they reported incongruences between the actual work situation and personal aspirations:

Well, I don't know I can't really speak of having realised my goals at work. Actually, I can't really answer that question [Do you feel you have realised your personal goals at work?], because by and large everything stayed the same over the last couple of years. And I think things will stay the way they are . . . unless new colleagues were hired, but that's not going to happen Well, actually I don't think there could be any change. This [concerning conflicts with and little support by hospital management] could only change—I'm telling myself sometimes—if our hospital was closely affiliated to the main hospital and if it got a better administration I, for one, don't see any possibility to change this situation at all.

Therefore, we distinguish two subgroups for this form of work satisfaction, defined by the dominance of either constructive or fixated elements. Note, however, that representatives of these subgroups differ much more strongly from representatives of other forms of work satisfaction than they do from each other.

For three participants, *satisfaction with a reduced level of aspiration* was established. The characteristic feature of this form of work satisfaction lies in its reduced level of aspiration. On the one hand, nurses describe how they reduce, restructure, or shift their personal goals in order to adapt to their work situation and its assigned tasks and given work conditions. Peter Schmidt may serve as an example. Peter, a former registered nurse with several years of work experience, is now a biology student and works part time at an addiction ward on weekends:

At the moment my work as a nurse does meet my goals and needs, but I'm not so sure whether it would do so in the long run. That's why I started to study biology Yes, of course, I can think of long-term goals for a job like mine [nursing], but since I'm here for only a limited period of time I moderated my aspirations.

On the other hand Peter and the other two nurses uphold singular, specific long-term aspiration, which they pursue even when they have to face obstacles at work. For this form of work satisfaction, a reduced job-related level of aspiration as in Peter's or in the two other nurses' case is accom-

panied by congruences between the actual work situation and personal aspirations, global work satisfaction, and a high degree of controllability for many aspects at work. Still, uncontrollability is experienced, particularly concerning those aspects at work which participants reported reduced levels of aspiration for like understaffing or former goals (offering psychological care, supporting, and encouraging patients' independence) incompatible with present job demands. No ward nurse was found among this group.

Resigned satisfied participants resemble the preceding group only with regard to the reduction of their level of aspiration. Indeed, these representatives experience a range of incongruences between actual work situation and personal aspirations, for which they perceive little controllability (e.g., work with patients, working time schedules, teamwork). Characteristically, a feeling prevails varying between indistinct satisfaction and dissatisfaction:

Looking at my work with the patients, I really can't say that I'm particularly satisfied with it, . . . surely not Actually, there is not an area which I'm really satisfied with. You know, work simply is a must to me But things are not so bad if I think of that I work only 20 hours a week, do my job, go home again and earn the money.

The level of aspiration is found to be reduced in various respects (e.g., working with patients, exerting effort, career ambitions), and sometimes is accompanied by goals aiming at preventing trouble with patients or colleagues.

On the whole, we found 28 nurses who could be assigned to the five forms of work satisfaction outlined above.

Forms of Work Dissatisfaction

Turning to forms of work dissatisfaction, the following features emerged during the interviews. In total, we found three forms of work dissatisfaction: constructive, fixated, and resigned work dissatisfaction.

The 29-year-old nurse Gerald Wagner who works on the admission ward of a psychiatric hospital for adults may be taken for an example of *constructive work dissatisfaction*. He attributes his manifesting dissatisfaction to several incongruences between the actual work situation and personal aspirations like understaffing, team problems, and a changing clientele of patients. The constructive element of this form of work dissatisfaction shows in Gerald's response to problematic situations at work:

If a decision is made [by the doctors] which I don't understand, I ask them and say well please explain it to me They must notice that there is somebody who also wants to know the "deeper" reasons why they decide something one way or another. Because I want to be taken more seriously . . . and I don't fear conflicts that much anymore.

The characteristic maintenance of the level of aspiration is expressed, when he says:

Nevertheless [shortly before he described the dissatisfying working conditions], . . . on my shift I do as much of modern psychiatric nursing as possible. Funny, because before I changed wards I used to say all right, I have to put up with it. And now I think, no, I will stick to it.

Despite generally perceived controllability, uncontrollability is expressed for a few, singular and clearly restricted areas of work, for example, cooperation with the ward doctor.

