

Transitions in Jobs, Occupational Socialization and Strain

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The objectives of this chapter are: to place the job transition literature into the perspective of occupational socialization; to present a model of stress effects in job transitions; and to present some empirical results from a research project.

Job transition is a specific example of role transitions. This transition may be the result of a change in one's position (or status), of a change of jobs equal in status, or of a change in the content of the job. Job transitions may occur between different roles or within a role. Louis (1980a) has referred to inter-role transitions (e.g., changing the job or changing one's profession) and to intra-role transitions (e.g., changing attitudes toward the job one holds or changing the importance one attaches to work after a heart attack, etc.). Since I assume that the processes involving stress and strain are similar in the various forms of job transitions, I only refer to the generic concept of job transition in this chapter.

Job Transitions and Occupational Socialization

Job transitions may be conceptualized subjectively or objectively. The subjective definition means that the expectancies of the person are taken into account in determining the beginning and the end of the job transition period. For example, a person may start a new job as a blue-collar worker, but he may have taken this job because he expected to become a foreman. For him the transitional period ends when he hears after five years that he will not become foreman. At this time one important outcome of the role transition may become evident, e.g., he might get depressed upon hearing that his hopes will not be realized. An objective approach implies that the transitional period ends when all the social and work requirements of the job are met by the person (or when he has to leave the company because he is not able to meet the requirements).

Although the literature usually favors the subjective account of job transition, it is useful to keep in mind that there is also an objective aspect of the job transition

period. Some problems may arise precisely from the poor fit between the objective aspects of the transitional period and the subjective account, e.g., when someone thinks that he is already out of the transition phase without having really mastered the requirements of the job. The general notion of a person-environment fit model can be profitably used here (Doehrman, in this book; Van Harrison, 1978).

Job transition refers to the change in a person's occupational roles; this usually implies that the person changes in some way as well. Traditionally, changes taking place in and because of the job have been subsumed under the heading of occupational socialization (Frese, 1982). In fact, it has been suggested that the job has the greatest influence on the person during the beginning period. Very often job (or career) transitions and occupational socialization are not differentiated (Louis, 1980a; Van Maanen, 1975; Van Maanen & Schein, 1979). I want to argue that there are two distinct positions in the occupational socialization field—and that only one of these refers to job transfer:

(1) The *exposure time position* maintains that longer exposure to certain working conditions (e.g., stressful situations) leads to greater impact on the person (Frese, 1981; Gardell, 1976). Accordingly, one would hypothesize that at the beginning of a new job the relation between job stressors and indicators such as psychosomatic symptoms is low. This relation, however, should increase with job tenure. The analogous reasoning in medicine is familiar: the longer one is exposed, e.g., to noise, the stronger is its effect—in our example, deafness. Usually there is a second component to this position in medicine—intensity. For example, when noise level is very high it has a relatively strong and quick impact, causing deafness; lower levels of noise result in a later onset of deafness (Buerck, 1974).

(2) The *initial impact position* is directly linked to the beginning period of a new job. "Reality shock" and its possible problems for the individual are related to this position. Various descriptions have been used for the processes by which the individual copes with problems that arise in the first period of taking the new job. Van Maanen (1977) describes the process of "normalizing the setting," which means that the new job incumbent must learn the informal and formal group structure, the ideas of normality in the new job, the terminology and labels that are used by the colleagues, and that he has to acquire the knowledge of what is supposed to be the core of the work. A second process consists of "discovering a theme," which refers "to an actor's notion of where he is going regarding his organizational career" (Van Maanen, 1977, p. 32). Similarly, Louis (1980b) has described the process of "sense-making." When "surprises" occur, one has to make sense of one's experiences. The occurrence of surprise depends on the level of awareness of the person's original expectancies, on the mismatch between the expectancies and the given reality of the new job, as well as on the focus of the expectancies (e.g., on the self or on the job). More inclusively, Nicholson (1982) has suggested that the person is differentially affected by the first period of the job depending upon how easily he can change the structure and content of the job and by the impact of the role requirements. The changes in the person and of the organization and the possibly innovative character

of these changes depend upon various factors. Most important are the "novelty of demands" and the level of discretion in the new job.

These two positions about occupational socialization lead to different but not necessarily mutually exclusive ideas about the relation between stress at the work place and its psychological and physiological impact on the person. The two hypotheses relating stress at work to psychosomatic diseases deriving from these positions are graphically described in Figure 1.

