PERSONAL INITIATIVE AT WORK: DIFFERENCES BETWEEN EAST AND WEST GERMANY

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Personal initiative, a concept akin to entrepreneurship and organizational spontaneity, was compared in East and West Germany. Differences were hypothesized to be the results of occupational socialization, particularly of work control and complexity, rather than of a selection effect. A representative longitudinal study was conducted in the East and a cross-sectional study in the West. Lower initiative at work was found in the East; control and complexity affected changes in initiative. The results speak for socialization and against selection.

Newspapers and anecdotal evidence have suggested that there is little personal initiative in East Germany, even since the unification of East and West.¹ Managers report that they must actively find out whether an assigned task was done at all. For example, secretaries may fail to do a task because they have the wrong telephone number, even though they could obtain the number from another person. Or blue-collar workers may wait next to broken machines until a supervisor comes by, instead of looking for him or her or for a technician who could fix the machines.

Anecdotes like these may be useful as a basis for hypothesis development, but they need to be tested empirically. A study of personal initiative in East Germany may reveal something general about initiative and also begin

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¹ Although no longer politically current, the terms East and West Germany are still prevalent in familiar speech and are used throughout this article.

to illuminate psychological processes important for economic development in East Germany and in other Eastern European countries.

THE CONCEPT OF PERSONAL INITIATIVE

Recently, there has been an increasing interest in dimensions of individual performance that may influence organizational effectiveness: "intrapreneurship" (Hisrich, 1990), organizational citizenship behavior (Organ, 1988), organizational spontaneity (George & Brief, 1992; Katz, 1964), general work behavior (Hunt, Hansen, & Paajanen, 1994), and contextual performance (Borman & Motowidlo, 1993). Our study of initiative is part of this general trend.

Personal initiative is a behavior syndrome resulting in an individual's taking an active and self-starting approach to work and going beyond what is formally required in a given job. More specifically, personal initiative is characterized by the following aspects: it (1) is consistent with the organization's mission,² (2) has a long-term focus, (3) is goal-directed and action-oriented, (4) is persistent in the face of barriers and setbacks, and (5) is self-starting and proactive.

To explain personal initiative, we use action theory. Space limitations prevent describing the theory in detail here; Frese and Sabini (1985), Frese and Zapf (1994), and Hacker (1985) describe the theory, and Carver and Scheier (1982) take a similar approach. According to action theory, people always plan actions to a certain extent, although planning may take place while they are acting, and actions are guided by goals (Miller, Galanter, & Pribram, 1960). At work, tasks provide a framework from which an individual job holder develops his or her goals.

Job holders translate externally given tasks into internal tasks through a redefinition process (Hackman, 1970). For example, blue-collar workers may redefine their tasks in such a way that one of their goals is to produce a good-quality product, even though this goal was not mentioned in their contract or in the official task description. This redefinition process allows employees to define extrarole goals (cf. Staw & Boetter, 1990).

Goals may have different time frames. If a production worker is confronted with a machine breakdown, he or she may ask a repairperson to fix the machine. In this case, the worker takes a short-term approach. In contrast, the worker may use a longer time frame. He or she may recognize that the same problem is likely to reoccur and, therefore, may strive to prevent the breakdown or learn how to fix the machine on his or her own. This strategy implies thought not only about immediate problems but also about future task performance (Frese, Stewart, & Hannover, 1987). A long-term focus is an essential element of personal initiative—of overcoming problems, dealing with difficulties, and thinking of alternative ways to do a task—because it

 $^{^2}$ Obviously, employees can also develop anticompany initiative, for example, to steal effectively. This type of initiative is not considered here.

allows the person to be proactive instead of just waiting until the problem reappears.

Long-term goals have an impact only if they are translated into actions. Kuhl (1983, 1992) wrote extensively about differences in how quickly people translate intentions (goals, in our terminology) into actions. Some people may have a certain goal but do little to achieve it; Kuhl calls this "state orientation." Others quickly put goals into action, showing "action orientation." Kuhl (1983, 1992) argued that state-oriented people are more occupied with their thoughts than with their actions. Action-oriented people do not think about the problems and advantages of their goals; rather they translate these goals quickly into actions. Thus, initiative implies goal-directness and action orientation.

Employees are likely to experience problems, barriers, and setbacks in pursuing new projects and goals. A supervisor may not like a new idea, for example, or untrained actions may be poorly executed in the beginning. If an employee gives up quickly in the face of barriers, there is no initiative, which implies dealing with problems actively and persistently.

Developing goals with a long-term focus and outside role requirements, implementing these goals, and persisting in implementation allow a person to develop self-starting activities that are proactive and thus show initiative.

A number of empirical studies and theoretical analyses have suggested that personal initiative can contribute to organizational effectiveness (Borman & Motowidlo, 1993; Hunt et al., 1994; Katz, 1964; Motowidlo & Scotter, 1994; Organ, 1988). No production or service system is perfect, and unplanned events are a fact of organizational life. Thus, extrarole activities are needed in every organization, and initiative should be included as one component of a multidimensional model of nonspecific job performance.

Additionally, Hacker (1992; cf. Frese & Zapf, 1994) argued that "superworkers" (the best workers in a given department) are characterized by having a longer time perspective on their work, a better-developed mental model of their work, and a more proactive approach to work than average workers. Interestingly, the speed of working was not significantly higher in the superworkers, but their strategies were more proactive and more sophisticated. The long-term orientation and the proactive approach are also aspects of our concepts of personal initiative. The best managers are also characterized by a higher degree of initiative (Boyatzis, 1982; Klemp & McClelland, 1986).

Personal Initiative and Other Constructs

Personal initiative is related to but not identical to other constructs, such as entrepreneurship/intrapreneurship (Hisrich, 1990), organizational citizenship behavior (OCB; Munene, 1995; Organ, 1990), and organizational spontaneity (George & Brief, 1992). Entrepreneurship refers to "behaviors that include demonstrating initiative and creative thinking, organizing social and economic mechanisms to turn resources and situations to practical account and accepting risk and failure" (Hisrich, 1990: 209). Initiative is one aspect of entrepreneurship (Frese, 1995). However, initiative does not neces-

sarily have commercial implications and is, therefore, more similar to intrapreneurship (Hisrich, 1990).