Fixed dissatisfaction was established for three nurses, two of them ward nurses. Unanimously, they voiced several severe incongruences between the actual work situation and personal aspirations. Taking the case of Katherine Walter, married with one child and working as a nurse on an addiction ward for more than 10 years, common features of this group of nurses can be illustrated. Katherine's level of aspiration is two-sided. On the one hand, she has reduced her aspirations and as a consequence she stopped discussing work-related issues with her colleagues or as she puts considerably less effort into her work. On the other hand, she preserves her long-term goals, which cannot be realized in her present job or, indeed, which are independent of her particular job on this ward:

I don't see my tasks as stressful [in the sense of work load] . . . neither nursing, which is my basic task, nor the superordinate tasks [concept of community-based psychiatric care, empowerment of the patient] . . . these things belong together otherwise it makes no sense to me and I couldn't enjoy working anymore. To see not just the things on one's ward, but also to see the city's care system for drug addicts. Otherwise it's no use at all and you will end up with swing-door-psychiatry. And that's not what I want, but it's just that at the moment there is nothing I can do about it.

Again, working with patients and the tasks as such are the sources of satisfaction while the dominant feeling is one of manifesting dissatisfaction. Apparently, this state of dissatisfaction represents a phase at the (provisional) end of a sequence of forms of satisfaction:

Meanwhile I have cut back my aspirations. Sure, at first I moderated them gradually, but it just wasn't enough. And finally, the rest of my goals, too, I couldn't realise. Because I simply can't cope with this insincerity [of her colleagues] . . . I stopped trying to change something about the situation myself. I'm through with that and as nothing changes about my present work situation I'm looking for a new job.

Katherine mentions a range of areas for which she experiences little controllability, for example, conflicts with the ward's psychologist, staffing policy, or her chances of finding a new job.

Finally, eight of our participants were identified as *resigned dissatisfied*. Like the other forms of work dissatisfaction, these nurses display dominant incongruences between the actual work situation and personal aspirations as

Table IV. Degree of Congruence with the Interview Data for the Q-Sort and the AZK Arranged by Forms of Work Satisfaction

	Degree of congruence with interview data	
	Q-sort	AZK
Classification on grounds of the interview data		
Progressive satisfaction	+ ^a	+
Stabilized satisfaction	+	+
Satisfaction with fixated/constructive elements	± ^b	±
Resigned satisfaction	- ^c	-
Satisfaction with a reduced level of aspiration	+	-
Constructive dissatisfaction	±	+
Fixated dissatisfaction	±	+
Resigned dissatisfaction	±	±

^aCongruent with interview data.

^bEquivocal relationship with interview data.

^cIncongruent with interview data.

well as a manifest dissatisfaction (in contrast to the resigned satisfied). They differ with respect to the level of aspiration, for which most participants report thorough reductions. For instance, a ward nurse remarked that she really did not feel like working anymore and that only the income was still important for her. A male nurse reported that he had dropped his intention to become ward nurse and that he no longer pursued the goal to enable patients to live on their own. Yet, residual goals (e.g., at least to create a pleasant climate at work) and particularly goals which are not related to the current workplace like spending more time with one's family or changing jobs are present in our participants' accounts. Perception of controllability at work is generally low. A second look at this group of participants, however, dissolves the homogeneity and reveals, on the one hand, four nurses who either very recently changed jobs or seriously plan to do so (resigned dissatisfaction with constructive elements). On the other hand, four participants considered changing jobs much less intensively or see it only as a long-term alternative (resigned dissatisfaction with fixated elements).

Summing up, we found 18 nurses who were assigned to three forms of work dissatisfaction.

Free Q-Sort Procedure

An analysis of this card-based method provides a source of validation for the interview results. We found varying congruence between the assignment of forms of work satisfaction based on interview results and the choice of cards in the free Q-sort procedure (Table IV). Taking the forms of work

satisfaction which were established on the grounds of the interview results as a basis for analysis, we noted congruent choices of cards for progressive satisfaction, stabilized satisfaction, and satisfaction with a reduced level of aspiration. For instance, representatives of the progressive form of work satisfaction almost unanimously preferred the corresponding card. However, the choice of cards by nurses of the form of satisfaction with constructive/fixated elements was not conclusive, while we found only incongruent evidence for the resigned satisfied.

The choices for all forms of *dissatisfaction* were equivocal, though interpretable. Two representatives of the fixated form of dissatisfaction primarily opted for changing jobs, and all resigned dissatisfied chose the corresponding card, however, it was part of a combination of cards.

Work Satisfaction Questionnaire-Short Form (AZK)

The authors chose a five cluster solution performed on the AZK-items (*k*-means clustering; for further information on statistical methods used, see section data analysis above). Clusters were interpreted by three criteria: degree of work satisfaction, changes in level of aspiration, and high ratings on one or more items specific for a certain form of work satisfaction. If all three criteria were headed in the expected direction, clusters were quite easy to interpret for each cluster solution. Moreover, in a stepwise discriminant analysis using jackknife classification method more than 75% of the subjects were correctly classified into their work satisfaction clusters. From a statistical point-of-view, especially considering the base rate of 20% and an almost equal distribution of correct classification among the five groups,¹² therefore, we could expect a fairly valid discrimination of the five forms of work satisfaction, which we interpreted as constructive work satisfaction, constructive work dissatisfaction (changing jobs), resigned work satisfaction, stabilized-progressive work satisfaction, and fixated work dissatisfaction (see Table V). The results provide mixed evidence for the extended model of work satisfaction. Resigned dissatisfaction and satisfaction with a reduced level of aspiration were missing.