According to the exposure time position (line a in Figure 1), psychosomatic symptoms increase with exposure time to stress. According to the initial impact position (line b in Figure 1), there is an initial reaction to the (possibly unexpected) job stressors, leading to psychosomatic symptoms. Eventually, however, as a result of the different coping processes (normalizing, sense-making, adaptation of expectancies, etc.) the person is able to adjust to the situation, and the psychosomatic symptoms decline (there may be lagging effects, of course). We cannot take for granted that the two positions are mutually exclusive. More complex relations between exposure time to stress and psychosomatic symptoms follow from this assumption. In Figure 2 the correlation is indicated that results if both positions are correct, but for different people. One might, for example, argue that bluntners and monitors (Miller, 1981) will have different reactions to stress at work. The monitors will experience intense stress and, consequently, attend well to the stressors in the first period of a new job. Therefore, they have the opportunity to reduce the strain level by adjusting to the situation (e.g., changing some features of the new job, adapting to others, learning new skills, etc.). For them, the curve will be consistent with the initial impact position. For bluntners, there is a tendency to stay ignorant of the stressors, the surprises, the mismatches between expectancies and reality, etc. If the stressful situation persists, and if additional problems with these stressors develop over time because of lack of adjustment to the stressors, then stress at work may have a cumulative effect on the individual. Various theorists, particularly those with a psychoanalytic background, have hypothesized that repression leads to long-term effects, especially in the area of psychosomatic diseases. In a particularly interesting study on life span development and defense mechanisms, Vaillant (1977) found that people who repress their problems show more signs of ill health than people who attempt to deal with their problems. When these two groups are not differentiated in a cross-sectional study, one sees a slight increase in psychosomatic symptoms at the very beginning, and then the correlation between exposure time to stress and psychosomatic symptoms disappears. Such a picture may lead to a false disconfirmation of the hypothesis that there is a direct relationship between work stress and the development of psychosomatic symptoms.

An even more complicated figure evolves when both positions are correct for the same people. Such a problem occurs, for example, when the coping strategies themselves have certain costs. These costs may turn out to be higher than enduring the stressor itself (Schoenpflug, in press). The following hypothetical case illustrates how such a picture is possible. When starting a new job one has to learn new skills, and that may be very difficult at first. Furthermore, most of the initial dealings in

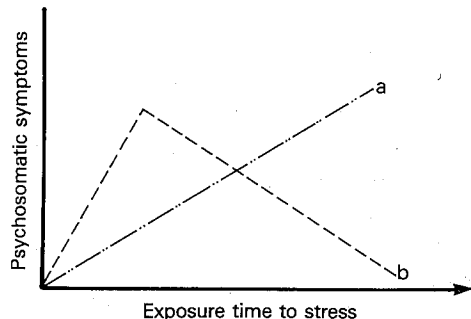


Figure 1. Exposure Time and Initial Impact Hypotheses of Occupational Socialization.

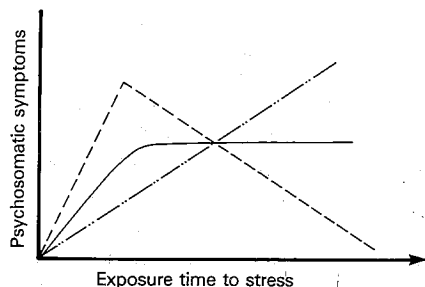


Figure 2. Both Hypotheses of Occupational Socialization when Correct for Different persons

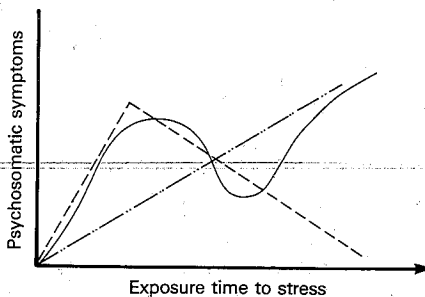


Figure 3. Both Hypotheses of Occupational Socialization when Correct for the Same Persons.

the new job are unclear and confusing, and the situation is difficult to influence. This may lead to the development of psychosomatic symptoms. The person will eventually learn how to cope with the situation, however. Slowly there will be a decrease in psychosomatic symptoms. The initial impact position would hold for this period. There may be a second layer of factors associated with this job; or the costs of having tried to cope with the stressor in the first place may be accumulating. Hope of advancement in the job may get crushed, or the job may become more and more boring. Additional problems with supervisors may occur that did not come up in the beginning. These factors may contribute to an increase in psychosomatic symptoms with exposure time, leading to an S-shaped curve. It is conceivable that both hypotheses are true for the same persons, resulting in the curve in Figure 3. Similar curves appear in a study of people who have moved (Hormuth, in this book).