Organizational citizenship behavior refers to "organizationally beneficial behaviors and gestures that can neither be enforced on the basis of formal role obligations nor elicited by contractual guarantee of recompense" (Organ, 1990: 46). Both OCB and initiative go beyond direct role requirements, and both contribute indirectly to organizational effectiveness (Organ, 1980).

However, there are also differences. OCB involves a set of five factors, two of which—altruism and compliance (Smith, Organ, & Near, 1983)—have been the most studied. In contrast to initiative, altruism is primarily related to the social sphere. Compliance has a passive connotation, referring, for example, to conscientiousness in attendance and adherence to rules. These are not part of the concept of initiative. Moreover, OCB research often assumes a supervisor's point of view, focusing on how helpful a worker is. However, supervisors often fail to support initiative and may even punish initiative approaches; this may be particularly so in Eastern Europe (cf. Pearce, Branyciki, & Bukacsi, 1994; Schultz-Gambard & Altschuh, 1993).3 Further, although initiative and OCB are both pro-organizational concepts, the time perspective each involves is different. Workers with high initiative contribute to long-range positive outcomes for organizations, but in the short term they may well be a nuisance to their bosses because they are constantly pushing new ideas. In contrast, OCB is more oriented toward a short-term, positive social orientation at the workplace.

The concepts of organizational spontaneity (George & Brief, 1992; Katz, 1964) and initiative both imply organizationally functional, extrarole, active behaviors. Thus, there is a large degree of overlap between these concepts. However, we prefer the term "initiative." Although "spontaneous" implies voluntary and self-controlled actions, it also implies lack of planning. Since initiative implies good planning, we do not want to stick to the term introduced by Katz.

Personal Initiative in East and West Germany

In East Germany's 40 years of bureaucratic socialism, people had little chance to express initiative at work⁴ (cf. Frese, 1995). Behavior by and within companies was highly regulated by central planning. Middle- and low-level management and workers had little input into how things were produced. Because there was no feedback via the market, there was little pressure to change things at workplace. As there was no competition with other companies, there was little incentive to develop high-level goals. The company

³ This historical context is one reason we did not measure OCB in East Germany; we were more interested in the rebellious element of initiative that overcomes resistance against change by a supervisor.

⁴ In activities outside work, however, a high degree of creativity and tenacity were necessary; individuals would search extensively to find ways to, for instance, build summer houses under conditions of scarcity.

goal was not to reach a high productivity level but to not make mistakes. Managers in the East were by and large more conventional and risk-avoidant than managers in the West, and they showed little independent thinking or achievement orientation (Schultz-Gambard & Altschuh, 1993). For these reasons, managers were not interested in workers' initiative and even imposed negative sanctions (Ladensack, 1990; Münch, 1990; Pearce et al., 1994; Shama, 1993).

Employees in East Germany had little control at work and low complexity in their jobs. Supervision was tight, "Tayloristic," and bureaucratic (Haraszti, 1977; Münch, 1990; Wuppertaler Kreis, 1992). Although Tayloristic job design is still prevalent in West Germany as well, there have been more attempts to increase job discretion for the workforce and to enhance workers' control and responsibility for their jobs (Ulich, 1991). Thus, both workplace factors (little control over and complexity of work) and leadership factors (negative management responses to initiative) led to a lower degree of personal initiative in East than in West Germany. Moreover, the school system contributed to a low degree of initiative (Oettingen, Little, Lindenberger, & Baltes, 1994). Accordingly, we posit:

Hypothesis 1: Personal initiative is lower in East Germany than in West Germany.

Selection of Socialization Effects as Causes of Potential East-West Differences

Differences between East and West Germany in initative at work may be explained either by socialization or selection processes.

Occupational socialization. We concentrate here on occupational socialization because it refers to change processes in the same domain as initiative at work. Control and complexity have "socializing power" because they change skills, motivation, and orientations (Frese, 1982), and they influence initiative primarily via motivational and skill development processes.

Employees must be able to make decisions with regard to their own work and working conditions (Frese, 1989). First, low *control* at work (little autonomy or job discretion) can engender a passive and helpless approach toward work (Frese, 1989; Karasek & Theorell, 1990; Seligman, 1975). Second, employee motivation to redefine work in an enlarged (extrarole) sense is increased by sufficient environmental potential for keeping up and developing an "effectance" and mastery motive (White, 1959). Third, decision-making power enhances a worker's feeling of empowerment and increases the sense of responsibility for a job (Hackman & Oldham, 1975). Fourth, lack of control may lead to more brooding than action, increasing state orientation. Fifth, if employees expect that nothing can be done because they lack control, they are unlikely to persist in the face of setbacks.

Similar arguments can be made for *complexity*. Kohn and Schooler (1983a, 1983b) showed that the complexity of work effects an active orientation to life and a higher degree of intellectual flexibility and creativity. Work complexity leads to the development and practice of a high degree of skills

and knowledge. A high skill level fosters a long-term perspective and creativity. These contribute to developing ideas about how to change work processes and make them more effective. Knowledge and skills also help to overcome barriers and setbacks, should they occur. This is not a deterministic relationship; initiative is possible in low-skill jobs, but work complexity enhances the development of initiative.

Thus, work control and complexity help people to show more personal initiative at work. Since proponents of the socialization point of view argue that differences in control and complexity have led to differences in initiative, there should be East-West differences in work control and complexity.

Hypothesis 2a: East Germany and West Germany will differ in the degrees of control and complexity afforded to employees at work.

Hypothesis 2b: Work control and complexity have a socialization effect.

Selection effects. According to a selection perspective, people high in initiative left East Germany more frequently than people low in initiative because they suffered more from the East German regime (which repressed initiative) and because they had the initiative to actually leave. The migration of more than three million East Germans to the West since 1949 (Hahn, 1994) would therefore have produced a lower level of initiative in the East.

To our knowledge, no one has examined the initiative level of migrants from socialist East Germany; thus, one cannot test this hypothesis directly any longer. Indirect tests must suffice: First, an implication of the selection hypothesis is that initiative is mainly due to stable personality traits and thus should change little over time. This idea could be tested in our longitudinal study. Second, we could also study whether people who left the East after mid-1990 (when we began our study) had been higher in initiative prior to their leaving than those who stayed. Third, since intentions are well correlated with behaviors (Fishbein & Ajzen, 1975), it was possible to compare those who would like to leave with those wo did not intend to leave East Germany.