Regarding the degree of congruence with interview results (see Table IV), stabilized and progressive satisfaction only occur as a mixed cluster, yet the vast majority of stabilized and progressive representatives established on grounds of the interviews is found among this cluster. Looking at the cluster of resigned work satisfaction, the data were incongruent with the interview data, as were the data for the satisfied with a reduced level

¹²The six and seven cluster solutions resulted in an overall classification rate of 80% and 75%, respectively. However, these two solutions show an unequal distribution of correct classification between the groups.

Table V. Means for the Five Cluster Solution of the AZK Core Items (Bruggemann, 1976)

	Constructive satisfaction (10.9%)	Constructive dissatisfaction (17.4%)	Resigned satisfaction (19.6%)	Stabilized-progressive satisfaction (21.7%)	Fixated dissatisfaction (30.4%)
"I like my job"	4.4	2.0	4.1	4.7	4.0
"I'm satisfied with my job" ^a	7.3 ^b	2.7	6.9	8.0	5.5
"This job is exactly right for me because I really feel fine here"	4.0	2.0	3.7	4.5	3.0
"One cannot expect that ones needs and wishes will be satisfied at work"	2.2	2.9	2.6	2.1	2.6
"Regarding my job I have become more demanding during the course of time"	4.6	4.0	3.4	3.7	3.6
"Somehow I m dissatisfied with my job, but I don't know what to do"	1.8	2.5	2.2	1.2	3.1
"I'm satisfied with my job—I always say it could be worse"	2.4	1.9	3.7	1.9	2.3
"I'm dissatisfied with my job because I always have to get angry; if nothing can be done about it, I will start looking for a new job"	1.8	3.9	2.0	1.0	2.1
"I'm dissatisfied with my job because I always have to get angry; however, I think that I can change something in the future"	4.2	2.8	2.1	1.2	2.9
"Since I don't expect too much I may be pretty satisfied with my job"	2.2	1.5	3.0	1.3	2.4
"I'm truly satisfied with my job and for the near future I would like everything to remain as good as it is now"	2.0	1.3	3.1	3.9	2.1
"I'm truly satisfied with my job, especially since I can really progress here"	2.8	1.4	2.7	3.6	1.9

^a9-Point scale; scales for all other items were 5-point scales.

^bBold type indicates those means relevant for the interpretation of the clusters.

of aspiration. Moreover, the results for the satisfied with fixated/constructive elements and the resigned dissatisfied were ambiguous, while both constructive and fixated satisfied were characterized by congruence.

DISCUSSION

Using various methodological approaches, we found evidence for a dynamic model of work satisfaction. The results of our semistructured interviews combined with data from the free Q-sort and the AZK questionnaire yielded eight forms of work satisfaction. These distinct forms were derived from the constituent variables of the model of different forms of work satisfaction and controllability at work as a fourth constituent variable. Six of these eight forms were rooted in either the original model or in the extended version by Büssing (1991); two forms were established empirically. Both forms, which were not derived from a theoretical background, represented forms of work satisfaction. Unlike the majority of traditional work satisfaction research, our results show a relatively low percentage of satisfied employees. Sixty-one percent of our participants were assigned to forms of satisfaction. Furthermore, we found that 1/4 of the nurses belonged to either fixated or resigned dissatisfaction, i.e., at that time, a sizeable proportion of our sample had undergone a critical phase in their work satisfaction; their careers still were in a personally strained and organizationally displeasing state.

Our analyses show that representatives of *constructive dissatisfaction* hardly ever considered or even planned changing jobs, instead they attempted to change their present work situation. *Fixated dissatisfied* nurses typically did not report any long-term goals for their present workplace. On the contrary, they reduced workplace-related ambitions drastically since they perceived little controllability at work; they sketched fairly distant wishes or seriously planned to change jobs instead. Indeed, serious plans to change jobs must be interpreted as a relaxation of fixation (see below).