In summary, job transition is related to one of the two major positions in occupational socialization on the impact of work on the person—namely, to the initial impact position. However, it is necessary to keep both positions in mind because, as I have tried to show, they are not mutually exclusive but may apply to different people, to different situations, or to the same people at different times. Nevertheless, it would go beyond the limits of this chapter to discuss both positions. Therefore, I shall concentrate on the job transition phase proper (leaving aside the exposure time effect), and develop a model of how stress effects come about in the transition period.

Stress Effects in the Transition Period

During the transition phase, the person must perform actions of three different kinds: (1) integration-actions, such as learning the necessary skills, integrating oneself into the work group, etc.; (2) change-actions, such as changing the work place according to one's goals, influencing the norms in the work group, etc.; and (3) work-actions, which is seldomly discussed in the job transition literature. Psychologists and sociologists have talked about all kinds of things people do during work transitions: they expect things (Waneous, 1976, 1977), they make sense of the new experiences in the job (Louis, 1980b; Van Maanen, 1977), and take certain perspectives (Van Maanen, 1977). But, curiously enough, one thing not discussed very often is the very basis of job transitions: people work. The working individual is described in the existing literature on job transition as a cognizing being who is not doing very much. An action theoretic account may help to overcome this bias.

Elements of Action Theory

Space permits only a very brief introduction to action theory. The basic concepts of action theory are discussed by Miller, Galanter and Pribram (1960). Important modifications and refinements have been introduced by Hacker (1978). Action theory presupposes that an action is guided by goals, plans, and feedback from the environment. Action is cognitively regulated by plans, and plans are modified by

feedback. Moreover, plans and goals are hierarchically organized. One can differentiate several levels of regulations of actions (Hacker, 1978; Semmer & Frese, in press). For the purpose of this chapter, it is sufficient to say that the highest levels of regulation pertain to heuristic and thought processes. The lowest levels regulate highly automatized action subroutines. These subprograms are more rigid than the actions controlled by higher levels of regulation. Thus, we can see a dimension from a high conscious level of regulation to a more automatized level. The more automatic the process: the less effort needed for orienting toward the relevant signals in the environment; the less effort necessary to develop the plans; the more overlap there is between different operations; the fewer decisions are necessary; the less feedback from the environment is needed and the more the movements take on a parsimonious form.

An action theoretic perspective has implications for learning the tasks of a new job. At first the person learning the new task has to develop a general notion of how to proceed. Here most of the actions are regulated on higher levels (and are conscious). Through practice the person learns to "delegate" these regulations to lower levels. An example might help to elucidate this point. When one learns to drive, one rather consciously shifts gear. One attends to the foot's pressing down the clutch and the changing of the gear shift shortly afterwards. With more practice this process is relatively automatic. Conscious attention is not needed to perform the complex synchronization of hand and foot.

Even though people tend to regulate work actions on a higher level when moving into a new job, they have certain kinds of automatized subroutines available. These may stem from other jobs that were held before or from everyday experiences. Some of these automatized subroutines may not be appropriate to the new situation. For example, a certain very quick and automatic response may cause accidents because the familiar gadgets are organized differently in the second job; it is relatively difficult to break up automatic responses.

It is usually assumed that the greater the difference from one job to the other, the more stressful the job transition (Brett, 1982; Nicholson, 1982). This prediction makes sense within an action theoretic perspective as well, because people have to learn new skills, since old ones are obsolete etc., when the new job is different from the old one. There is one additional corollary: Some job changes look rather trivial at first, but precisely because of this perception, automatized subroutines will be used. But the small differences between the jobs may require a change of these subroutines. ~~This is exceedingly difficult to learn.~~ In a research project in a steel factory, we had an example of this. The converter control was changed to a hydraulic device. This meant that the workers no longer had to use great strength to rotate the converter. This led to an accident when a worker rotated the converter too far, splashing the boiling steel out of the container on the platform. The supervisor did not understand how the converter man could have committed this error, since he had been told "several times before to be cautious." Apparently, it was very difficult for the man working there to change from one automatized skill to another, although the amount of change was not very large from the observer's point of view.