We recognize that people who left the East before 1990 (during the period of bureaucratic socialism) may well differ from those who left after 1990. Prior to 1990, migrants and refugees often lost all their belongings and risked losing their lives or suffering imprisonment. Nevertheless, the psychological processes of voluntary migration may be similar across circumstances. If initiative was an important predictor of migration during bureaucratic socialism, it should also show up in somewhat weaker form in those who left after mid-1990.

Socialization versus selection. We find the socialization explanation of East-West differences in initiative more compelling than the selection explanation. First, personal initiative implies that a person attempts to work constructively on problems. Therefore, initiative should lead to developing active coping strategies to deal with the constraints of bureaucratic socialism

(see Parker [1993] on the relationship between perceived control and constructive dissent). Second, the selection hypothesis runs counter to our concept of personal initiative as a behavior syndrome that changes slowly because of work socalization processes.

Hypothesis 3: The evidence supporting a socialization explanation for previously hypothesized differences between East and West Germany is stronger than the evidence supporting a selection explanation.

METHODS

Study Design

There are two parts to this article: In the first, we compare cross-sectional differences between East and West Germany in initiative, control, and complexity using data collected in 1991. In the second part, we test the hypotheses regarding selection and socialization with data from a longitudinal study. We restricted the longitudinal study to the East because dramatic changes occurred only there. West Germans did not feel a difference in their daily (work) lives because of unification⁵ (*Der Spiegel*, 1991).

For the East German data, we were concerned with the period between July 1990 (time 1) and July 1991 (time 3), a year selected because drastic changes occurred during it. Table 1 explains the events and the timing of the study waves. The study began on July 4, 1990, four days after the introduction of the West German deutsche mark as currency in East Germany. At that time, workplaces in East Germany were still quite similar to what they had been before the Communist government was voted out of power in the spring of 1990. Management had not changed dramatically, although a few companies had already been bought by Western firms. The power structure was largely the same as before. At this time, there was practically no unemployment in East Germany. At the time of the third wave, the market system had been solidly introduced. Unemployment figures were around 10 percent; a large additional group of people did not have normal jobs anymore but were not considered unemployed as they were in auxiliary jobs or reskilling courses supported by the state unemployment agency. Western technology was noticeably more prevalent at work than it had been, and many highlevel managers had been replaced.

Sample

Two representative samples were drawn from two circles. One was Dresden, a large city in the south of East Germany. It is the capital of Saxonia, houses a large technical university, and is well-off compared, for example, with cities in the north of East Germany. We sampled by randomly selecting streets, then selecting every third house and in each house, every fourth apartment (in smaller houses, every third one). Native Germans between the ages of 18 and 65 with full-time employment were invited to participate

⁵ This has since changed with the economic downturn in 1993.

			TABLI	E 1		
Events	in	East	Germany	and	Data	Collection

Date	Events	Data Collection
October and		
November 1989	Mass demonstrations start	
November 1989	Opening of the Berlin wall	
March 1990	First free election in the East	
July 1990	Economic unification	Time 1
October 1990	Political unification	
November 1990		Time 2
December 1990	First general election in all of Germany	
Throughout 1991	Serious economic crisis in East Germany	
May 1991	· ·	West German study
July 1991		Time 3

(thus, we sometimes had more than one person per family). The refusal rate of 33 percent was quite low for a study of this kind. Confidentiality was assured; if an individual preferred anonymity, it was provided with the help of a personal code word. All interviewees were paid for their participation.

In wave 1, 463 people participated in Dresden. For methodological reasons,⁶ we asked 202 additional people to participate at time 2. At time 3, 543 people participated. To rule out effects of experimental mortality, we compared those who dropped out between time 1 and time 3 to full participants; there were no significant differences in the initiative variables. The sample is representative of the age, social class, and gender composition of the Dresden working population.

For comparison, we chose the West German city of Mainz, which is smaller than Dresden but has similar features. It also houses a university and a state government, is relatively conservative, and contains relatively few foreigners. The selection procedure was the same as was used in the East at time 1.

Of course, any comparison between East and West German cities poses certain problems. The socioeconomic makeup of native Germans (who were the only ones asked to participate) in West German cities is different from that of those in East Germany, partly because there are more foreigners in the West, and they often occupy low-level jobs. Additionally, there was a different participation rate. West Germans, especially blue-collar workers, were less likely to participate than East Germans; the overall refusal rate

⁶ We added new interviewees at time 2 to be able to analyze the effects of participating in a study on initiative. Initiative scores of the first-timers could be compared to those of people interviewed at both time 1 and time 2 through *t*-tests. No significant differences between the two groups emerged on the core initiative scales, education, interviewer evaluation, overcoming barriers, and active approach (data not shown).

was 44 percent in the West, for an n of 160 participants. Thus, blue-collar workers were underrepresented in the West German sample, according to statistics provided by the city of Mainz.

Analysis Strategy and Potentially Confounding Variables

Because the samples' social class makeups differed and the West German sample was not quite representative for social class, mean comparisons are based on a two-way analysis of variance in which socioeconomic status was entered first. We only sampled employed individuals in the West and therefore, only those East Germans who had full-time jobs at time 3 were included in the East-West comparisons (time 3 n=450 in the East).

Finally, we used multivariate analysis of covariance (MANCOVA) to control for the following additional potential confounds: marital status, partner employment, gender, and number of children.⁷

The number of respondents varies across the analyses because data are missing and certain questions were only presented to certain people (for example, probes into questions related to continuing education). When using correlations or regression analyses, we used pairwise deletion of missing data (cf. Roth, Switzer, Campion, & Jones, 1994).

Interview Procedure

Structured interviews were conducted, with additional prompts used by the interviewers as necessary. The interviewers were psychology and business students from Giessen and Dresden trained during a two-day course that included role playing, particularly on how to use prompts. Interviewers were also trained in the use of coding, and examples of the end points of the scales were provided. After time 1, each newly trained interviewer conducted a first interview together with an experienced interviewer, a practice that provided additional learning.