A considerable proportion of participants (17%) was assigned to *the resigned form of dissatisfaction*. In contrast to the resigned satisfied's experience of indistinct dissatisfaction, representatives of this form felt manifestly dissatisfied. This form of work dissatisfaction was persistently found in previous studies with the AZK at comparable percentages, yet it constitutes a deviation from the Bruggemann model. According to the original model resignation should result in satisfaction. Yet, resigned dissatisfied nurses apparently do not achieve satisfaction via this mechanism. This may be due to the fact that these nurses cannot or do not want to lower their aspirations enough to experience satisfaction. Nursing typically involves a high percentage of tasks dealing with other persons (with patients, doctors,

or colleagues) demanding a high degree of interaction and communication skills from the caregiver in a work situation that is characterized by irregular and often unpredictable amounts of work, time pressure, pressure for quick decision-making and interacting with seriously ill persons. All of these aspects cannot easily be neglected or ignored by a person working on a ward. These job demands will not allow permanent withdrawal; they are very likely to frustrate attempts to passively resign into a state dominated by a low concern for work-related matters and little engagement. Therefore, it seems that resigned dissatisfied nurses are caught in a trap consisting of a contradiction between nondismissable high-standard work demands and related professional goals on the one hand and the intent to lower the level of aspiration for instance because of low controllability at work on the other hand.

One of the reasons why it should be difficult to find pure forms of resigned or fixated dissatisfaction in future studies are these personally involving job demands in caring and helping. Another reason is the situation for nurses on the labor market. Particularly during the 1980s, there was a high demand for labor in the health care system in Germany. Combined with high rates of fluctuations and transferability of qualifications and skills, it was comparatively easy to leave an adverse job. Moreover, those theoretically derived pure forms of work satisfaction assume too much stability. For both resigned and fixated dissatisfaction, we found countervailing tendencies or perspectives on each of the constituent variables—a fact which induces substantial dynamics into a form of work satisfaction. Comparing all three forms of dissatisfaction with the taxonomy for differentiating forms of work satisfaction presented in this article, we must concede that the empirical evidence suggests higher levels of aspiration inducing more dynamics and more action orientation than expected.

We established clear evidence for *progressive* and *stabilized forms of satisfaction* (some 30% of all participants) in both interviews, Q-sort and AZK. Looking at satisfaction with constructive elements, discontent with respect to certain aspects of the work situation seems to be a discriminatory feature since it was not found for progressive satisfaction as assumed (see Table I).

In contrast to previous studies that used the AZK and found up to 40% of *resigned satisfied* employees, we noted resigned satisfaction for some 20% of our participants in the AZK, respectively, 7% in the interview. This discrepancy can in part be attributed to a difference in occupational groups and to different work situations. However, in face of the voluntary character of participation in our project we also have to consider the possibility of a biased self-selected sample. This assumption is supported by the fact that further cluster and discriminant analyses of the AZK comparing the present

sample with a larger sample of nurses resulted in the nurses from the present sample being assigned to no more than three clusters, none of which was interpretable as resigned satisfaction. Beyond those arguments on sample-specific problems, the AZK apparently shows psychometric deficits in measuring the dynamics in work satisfaction responses (for a further discussion of the AZK, see Büssing, 1992).

Our analysis highlights the role of controllability at work and the dynamic nature of the interplay between person and situation variables. Controllability at work was posited as another important variable for the formation and further development of forms of work satisfaction by Büssing (1991) in his extended model of different forms of work satisfaction. The relevance of this extension was shown by illustrating the discriminatory power of perceived controllability for different forms of work satisfaction. This holds true in particular for the constructive and fixated forms of dissatisfaction. For those forms, perceived controllability was reflected, for instance, in participants' influence on their superior or in psychological withdrawal in case of perceived uncontrollability (also see Henne & Locke, 1985; Rusbult et al., 1988). Apparently, controllability at work functions as a mechanism to regulate the person-work interaction insofar as perceived low controllability at work in connection with incongruences between the actual work situation and personal aspirations and/or reduced levels of aspiration can be seen as a cause of dissatisfaction at work as, for example, in the cases of fixated or resigned dissatisfaction. However, interindividual differences in a desire for control and in levels of competencies to handle increased control discussed in the involvement literature (see Cotton, 1996) or the degree of self-efficacy (Parker, 1993) are likely to moderate this relationship. Accordingly, our results showed no clear link between degree of control at work (for example, in comparing ward nurse vs. regular registered nurse) and forms of satisfaction.

The diverse methods employed in this study demonstrated particular merits as well as limitations. We gave our subjects the opportunity to actively participate by integrating their points-of-view into the process of data collection. The "open" interview situation allowed us to access information which traditional satisfaction research and methodology tells us little about; yet these "insights" are essential for understanding the phenomenon of work satisfaction:

- Participants outlined ambivalent aspects of their work situation, e.g., coming to terms with the incompatibilities of socio-therapeutic care and administrative demands as a ward nurse or dealing with suicidal patients.

- Perspectivity of work satisfaction statements, i.e., participants' reports on work satisfaction varied depending on the point-of-view they took, e.g., past vs. present, social comparison with colleagues.
- Participants reported personal goals of varying relevance and degrees of abstractness; they interrelated these various goals so that constellations of apparently contradicting goals became interpretable.