Job Transitions, Stress and Strain

Against the background of action theory we can outline some effects of stress in the transition period. Most concepts of stress posit some mismatch between the environment and the person (McGrath, 1970; Semmer, 1980). The concept of mismatch has been elaborated within the person-environment fit model (Doehrman in this book; Van Harrison, 1978). Similarly we will define stress as the mismatch between the resources, abilities, needs, and expectations of the person and the demands of the environment.¹ Of particular importance is the mismatch between the person's skills and the demands made by the environment.

The Person-environment fit model implies that environmental resources play a role in the reduction of the misfit or mismatch. This emphasizes the concept of control, shown to be important in experiments (Glass & Singer, 1972; Seligman, 1975) and field research on stress (Karasek, 1979; Semmer, 1982). Nicholson (1982) has emphasized the importance of control in job transitions, and the proposed model builds on some of his suggestions. According to this research, stress effects are weaker when control is high. There are three possible hypotheses as to why control has a beneficial effect: (1) The reduction of stress hypothesis: If one exerts control over the work situation, one is able to reduce stress when it appears. In the long run, control facilitates the reduction of existing stressors. (2) The reduction of impact of stress hypothesis: In contrast to the "reduction of stress hypothesis" this hypothesis implies that one might not be able to reduce the stressor, but that it is possible to reduce the impact of the stressor on the person. For example, a person might choose to do difficult tasks in the morning, because he feels more fit to do them at this time. (This presupposes the possibility of controlling the time structure of the day.) (3) The minimax hypothesis (Miller, 1979): If one is able to control the stressor, then one can be sure of what the highest amount of stress will be. Control means that the person can do something to reduce the stress when it becomes intolerable. If one is not able to control the stressor, then one is never sure what the highest amount of stress will be. Therefore, the person is never relaxed. So the term minimax implies that control enables one to minimize the maximum duration or intensity of the stressor. We do not think that it is possible to decide among these hypotheses at this time. The different processes may all contribute to the stress-reducing function of control.

Control at the work place and in job transitions involves both influence here and now, and also potential influence in the future. For example, a person who assumes he will become a foreman will not be affected by stressors at work in the same way as a person who knows that he will continue to do this work for life. One must also consider different kinds of control: individual control and control exerted on a collective level. In the blue collar sector, the influence on a purely individual level is relatively small. However, on a collective level (if the work group is supportive), the workers may have quite some influence.

Predictability is another moderator of stress, and similar arguments have been made about its effect as have been made about control. Miller (1981) has differentiated "contingency predictability" from "what-kind-of-event predictability." The

former refers to knowledge of "when and under what circumstances an event" occurs (p. 204). The latter refers to knowledge of "what the event will be like and what effects it will have" (p. 206). The interesting question is in what way does predictability interact with stress? Miller advances the hypothesis that predictability is preferred if both the impact of the stressor is immediate and the person is not able to use attention deployment (or blunting). This means that when it is easy to distract oneself from the aversive situation predictability will not be preferred. Predictability at work can take both forms. Contingency unpredictability at work exists, for example, when it is unclear to the worker at what point his supervisor will check on his performance. Such a procedure is often used in the supervision of operators in telephone companies, where the supervisor cuts into the line without warning. The what-kind-of-event unpredictability is probably more prominent in job transitions. Sudden new duties and expectations of job performance level are examples of this type.

In the following discussion I shall restrict myself to those stressors and events at the work place that are not easily "blunted," i.e., where distraction is not a useful means of coping with the stressors. This is a useful assumption for job transitions, because people are most often forced to take notice of the stressors at work since they are usually necessary concomitants of the job itself. Furthermore, I shall concentrate on the long-range impact of the stressors during transition. I assume that the first reaction to uncontrollable stress is reactance (Wortman & Brehm, 1975), and the first reaction to unpredictability is anger or surprise. But these are only short term reactions. We shall now discuss reactions that appear when mismatches (stressors) occur repeatedly.