In these interviews, three kinds of data were collected: Objective facts (e.g., is the interviewee unemployed?), a judgment of behavior (rated by the interviewer on a five-point scale directly after the interview), and a narrative, which was submitted to coding at a later date. Interviewees' answers were jotted down by the interviewers in a short form, typed, and later used as the basis for numerical coding, with one of the coders being the interviewer himor herself.⁸ In the third wave of data collection, the codings were culturally

⁷ Female employment was and is much higher in East than in West Germany (*Der Spiegel*, 1991). One could argue that a partner's employment (or children at home) affect orientation toward work and the taking of initiative. Age, gender, marital status (Melamed, 1995), and number of children could also be confounds.

⁸ For reasons of research economy, we did not use verbatim transcriptions of the interviews. Transcribing was not necessary because the coding system was developed beforehand and the interviewers knew which answers had to be written down to make coding possible. However, the interviewers were also trained to write down the relevant responses as word-for-word as possible; thus, the records were not just a shorthand for coding.

cross-checked—interviews done by interviewers from East Germany were recoded by interviewers from the West, and vice versa. Interrater agreements were adequate and are presented below. The means of the coding values of both raters were used in the analyses. After an interview, the interviewee was given the questionnaire to fill out at leisure (it was usually picked up after one or two weeks).

Measurement of the Interview Variables

Table 2 presents scales, Cronbach's alphas, means, standard deviations (East and West collapsed, time 3 data), and correlations; the Appendix lists the items for the scales.

Personal initiative. We think that there are problems in the use of direct questionnaire measures for initiative (Frese, Fay, Leng, Hillberger, & Tag, 1996) because social desirability bias is likely to be high unless answers can be probed (as is possible in an interview). The most important issue was that of differential anchor points. Whenever questionnaire-derived mean differences are tested across different cultures, it can be argued that people simply understand the scales differently (Poortinga & Vijver, 1987). The argument has two sides: First, if respondents compared themselves only with others from the East, they might think of their own initiative as quite high, though it was in fact low relative to West Germans'. Using a questionnaire in such a case would lead to rejecting the hypothesis that there are differences between East and West, even though there are such differences. Alternatively, because East Germans know that they are low on initiative, they might describe themselves along the lines of the popular stereotypes and thereby underrate their own initiative. This would lead to an acceptance of the hypothesis in spite of true similarities between East and West. To overcome these problems, we used interview-based measures to study the core variables.

Quantitative and qualitative initiative at work. Direct questions on past initiative were asked. If the respondent gave an example of initiative, the interviewers probed into the nature of the problem or activity, asking whether it was the interviewee's or somebody else's idea, whether other people in his or her job would also look into these problems or do these things (to ascertain extrarole behaviors), how often it was done, and so forth. If the activity was something that only required additional energy, it was coded as an example of quantitative initiative. If the activity addressed new problems or included new ideas, goals, or strategies going beyond what was expected from a person in the particular job (for example, a blue-collar worker's looking into a complicated production problem or a low-level supervisor's attempting to reorganize a work structure), it was deemed to be qualitative initiative. Qualitative and quantitative initiative were combined to form a five-point scale general initiative at work. Interrater correlations were .84 in the East and .89 in the West.

In addition, we developed a special subindex on *qualitative initiative*. Here, only the extremes of qualitative initiative (ratings of 4 and above)

Descriptive Statistics and Time 3 Correlations^a TABLE 2

Interview Variables	1	7	3	4	2	9	7	8	6	10	Range	8	Mean	s.d.
Interview														
 Qualitative work 														
initiative		.61**	.18**	.27**	.10*	.15**	.03	02	.07	05	0-4	ą	0 44	0.74
2. General work								!		2	•		:	*
initiative	**29.		.26**	.41**	.25**	.31**	.19**	.20**	.20**	16**	1_6	74	2.15	0.78
3. Education)) !	į	2			2	2
initiative	.29**	.37**		.52**	.33**	.40**	.18**	**62.	*80	20**	5-0	p	2.13	163
4. Interviewer									!) !))		i	2
evaluation	.29**	.30**	.39**		.42**	.63**	.26**	.36**	.23**	32**	1-5-	6	3.75	0.85
Overcoming)	!	•	2	5	2
barriers	.27**	.26**	.28**	.18**		.62**	.13**	.15**	*80	12**	1-6	.58(W)	3.16(W)	0.66(W)
												.70(E)	2.97(E)	0.74(E)
Active approach	.28**	.41**	.30**	.48**	.50**		.17**	.19**	.13**	18**	1 - 5	.70	3.57	0.78
Questionnaire														ļ
Control at work	.22**	.30**	.14*	.22**	.14*	.25**		.50**	.29**	36**	5-1	78	3.63	0.85
8. Complexity of										}	•	:		
work	.17*	.28**	.15*	.28**	.16*	.31**	.49**		.24**	24**	1 - 5	.67	3.51	0.77
Self-efficacy	.20**	.20**	.17*	.28**	.12	.26**	.14*	.32**		45**	1-5	.70	3.51	0.54
 Control rejection 	24**	28**	20**	16*	23**	23**	46**	40**	49**		1-5	.87	2.00	0.62

⁴ Correlations above the diagonal are for East Germans; those below the diagonal are for West Germans; alphas, means, and standard deviations are for the total sample except as noted.

^b Index measure.

p < .05

were counted (one point was given for each coding that was 4 or higher). The coders were instructed to give a 4 or 5 if there was a high degree of qualitative initiative present. We assumed that this index would be sensitive to East-West differences because it measures the very essence of initiative. Because of the restricted variance, interrater correlations were low (East r=.32 and West r=16). The means are very low because only a few interviewees actually had more than one case in which they showed high qualitative initiative.

Education initiative. This scale measured whether an interviewee intended to participate or participated already in some continuing education. The coding was based on what the interviewees had planned and how concrete or abstract these plans were (for example, did the person already know which course he or she would take, had he or she registered for the course, etc.) The interrater agreement was .88 in the East and .92 in the West.

Interviewer evaluation. The interviewers were asked to fill out a semantic differential scale to rate how active, initiating, and plan- and goal-oriented the interviewees were; no rerating was done here because the scale was intended to give interviewers' impressions.