In sum, the analysis of our interviews clearly indicated the ample cognitive and evaluative processes that need to be addressed in studying work satisfaction.

Altogether, the free Q-sort procedure appears to deliver results of limited consistency with results from our semistructured interviews. Still, on the level of aggregate statements concerning the constituent variables, the cards were understood in the way intended by the researchers as we noted during the communicative validation of participants' comments. In particular, we could often establish mutually unidirectional relationships between cards and forms of satisfaction established in the interviews. The relatively less consistent relationship for forms of dissatisfaction (representatives of forms of dissatisfaction on average chose more cards than their satisfied counterparts did) can be explained as a consequence of the characteristics of these forms of work dissatisfaction, rather than being a methodical weakness of the procedure.

In total, the AZK clustering provided results consistent with results from our semistructured interviews. For representatives of stabilized and progressive work satisfaction as well as for constructive and fixated dissatisfied results from the AZK-clusters were compatible. Apparently, questionnaire items are less sensitive to those forms that imply a reduction of personal aspirations. While these results support critics pointing out that a dynamic model requires other than standardized attitude-based measurement, future studies may use the AZK as a screening device at a first step in a research or evaluation process. Although, as expected, the Q-sort and the AZK showed specific limitations in their power to differentiate forms of work satisfaction subsequent research should advance the elaboration of these methods in order to capitalize on their relative merits. In particular, extending the application of AZK to non-German-speaking countries appears fruitful for methodical advancement.

A differentiation of forms of work satisfaction would probably have considerable impact on research in organizational behavior as well as practical consequences for personnel management. The model of different forms of work satisfaction incorporates two concepts, i.e., goals and control,¹³ both of which can be taken as starting points for interventions on

¹³The research group of the first author is working on experiments to investigate the relationship between forms of work satisfaction, goals, and control at work.

an individual and on an organizational level. Depending on the range of forms of work satisfaction present in an organization's workforce, different strategies to manage employees are functional in order to reduce (further) organizational costs in terms of turnover, low productivity levels, low creativity, etc. on the one hand, and individual harm like reduced well-being or limited personal development on the other hand.

According to first analyses of consequences of different forms of work satisfaction, we must take into account that resigned and fixated work dissatisfaction are related to reduced well-being, effort, and performance as well as resistance to change on the employee's side and—presumably—less adaptability and performance on the organization side. Moreover, another remarkable aspect on the individual side of resigned and fixated dissatisfaction seems to be reduced goal-setting activities and, closely connected, a restricted professional development and socialization into the job (see Nicholson, 1984). Managing resigned and fixated work dissatisfaction seems to be a difficult task as resignation is not a matter of short periods of time. It seems to be much more a consequence of a longer lasting conflict between individual aspirations on the one hand and organizational structures as well as specific working conditions on the other. Therefore, the cost-effectiveness of strategies regarding the management of resigned and fixated work dissatisfaction is obvious: prevention for example by appropriate selection procedures, continuous potential analysis, prospective work design, and organizational development seems to be a far more cost-effective way than subsequent intervention or correction for it.

From an organizational point-of-view, turnover and absenteeism appear to be only one side of work dissatisfaction. As mentioned before, constructive work dissatisfaction might become a background for growth in organizations as constructive dissatisfied persons mostly show sufficient frustration tolerance and action concepts for new problem-solving attempts. Because of that, their goal orientation and motivation for altering negative work situations should become an integral part of an organizational change planned or at least supported by the management. A transformation of this potential into organizational change on one side and personal development on the other would require (new) strategies for conflict management in organizations, a willingness to broaden control at work (e.g., by participative goal-setting and decision making for nurses, autonomous ward groups, health quality circles, flexible working time, etc.), as well as serious commitment by management and other groups responsible in organizations. By utilizing their human resources to a higher degree as well as offering attractive working conditions in terms of qualifications, challenging tasks, and pay an organization prepares itself for dealing with growing standards of production, service, and technology in an increasingly competitive eco-

conomic environment (see Storey, 1995). Therefore, hospitals and other organizations should basically look at constructive work dissatisfaction in a positive manner.