In Table 1, the action process is described: goal generation, goal decision, plan generation, plan decision, and feedback. Furthermore, there are three columns: one involving mismatch (stress) which is predictable and controllable, the other two involving mismatch which is repeatedly unpredictable and uncontrollable. The dimensions of predictability and controllability can be differentiated analytically, although they often occur together in the work situation. Mismatch regarding the goal may mean that the new job has goals that are different from the individual's goals. Mismatch regarding plans implies that skills (plans) are demanded in the new job that the individual does not have at his disposal. Mismatch in feedback can come about when the individual gets negative feedback in the new job. Controllable and predictable mismatch is not especially stressful for people, because they can modify the organizational goals and demands, can learn new skills or use other plans to achieve the desired goals. In terms of stress, unpredictable and uncontrollable mismatches are more problematic.

Regarding goals, unpredictable mismatch means that the goals are changed without any apparent pattern (contingency unpredictability). This occurs, for example, when a supervisor behaves inconsistently or when the novice in a job does not know the appropriate goals. The what-kind-of-event unpredictability may mean that

Table 1. A Model of Stress Effects in Job Transitions

Action process of individual	Organizational mismatch but predictable and controllable	Organizational mismatch and repeatedly unpredictable	uncontrollable
Goal generation	Modification of organizational goals		Goal generation is given up
Goal decision		Only short term goals pursued	
Plan generation	Modification of demands or learning new skills		Plan generation is given up
Plan decision		Only short term plan executed	
Feedback	Modification of demands or changing	Increased attention (suspicion)	Action stops

new organizational goals are introduced without prior information or consultation. Either kind of unpredictability results in the individual's pursuit of only short-term goals. Since unpredictable events are more likely to occur in longer time intervals (and since long term goals cover long time intervals), unpredictable disruptions of these goals are more probable than disruptions of short term goals. Therefore, the individual will only pursue short term goals under conditions of unpredictability. Uncontrollable mismatch occurs when the person is not able to influence (or determine) goal decisions, and when the organizational goals mismatch with his own. This may at first lead to fewer goal decisions; and eventually goal generation will be given up, since there is no use for developing goals. In contrast to what happens under unpredictable mismatch, goal generation itself is affected.

Unpredictable mismatch concerning plans means that the kinds of skills demanded are unclear (contingency unpredictability) or that new skill demands occur without prior warning (what-kind-of-event unpredictability). Both problems occur when the organization (or the supervisor) is capricious. Again we hypothesize that this leads to a predominant pursuit of only short-term plans, which are less often interrupted. A part of the problem that occurs here has been discussed under the label

of role ambiguity (Kahn, 1973). Uncontrollable mismatch regarding plans may mean two different things: (1) The skills are so difficult they cannot be mastered; or (2) The activities are prescribed in such detail that the person does not have any influence on the planning of his own activities. In both cases, plan generation may be given up.

Unpredictable mismatch in feedback means either that it is unclear when one gets (mismatching) feedback (contingency predictability) or that it is unclear what kind of feedback one will be getting (what-kind-of-event unpredictability). Such a situation may occur when the organization (or the supervisor) is capricious. In such a situation, the individual will actually increase attention and information seeking; thus, this condition may lead to enhanced suspiciousness. Similar unpredictability occurs in large tasks where the feedback is sluggish, and where it is unclear what kind of feedback can be expected or how it is related to the processes taking place. Uncontrollable mismatch in feedback occurs when negative feedback is given or not given, regardless of the action a person is performing. This is the classic definition given by Seligman (1975) of the helplessness-inducing noncontrol situation. In this case people will stop acting, and become passive.

The differentiation between goals and plans within this action theoretic approach leads to some interesting hypotheses (again referring to the three types of actions necessary in the job transition phase—integration, change, and work). If both plans and goals are intact, there is planned goal-directed action. If, however, the plan is intact but the goal is not (e.g., not well developed), senseless reactions to the environment will occur, e.g., conforming to the work group without any conceptualization of the goal. If the goal is intact but the plan is not (e.g., because the goal is blocked and one cannot get around it), a classic frustration situation develops. Finally, if neither plans nor goals are intact the person becomes passive.