Overcoming barriers. Overcoming barriers is central to our concept of initiative because it is a behavioral measure; it measures a person's tenacity when confronted with obstacles to the pursuit of a goal. Our measure was inspired by the situational interview (Latham & Saari, 1984). The interviewee was asked to imagine having a certain problem—for example, a colleague who always did his or her work sloppily, requiring additional effort from the interviewee. For each problem-solving response given, the interviewer would present reasons why the selected strategy would not work, thus presenting barriers. After the third barrier (the question itself constituted the first one), the respondent was asked whether he or she could think of additional strategies. In this way, we measured how many barriers the respondent was able to overcome. Interrater agreement was .80 in the East and .86 in the West. 10

Active approach. Barriers can be overcome in different ways; a search for a solution can be delegated to somebody else (for example, a supervisor) or actively pursued oneself. To get at this issue, the interviewers were asked to rate how active an interviewee's propositions for overcoming barriers were. This rating was done across the four problem situations used in overcoming barriers (no rerating was done on these variables).

⁹ The low interrater reliability is due to restriction of variance. Interrater correlations for a nonrestricted version of the same items were .75 in East and .75 in West Germany.

¹⁰ At time 3, there were two different versions of overcoming barriers. Two of the four questions asked in the West were part of the time 2 interview in the East. As we wanted to have only work-related items comparing East and West Germans, we used a mixture of two time 2 and two time 3 questions in the East to equalize the content of the scales. However, when the analyses were restricted to the East, we used the original four time 3 items, which included two non-work-related items, "losing one's apartment" and "reduction of unemployment benefits."

The initiative scales have been shown to have adequate validity (cf. Frese et al., 1996) in terms of adequate intercorrelations and significant correlations with the interviewees' life partners' (spouses, etc.) judgments of the interviewees' initiative. Moreover, people who were self-employed or who wanted to become self-employed showed more initiative in the East, and those with high initiative also had clearer career plans and executed their career plans more often than those with low initiative.

Questionnaire Variables: Auxiliary and Additional Variables

Auxiliary variables. We have argued that initiative should not be measured by questionnaires. However, in the sense of triangulation (Webb, Campbell, Schwartz, & Sechrest, 1966), interview- and questionnaire-based measures should lead to similar results. For this reason, we also included two auxiliary measures, generalized *self-efficacy* and *control rejection*, in our analyses.

Self-efficacy and control rejection are conceptually and empirically close to personal initiative. Both are related to control at work. Self-efficacy—an expectation of mastery—is the opposite of work-related helplessness (Speier & Frese, 1996) and is a generalized expectancy. Since mastery expectations are prerequisites of initiative (Bandura, 1986), self-efficacy is closely related to initiative. It is relevant that Sandelands, Bockner, and Glynn (1988) presented evidence that self-esteem, a variable related to self-efficacy, is an antecedent of persistence.

Taking responsibility and wanting to take charge are prerequisites of initiative (Frese, Erbe-Heinbokel, Grefe, Rybowiak, & Weike, 1994). We used the scale control rejection as a variable that should be related negatively to initiative (Frese et al., 1994). A high score on this variable indicates that the individual does not want control or responsibility at work. Both self-efficacy and control rejection are trait-like measures, while personal initiative is a behavior syndrome.

Additional variables. Control at work (Semmer, 1984) assesses job discretion in terms of, for example, ability to influence working conditions and work strategies. Complexity of work (Semmer, 1984) describes how difficult an individual's job decisions are. Semmer showed the ratings of subjects (blue-collar workers) and observers to be highly correlated for both variables (r = .58 and r = .67 for control and complexity, respectively). There is also evidence that people report these job characteristics with little subjective bias (Zapf, 1989).

Having left East Germany was established in September 1992, when we checked what letters had been returned to us (letters were sent to interviewees prior to the time 2 and time 3 visits) against the police register to which all German citizens must report to ascertain whether subjects had moved to the West; the interviewers also asked neighbors whether people had moved, if they could not be reached at their known addresses.

An additional set of a single-item questions addressed marital status, job of partner, number of children, and age of interviewee.

RESULTS

Cross-Sectional Study: East-West Differences in Initiative

In a first step, the hypothesis that working East Germans have a lower degree of initiative than West Germans was tested with a multivariate analysis of variance (MANOVA) with all dependent (initiative plus auxiliary) variables included; for methodological reasons, socioeconomic status (SES) was included as a factor. All multivariate effects were significant (Hotelling's test). The results reveal a significant East-West multivariate effect as suggested by our hypothesis ($F_{8,379} = 4.15$, p < .01), an effect of socioeconomic status $(F_{16,756} = 4.74, p < .01)$, and an interaction effect $(F_{16,760} = 2.08, p < .01)$. When the potential confounds were entered into a multivariate analysis of covariance (living alone/with partner, partner employed, age, gender, and number of children), these potential confounds had a significant multivariate influence on the dependent variables ($F_{40.1,617} = 2.22$, p < 01), but they did not change the pattern of results at all [East vs. West ($F_{8.325} = 3.59$, p < .01), SES ($F_{16,648} = 4.75$, p < .01), interaction effect ($F_{16,648} = 1.76$, p < .05)]. Accordingly, no further analyses were done with these confounds added (although SES was included in all further analyses).

These data confirm our general prediction, Hypothesis 1. Since all of the effects were significant, further univariate hierarchical ANOVAs were calculated. Table 3 reports the important results regarding East-West differences. 11 Because none of the interactions were significant, they are not displayed in the table. Levels of five of the eight initiative variables were significantly higher in the West, and one additional variable was nearly significantly higher; these included the most important core variables, overcoming barriers and qualitative initiative.

Interestingly, education initiative did not differ between East and West. The reason is probably that many funds are earmarked by the government for continuing education for East Germans. Interviewer evaluation—the variable that is most likely to reflect prejudices—also did not differentiate between East and West. Thus, one cannot argue that the initiative differences were due to prejudices held by the interviewers and raters.

The mean differences between East and West constituted about one-fourth to two-thirds of a standard deviation. Figure 1 presents the results for overcoming barriers in a slightly different format: Here, the group of people with high performance (a score of at least one standard deviation above the mean) on the variable overcoming barriers was singled out. In the East, 13 percent were high on this measure of taking initiative, and in the West, about three times as many had high scores (35%).