There are several further questions which future research should address. *Firstly*, different forms of work satisfaction are conceptualized as states, which are determined by four constituent variables at the core of the model. Our approach so far was a cross-sectional one combining different methodologies and methods. To increase internal validity, appropriately designed longitudinal studies that monitor events happening between points of measurement (e.g., by regular phone contact with participants) are useful, and allow us to determine the stability of forms of work (dis)satisfaction (also see Büssing, forthcoming). *Secondly*, from a pragmatic as well as a practical view, it would be highly desirable to have a small-scale, more economical yet similarly valid method as the semistructured interviews. Presently, we work on a puzzle technique in which participants are asked to construct their present forms of work satisfaction along the constituent variables of the model; they may do so by arranging and commenting on cards that reflect the various values of each variable. Analyzing both the arrangement of cards and the respective comments it should be possible to reconstruct relationships between single constituent variables of different forms of work satisfaction. *Thirdly*, to assume a strong link between degrees of satisfaction and levels of performance seems plausible, yet is premature at this time as numerous studies showed (see above). And it also “. . . obscures the fact that we know so little about the structure and determinants of each” (Schwab & Cummings, 1970, p. 429), which still is true today. This weak link, on the one hand, is less surprising if we consider the difficulties in conceptualizing and measuring performance (e.g., the existence of various moderating variables like skill levels, or influence of social norms in work groups, the choice of adequate performance criteria; see Schwab & Cummings, 1970; Staw, 1984), and if we bear in mind the criticisms applied to traditional satisfaction research, its concepts and methodology in this paper on the other hand. Therefore, instead of performance, individual problem-solving attempts in dealing with incongruent, ambivalent work situations should be the provisional mode of behavior to be looked at. A useful theoretical underpinning is provided by Lazarus' and Launier's taxonomy of coping styles (Lazarus & Launier, 1978; Lazarus & Folkman, 1984) developed within the framework of their cognitive stress model (see Büssing & Bissels, forthcoming). *Fourthly*, recent research focuses on work satisfaction as a (genetic) disposition for affective reactions to one's work environment (see the literature on negative affectivity, e.g., see Levin & Stokes, 1989; Necowitz & Roznowski, 1994; also Staw & Ross, 1985; Staw, Bell, & Clausen, 1986; for an overview and discussion on dis-

position and situation in work satisfaction see Arvey et al., 1991). This body of evidence should be considered and reflected in further studies using the extended model, though a static and one-sided dispositional approach to the complex reciprocal processes between person and work environment must be cautioned against (Semmer & Schallberger, 1996, p. 282).

REFERENCES

- ADAMS, J. S. Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, 1963, 67, 422-436.
- ARVEY, R. D., BOUCHARD, T. J., SEGAL, N. L. & ABRAHAM, L. M. Job satisfaction. Environmental and genetic components. *Journal of Applied Psychology*, 1989, 74, 187-192.
- ARVEY, R. D., CARTER, G. W., & BUERKLEY, D. K. Job satisfaction: Dispositional and situational influences. In C. L. Cooper and I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 6). Chichester: Wiley, 1991, pp. 359-384.
- BACHARACH, S. B. Organizational theories: Some criteria for evaluation. *Academy of Management Review*, 1989, 14, 496-515.
- BLOCK, J. Advancing the psychology of personality: Paradigmatic shift or improving the quality of research? In D. Magnusson and N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology*. New York: Wiley, 1977, pp. 37-63.
- BRUGGEMANN, A. Zur Unterscheidung verschiedener Formen von "Arbeitszufriedenheit" [The differentiation of different forms of "work satisfaction"]. *Arbeit und Leistung*, 1974, 28, 281-284.
- BRUGGEMANN, A. Zur empirischen Untersuchung verschiedener Formen der Arbeitszufriedenheit [An empirical investigation of different forms of work satisfaction]. *Zeitschrift fuer Arbeitswissenschaft*, 1976, 30, 71-74.
- BUNZ, A. R., JANSEN, R., & SCHACHT, K. *Qualität des Arbeitslebens. Soziale Kennziffern zur Arbeitszufriedenheit und Berufschancen* [Quality of working life. Social parameters on work satisfaction and career options]. Bonn: Forschungsbericht des Bundesministeriums fuer Arbeit und Sozialordnung, 1973.
- BÜSSING, A. Struktur und Dynamik von Arbeitszufriedenheit: Konzeptuelle und methodische Ueberlegungen zu einer Untersuchung verschiedener Formen von Arbeitszufriedenheit [Structure and dynamics of work satisfaction: Conceptual and methodical reflections on investigating different forms of work satisfaction]. In L. Fischer (Ed.), *Arbeitszufriedenheit. Beiträge zur Organisationspsychologie 5* [Job satisfaction. Contributions to organisational psychology 5]. Göttingen: Hogrefe, 1991, pp. 85-114.
- BÜSSING, A. A dynamic view of job satisfaction in psychiatric nurses in Germany. *Work & Stress*, 1992, 6, 239-259.
- BÜSSING, A. Work and leisure in health care. A study of subjective concepts. In M. Hagberg, F. Hofmann, U. Stöbel, and G. Westlander (Eds.), *Occupational health for health care workers*. Landsberg a.L.: Ecomed, 1995, pp. 12-17.
- BÜSSING, A. Motivation and satisfaction. In M. Warner (Ed.), *International encyclopedia of business and management*. (Vol. 4). London: Thomson Business Press, 1996, pp. 3548-3559.
- BÜSSING, A. *Stability and change in different forms of work satisfaction over a period of six years*. Muenchen: Technical University, Chair of Psychology. Forthcoming.
- BÜSSING, A. & BISSELS, T. *Problem solving behaviour in different forms of work satisfaction: An explorative study*. Muenchen: Technical University, Chair of Psychology. Forthcoming.
- COTTON, J. L. Employee involvement. In C. L. Cooper and I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 11). Chichester: Wiley, 1996, pp. 219-242.
- CRANNY, C. J., SMITH, P. C. & STONE, E. F. (Eds.). *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York: Lexington, 1992.
- FISCHER, L. (Ed.). *Arbeitszufriedenheit* [Work satisfaction]. *Beiträge zur Organisationspsychologie 5*. Stuttgart: Verlag fuer Angewandte Psychologie, 1991.