Some Empirical Results

An overall test of the proposed concepts has not been conducted, but we have analyzed some data of a project on stress at work (Projekt Psychischer Stress am Arbeitsplatz,² 1981) in order to examine two aspects of the model: control (particularly change of control), and deterioration of working conditions. I would hypothesize that the impact of stress is more pronounced when control is low. This effect should be stronger when there is a transition from high to low control. The opposite effect should occur when amount of control is increased. Furthermore, we want to examine the correlation between stress at work and psychosomatic complaints, dependent upon job tenure of the person. This will allow us to determine which is more correct, the initial impact or the exposure time position. Control at work was measured by observer ratings as well as by self-ratings. The scale consists of items such as "is it possible to decide how to go about doing a task?" or "is it possible to determine the order of work steps in this job?" Stress at work was also measured by observers and the subjects, and is a summary index of several different scales, such as uncertainty in the job, work-organizational problems (e.g., material does not

come in time), environmental stress, danger of accidents, and intensity (mental speed). For the development and details of these scales, consult Semmer (1982). Subjects were male blue-collar workers in the metal industry in West Germany.

In one of the two cross-sectional studies of this project, Semmer (1982) showed that control at work was an important moderator of the relation between work stress and psychosomatic complaints even when stress and control at work were measured by estimates of observers of the job. When observed control was high, observed work stress and psychosomatic complaints correlated only slightly (multiple $R = .19$). When control at work was low the correlation increased to $.40$. This difference was even more pronounced when the subjective responses of the subjects were used. The group with high control showed an R of $.28$; and the one with low control an R of $.53$ between work stressors and psychosomatic complaints.

A total of 90 subjects from this study were reobserved and requestioned one and one-half years later, which gives us an opportunity to look at differences in control at work, and thus at one aspect of the transition process. If our hypothesis is correct, people who have low control at work should show a higher correlation between stress and strain at work than people with high control. This tendency should be more pronounced when one moves from high to low control over time. Even though the cells become very small (most people are quite stable in the control they have in their work), the data tended to go in this direction. Subjects in the high observed control conditions generally showed low correlations between subjective stress at work and irritation/strain; subjects in the low control conditions showed high correlations. There was some indication that the people who moved from high to low control showed a more pronounced correlation. However, this was not the case for psychosomatic complaints (the second dependent variable), so that we are not sure about the consistency of this result.

Finally, we inspected the correlation between stress at work and psychosomatic complaints depending upon job tenure. The data for testing these hypotheses come from another (cross-sectional) study of 932 male, blue-collar workers in West Germany (taken from the same project). Since it is a cross-sectional study, the results must be interpreted with caution. If the initial impact hypothesis is correct, there should be a higher correlation with people who have just started the job. If the exposure time position is correct the correlation should increase with job tenure. Results presented in Figure 4 tend to agree with the notion that both positions may be correct. The curve follows the pattern of Figure 3, except that the zero correlation in the beginning does not exist because the lowest job tenure is one year. The correlations tend to be smaller in the middle range of job tenure, and higher with the people who just started the job or who have been on the job for longer than 20 years (with observed job stress) or longer than eight years (with subjective stress).

Summary and Conclusion

We have maintained that it is useful to place job transition into the framework of occupational socialization, and have discussed the two positions that relate work



Figure 4. Correlation Between Stress and Psychosomatic Complaints as a Function of Job Tenure.

experiences to stress effects (initial impact and the exposure time positions). The initial impact position is more closely tied to job transitions. We also attempted to show that an action theoretic approach may help us to understand the effects of stress at work. This is particularly important when one wants to understand the impact of stress in job transition on actions. Depending upon the possibility of developing plans and long-term goals (which depend on controllability and predictability), there will be different tendencies in action: planful action, frustrated action, senseless reaction, or passivity. These actions have an impact on the three types of actions that must be carried out in job transition: integration-actions, change-actions, and work-actions. Finally, we tried to show that some of the ideas presented in this chapter are supported by empirical research.

Notes

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¹This definition of stress makes it difficult to differentiate it from "challenge" (a general problem of the P-E misfit model), because both stress and challenge also imply a certain misfit between one's own skills and the demands of the environment. A possible way to differentiate between these two concepts refers to success in dealing with the misfit. We call something a challenge when we are able to or expect to succeed, and a stress when we expect that we will not succeed. Success is only noticed retrospectively, and is dependent upon the coping strategies of the person.

²The project "Psychological Stress at Work" is a collaborative research project between the Technical University of Zuerich (U. Fellmann, I. Udris, E. Ulich) and the Free University of Berlin (E. Bamberg, H. Dunkel, S. Greif, G. Mohr, D. Rueckert) including the author of this paper. The research was supported

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