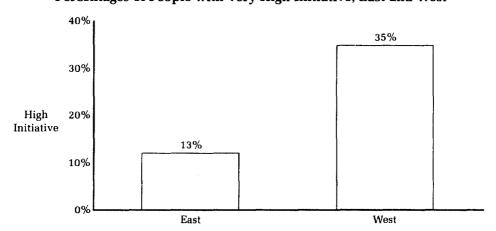
¹¹ Socioeconomic status showed significant differences in the variables in Table 5 (higher social status showing more initiative, except for self-efficacy); however, since status was entered only as a potential confound, we are not concerned with a detailed analysis of this variable.

TABLE 3
ANOVA Results: East-West Differences in Initiative^a

	Stan	ne 3 Idard ations	Time 3	3 Means	ANOVA
Variables	East	West	East	West	F
Qualitative work initiative	0.73	0.89	0.38	0.65	7.36**
General work initiative	0.74	0.83	2.09	2.36	3.55†
Interviewer evaluation	0.88	0.76	3.74	3.88	n.s.
Overcoming barriers	0.62	0.66	2.82	3.17	17.31**
Active approach	0.78	0.71	3.54	3.81	4.08*
Education initiative	1.65	1.58	2.02	2.29	n.s.
Control rejection	0.61	0.58	2.08	1.72	19.87**
Self-efficacy	0.51	0.51	3.44	3.84	66.44**

^a Hierarchical ANOVAs with socioeconomic status entered first were conducted; only employed interviewees were included in analyses. Socioeconomic status was significant for all variables except self-efficacy. All interactions were nonsignificant; ranges of n, 296–385 (East), 129–159 (West).

FIGURE 1
Percentages of People with Very High Initiative, East and West^a



 $^{^{\}rm a}$ Initiative was measured as overcoming barriers. One s.d. above mean 2.89 + .61 = 3.50.

[†] p < .10

^{*} p < .05

^{**} p < .01

Longitudinal Study: Socialization Versus Selection

According to the socialization concept, control at work and work complexity should influence initiative. This implies that there should be significant East-West differences in control and complexity (Hypothesis 2a). In the two-way hierarchical ANOVAs (in which SES and East-West differences were factors), significant differences in control at work measured at time 3 appeared for SES ($F_{2,526} = 18.17$, p < .01) and for East-West differences (\overline{x} [East] = 3.52, \overline{x} [West] = 3.90; $F_{1,526} = 8.02$, p < .01). Similar results prevailed for complexity measured at time 3 (SES $F_{2,525} = 22.59$, p < .01) and East-West differences (\overline{x} [East] = 3.43, \overline{x} [West] = 3.72; $F_{1,525} = 4.53$, p < .05). None of the interactions were significant. Thus, Hypothesis 2a is confirmed.

Hypothesis 2b predicts that control at work and work complexity will change level of initiative, thus expressing a socialization hypothesis. We were able to test this question for those initiative variables for which we had both time 1 and time 3 data (qualitative and general work initiative measures were not used at time 1). Table 4 displays the single correlations and, more important, the squared multiple correlation coefficients, relating control and complexity with initiative in East and West (columns 3 and 6). These show that, on the average, control and complexity explain about 9 percent of the variance in initiative in the East and about 10 percent in the West.

To test whether control and complexity actually influenced changes in personal initiative, hierarchical regression analyses were calculated for the longitudinal study in the East (last column of Table 4). The time 1 initiative variables were entered first (and thereby, partialed out), and then control and complexity at time 3 were included. The last column of Table 4 gives the increments in variance explained by control and complexity above and beyond the stability of the initiative variables. In all cases (except one that is nearly significant), there were significant increments. These results support the socialization hypothesis.

Hypothesis 3 states that there is more evidence for a socialization explanation of East-West differences than for a selection explanation. The selection hypothesis can be tested with two kinds of data. First, is there a change in East Germans' initiative between time 1 and time 3? There is evidence for a significant increase in two of the initiative variables (Table 5)¹³ and one nearly significant increase, although education initiative and self-efficacy show a reduction, with the auxiliary variable self-efficacy being marginally significant. These results run counter to what a pure selection effect would suggest.

Second, were East Germans who wanted to leave or who had actually left higher in initiative than those who wanted to stay or stayed? Only wanting to leave the East (measured at time 1) was significantly related to self-efficacy (see Table 6).

¹² Control and complexity were measured at time 3 because the effects of changed jobs could be tested then

¹³ The variable overcoming barriers needs a comment. We used different kinds of situations as material to ask the interviewees to overcome barriers at time 1 and at time 3; this was to ensure that there would be no simple learning-from-repetition effect. However, we cannot be certain that the time 1 questions were similar in difficulty to the time 3 questions. Thus, the significant difference between time 1 and time 3 in this variable should not be taken as evidence of an increase in initiative.

Correlations and Regression Analysis Results

		S	Cross-Sectional Study	Study			
		East			West		Lonoitudinal
	Corr	elations		Corr	elations		Study
Time 3 Variables	Control	Complexity	R^{2a}	Control	Complexity	R^{2a}	Δ R^{2b}
Interviewer evaluation	.26**	.36**	.14**	.22**	.28**	**60.	.052**
Overcoming barriers	.13**	.15**	.02**	.14**	.16*	.03	.021 [†]
Active approach	.17**	.19**	.04**	.25**	.31**	.11**	.023*
Education initiative	.18**	.29**	**80.	.14*	.15*	.03	**620.
Control rejection	36**	24**	.13**	46**	40**	.25**	.016*
Self-efficacy	.29**	.24**	.10**	.14*	.32**	.10**	.015*

* Work control and complexity at time 3 are cross-sectional predictors.

^b Work control and complexity at time 3 entered after time 1 initiative was entered in hierarchical regression analyses to test the effect of control and complexity on change in initiative.

p < 0.10* p < 0.05** p < 0.01

TABLE 5
Changes in Initiative in the East^a

	Me	ans			
Variables	Time 1	Time 3	t		
Interviewer evaluation	3.58	3.66	-1.72 [†]		
Overcoming barriers	2.20	2.90	-14.52**		
Active approach	3.06	3.45	-7.11**		
Education initiative	2.49	2.02	5.10**		
Control rejection	2.04	2.07	n.s.		
Self-efficacy	3.47	3.43	1.86 [†]		

^a The *t*-tests for dependent sample were to test changes for scales assessed at time 1 and time 3; for education, the comparison was between time 2 and time 3.