- FRENCH, J. R. P., RODGERS, W. L., & COBB, S. Adjustment as person–environment fit. In G. Coelho, D. Hamburg, and J. C. Adams (Eds.), *Coping and adaptation*. New York: Basic Books, 1974.
- FRESE, M., & ZAPF, D. Action as the core of work psychology: A German approach. In H. C. Triandis, M. D. Dunnette, and L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 4). Palo Alto, CA: Consulting Psychologists Press, 1994, pp. 271-340.
- GANSTER, D. C., & FUSILIER, M. R. Control in the workplace. In C. L. Cooper and I. Robertson (Eds.), *International review of industrial and organizational psychology*. Chichester: Wiley, 1989, pp. 235-280.
- GRIFFIN, R. W., & BATEMAN, T. S. Job satisfaction and organizational commitment. In C. L. Cooper & I. Robertson (Eds.), *International review of industrial and organizational psychology*. London: Wiley, 1986, pp. 157-188.
- HACKER, W. *Arbeitspsychologie. Psychische regulation von arbeitstätigkeiten [Work psychology. Psychological regulation of work tasks]*. Bern: Huber, 1986.
- HACKMAN, J. R. Tasks and task performance in research on stress. In J. E. McGrath (Ed.), *Social and psychological factors in stress*. New York: Holt, Rinehart & Winston, 1970, pp. 202-237.
- HENNE, D. L., & LOCKE, E. A. Job dissatisfaction: What are the consequences? *International Journal of Psychology*, 1985, 20, 221-240.
- IAFFALDANO, M. T., & MUCHINSKY, P. M. Job satisfaction and job performance: A meta analysis. *Psychological Bulletin*, 1985, 97, 251-273.
- KANFER, R. Work motivation: New directions in theory and research. In C. L. Cooper and I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 7). Chichester: Wiley, 1992, pp. 1-53.
- KLEINBECK, U., QUAST, H.-H., THIERRY, H., & HÄCKER, H. (Eds.). *Work motivation*. Hillsdale, NJ: Erlbaum, 1990.
- LACHENBRUCH, P. A. (1975). *Discriminant analysis*. London: Hafner, 1975.
- LAZARUS, R. S., & FOLKMAN, S. *Stress, appraisal, and coping*. New York: Springer, 1984.
- LAZARUS, R. S., & LAUNIER, R. Stress-related transactions between person and environment. In L. A. Pervin and M. Lewis (Eds.), *Perspectives in interactional psychology*. New York: Plenum, 1978, pp. 287-327.
- LEVIN, I., & STOKES, J. P. Dispositional approach to job satisfaction: Role of negative affectivity. *Journal of Applied Psychology*, 1989, 74, 752-758.
- LEWIN, K., DEMBO, T., FESTINGER, L., & SEARS, P. S. Level of aspiration. In J. McHunt (Ed.), *Personality and the behavior disorders* (Vol. 1). New York: Ronald Press, 1944, pp. 333-378.
- LOCKE, E. A. The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology*. New York: Wiley, 1976, pp. 1297-1351.
- LOCKE, E. A. Job satisfaction. In M. Gruneberg and T. Wall (Eds.), *Social psychology and organizational behavior*. Chichester: Wiley, 1984, pp. 93-118.
- LOCKE, E. A., & HENNE, D. Work motivation theories. In C. L. Cooper and I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 1). Chichester: Wiley, 1986, pp. 1-35.
- MILES, M. B., & HUBERMAN, A. M. *Qualitative data analysis*. Beverly Hills, CA: Sage, 1984.
- MINSEL, W. R., & HEINZ, M. Das Q-Sort-Verfahren [The Q-sort procedure]. In H. Feger and J. Bredenkamp (Eds.) *Forschungsmethoden der Psychologie. Enzyklopädie der Psychologie* (B, 1, 2) [Research methods in psychology. *Encyclopedia of psychology*], Göttingen: Hogrefe, 1983, pp. 135-153.
- MORSE, N. C. *Satisfaction in the white-collar job*. Ann Arbor: University of Michigan, 1953.
- NECOWITZ, L. B., & ROZNOWSKI, M. Negative affectivity and job satisfaction—cognitive processes underlying the relationship and effects on employee behaviors. *Journal of Vocational Behavior*, 1994, 45, 270-294.
- NICHOLSON, N. A theory of work role transitions. *Administrative Science Quarterly*, 1984, 29, 172-191.