Table 6 shows a comparison between those who had left the East to resettle in the West (we knew of 12 individuals who had done so by September 1992) and those who stayed in the East. There is one nearly significant result (from one-sided *t*-tests); those who left the East demonstrated somewhat *less* qualitative initiative. In addition, four of the variables showed nonsignificantly higher means for those who had stayed. Thus, the different

TABLE 6
Comparisons of Stayers and Leavers^a

	Wai	nted to Leav	e East, T	ime 1]	Left vs. Stay	ed
		Means				eans	
Variables	Yes	Maybe	No	F	Left East	Stayed in East	t
Qualitative work							
initiative, time 3	0.38	0.42	0.36	n.s.	0.13	0.38	1.97
General work							
initiative, time 3	2.04	2.19	2.07	n.s.	1.93	2.13	n.s.
Education initiative ^b	2.13	2.19	2.00	n.s.	1.64	1.81	n.s.
Interviewer							
$evaluation^b$	3.82	3.81	3.64	n.s.	3.36	3.45	n.s.
Overcoming barriers ^b	2.80	2.93	2.91	n.s.	2.36	2.39	n.s.
Active approach ^b	3.27	3.41	3.46	n.s.	3.27	3.18	n.s.
Control rejection ^b	2.13	1.99	2.08	n.s.	2.26	2.04	n.s.
Self-efficacy ^b	3.70	3.52	3.39	3.82*	3.47	3.39	n.s.
n	15	36	257		8-12	>530	

^a By September 1992, 12 people had moved to the West; time 2 comparisons were done for leavers wherever possible; one-sided *t*-tests were used.

⁺ p < .10

^{**} p < .01

^b When testing for differences in "wanted to leave," we used time 3 results; when testing for differences between leavers and stayers, we used time 2 data.

[†] p < .10

^{*} p < .05

sets of data do not provide any evidence to support a selection effect of initiative. The selection hypothesis cannot be upheld, but the socialization effect is supported by the data, confirming Hypothesis 3.

DISCUSSION

This study provides evidence that personal initiative is lower in East than in West Germany. These differences are quite robust, and they do not disappear when controls are added. As Figure 1 shows, the difference is impressive if one looks at the extremes of the distribution—representing those who matter most for organizations.

As predicted, socialization provides a better explanation of the results than does selection. Control at work and work complexity are lower in the East, and they significantly predict changes in initiative variables. The selection hypothesis was not supported by the two analyses involving people who wanted to leave and people who actually left East Germany. Although these analyses can be criticized because pre-1990 leaving may not be analogous to post-1990 migration, the selection hypothesis also assumes that initiative is a stable variable. In contrast, our results suggest that there are some slow changes.

In interpreting our results, one might argue that the interviewees either became more interested in initiative because they participated in the study or that they learned to deal with the interview questions better, showing superficial learning. However, as discussed in footnote 6, those who participated in the study twice were no different in initiative than those who participated only once.

One might also argue that the interviewers were prejudiced against East Germans. Since the initiative scales were based upon their judgments, such bias could produce differences. Three arguments speak against this interpretation. First, the auxiliary concepts that were based on the interviewees' questionnaire responses showed a pattern quite similar to that of the interview-based scales. Second, the variable interviewer evaluation, which is most strongly based on the interviewers' subjective judgment and, therefore, the most prone to be biased, did not produce significant East-West differences. Third, we had a check in the cross-cultural codings, with East German coders recording the interviews done by West Germans and vice versa.

Although only a few studies have examined psychological processes in Eastern Europe, there are some that are in line with our results. One study on self-efficacy in school children (Oettingen et al., 1994) found children in East Berlin to have lower self-efficacy and less faith in influencing their performance than those in West Berlin. Schultz-Gambard and Altschuh (1993) showed that East Germans had more conventional leadership styles and were more dependent on those above them, less self-reliant, and less achievement-oriented than West Germans. Welsh, Luthans, and Sommer (1993) evaluated different management strategies and found that participative techniques did not work in Russia.

We think that the results can probably be generalized to other Eastern European countries to a certain degree. There are similarities in upbringing, socialization, and the organization of workplaces across Eastern Europe (Frese, 1995; Haraszti, 1977; Pearce et al., 1994; Shama, 1993; Welsh et al., 1993). Additionally, all these countries have been shaken by massive changes. However, there are also differences in the transition processes. There is more interference from Westerners in East Germany than in other European countries. Thus, East Germans frequently experience a situation similar to the one that prevailed during the period of bureaucratic socialism: They are supposed to follow orders from somebody above themselves without getting any sense that their own thoughts and problem-solving approaches are important. However, this time the "somebody above" is a manager flown in from West Germany. Further, the drastic necessity to change is more salient in those Eastern European countries that receive less financial support than East Germany.

We think that this study of initiative also has general implications that go beyond Eastern Europe. First, the concept of initiative is important as one aspect of contextual performance in any society. The importance of initiative will increase with modern production systems (Womack, Jones, Roos, & Carpenter, 1990), since supervision is reduced in lean organizations and there is more reliance on shop floor employees' participating actively in organizing work, improving process and product quality, and taking care of unexpected events efficiently. None of these tasks can be put into codified form, and therefore, they rely on initiative to be done effectively.

Second, initiative may be of particular importance in change processes (Howard, 1995; Kanter, 1983). People with a high degree of initiative will also be more likely to participate in workplace changes (Frese & Plüddemann, 1993). Further, change processes cannot be programmed and prepared in such a way that nothing goes wrong. Thus, in change situations, management depends on all of an organization's employees to deal with unpredictable events and to prepare to avoid mistakes—activities that take initiative. The issue of empowerment has been important here, as is reflected in our results on control and complexity (Kanter, 1983; Wall & Jackson, 1995).

Third, the results on the influence of control and complexity on personal initiative can probably be generalized to Western countries. Although there are *mean* differences between East and West Germany, there are no *correlational* differences (the East-West correlations of the correlations displayed in Table 4 are .92 for control and .95 for complexity). Since Tayloristic production methods reduce control and complexity, this pattern implies that Tayloristic organizations run the risk of reducing their employees' initiative.

Fourth, a response of managers to employees' lack of initiative is often to "tighten the ropes" and increase supervision and outside control. Employees' degree of control at work thus declines, which can reduce initiative even further, starting a vicious cycle. Managers should be careful not to fall into this trap and should instead introduce a slow process to help increase and promote initiative.

Fifth, we assume that a certain amount of tension and conflict can develop when people from different "initiative cultures" have to work together, because their expectations of what needs to be done at work differ. This tension exists in East Germany when employees from the West do not understand why East German employees do not show initiative (Hawranek, 1990). We assume that similar problems develop when different organizational cultures collide.

In any case, one should be realistic. Certain cultures may have a lower level of initiative than others. It is fruitless to make the question of initiative a politically divisive issue to which people attach prejudices and preconceptions (as is done in Germany); rather, scientific study of initiative, its predictors, and means by which it may be increased should be pursued.

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APPENDIX

Interview Measures

Quantitative and Qualitative Initiative at Work

- 1. During the last two years, did you submit suggestions to improve work?
- 2. During last two years, did you go to see the boss, because there were problems in work?
- 3. Can you remember a situation during the last year in which you have you searched for causes for something that did not function correctly?
- 4. Have you changed something in your work during the last year (e.g., the sequence of activities, added other activities, etc.)? (Prompts were used like "how many," "which ones," "explain in detail," "have you done this by yourself or have others helped you," "do you typically do this in your job"; each item was coded as to whether it constituted qualitative or quantitative initiative on five-point scales: 1 = very little [quantitative/qualitative] initiative, 5 = very much initiative.)

Education Initiative

- Does the subject intend to participate in some continuing education in the future? (yes, no)
- 2. Has s/he done something concrete to accomplish this? (1 = no concrete steps undertaken, 2 = few concrete steps [e.g., asked a colleague but not an official

- institution], 3 = some concrete steps [e.g., application], 4 = precise time is fixed, 5 = participates at the moment)
- 3. Has s/he actually participated in some continuing education since the last interview? (1 = did not take part, 2 = low participation [has possibly taken a small course for a few days], 3 = middle, 4 = high participation [took a longer-term qualification or longer course], 5 = very high participation (e.g., has started longer requalification training or study])
- 4. Was it based on his or her own decision? (1 = company or unemployment agency demanded it, 2 = there was official demand but also interest by S, 3 = middle, 4 = there was an interest by S but also company interest, 5 = it was solely achieved by S even against resistance of company)
- 5. Longer-range plans for occupational future? (1 = no plans, 2 = abstract plans, 3 = middle, 4 = plans with a certain degree of concreteness, 5 = plans with a high degree of concreteness [e.g., application])

An overall mean cut-off point was taken and only answers higher than the mean were counted.

Interviewer Evaluation

- 1. Active/inactive interview-dialogue behavior
- 2. Behaves actively/passively
- 3. Will behave actively/passively in the future
- 4. Goal-oriented/easily gets diverted from goal
- 5. Motivated to act/would rather not do anything
- 6. Wants to act quickly/wants to postpone
- 7. Internally controlled/externally controlled
- 8. Independent/not independent
- 9. Achievement-oriented/achievement is unimportant
- 10. Ambitious/not ambitious

Overcoming Barriers

- 1. Pretend for a moment, that you are dismissed from your job. What will you do?
- 2. Pretend for a moment, you want to do some further education. What will you do?
- 3. Pretend for a moment, your work colleague always does his/her work so sloppily that you have additional work to do. What do you do?
- 4. Pretend for a moment, that you work as a blue-collar worker on a machine and this machine breaks down. What do you do?

Coding: Overcoming a barrier was only counted when it was clearly a different response from the last one (e.g., not another supervisor when first answer was supervisor); interviewer stopped developing new barriers after 3 or when S could not give an answer.

Active Approach

The following rating was done for each item in "overcoming barriers": S/he is active/passive. Coding criteria for active: overcoming barrier by own activity, not delegating to others.

Questionnaire

All of the questionnaire-based measures had a five-point answer scale, most of the form "not true at all" (1) to "very true" (5).

^a Actually there is a translation problem here—the German word *zutreffen* is not easily translated into English.

Self-Efficacy

- When I am confronted with a new task, I am often afraid of not being able to handle it (recoded).
- 2. I like to make suggestions on how to improve the work process.
- 3. I judge my abilities to be high.
- 4. If I want to achieve something, I can overcome setbacks without giving up my goal.
- 5. When I want to reach a goal, I am usually able to succeed.
- 6. In case I would become unemployed, I am convinced that, because of my abilities, I will soon find a new job.

Control Rejection

- 1. I do only what I am told to do. Then nobody can reproach me for anything.
- 2. Work is easier if I am always told how to do it.
- 3. You only run into trouble, if you do something on your own.
- 4. I would rather be told exactly what I have to do. Then I make fewer mistakes.
- 5. I act according to the motto: I follow order, then nobody is going to reproach me.
- 6. I have to think about too many things when I have to make decisions.
- 7. I'd rather have routine work.
- 8. I prefer to have a supervisor who tells me exactly what I have to do. Then he or she is at fault if something goes wrong.
- 9. I want to decide more things myself (recoded).
- 10. Work is more interesting, if one has to make many decisions (recoded).

Complexity of Work

- Do you receive tasks that are extraordinary and particularly difficult? (1 = never, 5 = several times a week)
- 2. A must make very complicated decisions in his/her work, B only has to make very simple decisions. (1 = exactly like A, 5 = exactly like B)
- Can you use all your knowledge and skills in your work? (1 = very little, 5 = very much)
- 4. Can you learn new things in your work? (1 = very little, 5 = very much)

Control at Work

The five-point answer scale for the following items was very little, rather little, somewhat, rather much, and very much.

- 1. If you look at your job as a whole: How many own decisions does it allow you to make?
- 2. Can you determine how you do your work?
- 3. Can you plan and arrange your work on your own (e.g., calculate, which material/tools you need)?
- 4. How much can you participate in decisions of your superior (e.g., the superior asks you for your opinion and asks for suggestions)?

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