- NICHOLSON, N. Towards a new agenda for work and personality: Traits, self-identity, "Strong" interactionism, and change—Guest editor's introduction to "Work and Personality." *Applied Psychology: An International Review*, 1996, 45, 189-205.
- NORD, W. R. Job satisfaction reconsidered. *American Psychologist*, 1977, 32, 1026-1035.
- O'REILLY III, C. A. Organizational behavior: Where we've been, where we're going. *Annual Review of Psychology*, 1991, 42, 427-458.
- PARKER, L. E. When to fix it and when to leave: Relationships among perceived control, self-efficacy, dissent, and exit. *Journal of Applied Psychology*, 1993, 78, 949-959.
- PORTER, L. W., & LAWLER, E. E. *Managerial attitudes and performance*. Homewood: Irwin, 1969.
- RUSBULT C.E., FARRELL, D., ROGERS, G. & MAINOUS, A. G. Impact of exchange variables on exit, voice, loyalty, and neglect: An integrative model of responses to declining job satisfaction. *Academy of Management Journal*, 1988, 31, 599-627.
- SAUTER, S. L, HURRELL, J. J., & COOPER, C. L. (Eds.). *Job control and worker health*. Chichester: Wiley, 1989.
- SCHNEIDER, B. Organizational behavior. *Annual Review of Psychology*, 1985, 36, 573-611.
- SCHWAB, D. P., & CUMMINGS, L. L. Theories of performance and satisfaction. *Industrial Relations*, 1970, 9, 408-430.
- SEMMER, N., & SCHALLBERGER, U. Selection, socialisation, and mutual adaptation: Resolving discrepancies between people and work. *Applied Psychology: An International Review*, 1996, 45, 263-288.
- SIX, B., & ECKES, A. Die Korrelation zwischen Arbeitszufriedenheit und Arbeitsleistung: Ergebnisse einer Meta-Analyse [The correlation between work satisfaction and performance: results of a meta-analysis]. In L. Fischer (Ed.), *Arbeitszufriedenheit [Job satisfaction]*. Göttingen: Hogrefe, 1991, pp. 21-45.
- SIX, B., & KLEINBECK, U. Arbeitsmotivation und Arbeitszufriedenheit [Work motivation and satisfaction]. In E. Roth (Ed.), *Enzyklopädie der Psychologie, Band Organisationspsychologie [Encyclopedia of psychology]*. Göttingen: Hogrefe, 1989, pp. 348-398.
- STAW, B. W. Organizational behavior: A review and reformulation of the field's outcome variables. *Annual Review of Psychology*, 1984, 35, 627-666.
- STAW, B. M., & ROSS, J. Stability in the midst of change: A dispositional approach to job attitudes. *Journal of Applied Psychology*, 1985, 70, 469-480.
- STAW, B. M., BELL, N. E., & CLAUSEN, J. A. The dispositional approach to job attitudes: A lifetime longitudinal test. *Administrative Science Quarterly*, 1986, 31, 56-77.
- STOREY, J. (Ed.). *Human resource management—a critical text*. London: Routledge, 1995.
- SUTTON, R. I., & STAW, B. M. What theory is not. *Administrative Science Quarterly*, 1995, 40, 371-384.
- SZILAGYI, A. D., & WALLACE, M. J. *Organizational behavior and performance*. Glenview, IL: Scott & Co., 1983.
- THIERRY, H., & KOOPMAN-IWEMA, A. M. Motivation and satisfaction. In P. J. D. Drenth, H. Thierry, P. J. Willems, and C. J. de Wolff (Eds.), *Handbook of work and organizational psychology* (Vol. 1). Chichester: Wiley, 1984, pp. 131-174.
- WALL, T. D., JACKSON, P. R., & MULLARKEY, S. Further evidence on some new measures of job control, cognitive demand and production responsibility. *Journal of Organizational Behavior*, 1995, 16, 431-456.
- WEAVER, Ch. V. Job satisfaction in the United States in the 1970. *Journal of Applied Psychology*, 1980, 65, 364-367.

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