

Dresden, April 2005

Dear Participant!

In winter 2004/2005 you filled out a questionnaire in which we asked you about your evaluation of the entrepreneurial climate in your region. We thank you very much for taking part in this. In the questionnaire we also asked you to describe your own entrepreneurial potential and general personality characteristics. Further you answered questions about how optimistic you are and your preferred action strategies. Please note that we did not ask all the questions in each region/country.

In the following you find general explanations of all these characteristics.

For your individual feedback please send an email with your code to riedel@service360.de. After we received your code, we will send your personal scores to you within the next days. Due to the amount of requests we get, it won't be possible in every case to reply immediately. We ask you for your understanding that in individual cases your feedback may take a little bit longer.

Please contact us with questions and comments,

Katrin Riedel & Ute Stephan

The „Big Five“ Personality Characteristics

The 'Big Five' personality characteristics were measured with the MRS-20 (Schallberger & Venetz, 1999).

The MRS-20 is a questionnaire in which a person describes herself/himself using a total of 20 pairs of opposing adjectives. The underlying characteristics described with those adjectives are the 'Big Five' personality characteristics, namely: "emotional stability", "extraversion – introversion", "openness to experience", "agreeableness", and "conscientiousness". These dimensions are regarded as the five basic characteristic features of the personality of every individual (Big Five, Costa & McCrae, 2003). Every single dimension/characteristic is conceptualized as a dimension with two extreme poles. For example a person can be more or less emotionally stable. The questionnaire attributes four pairs of adjectives to each dimension. On a scale ranging from 1 to 6 in the questionnaire, you indicated for each pair of adjectives to which degree the characteristics apply to you.

The mean for every four adjective pairs is summed up to form your “score” in that dimension. In the following we explain for each dimension what high (maximum value: 6) and low (minimum value: 1) scores mean:

The scale “**Emotional Stability**” describes how emotions are experienced. It especially focuses on how negative emotions are experienced.

High scores: emotionally stable persons describe themselves as calm, balanced, and free from problems. They also do not easily lose control in stressful situations. They report to be mostly secure instead of feeling nervous or frightened.

Persons with *low* scores in “emotional stability” report, they easily get out of balance. They report more often to have negative and more intense emotions and they report that they are frequently shocked or troubled.

The scale “**Extraversion – Introversion**” includes such aspects as sociability, activity and self-confidence.

Persons with *high* scores on the “extraversion”-scale declare that they like other people, feel comfortable in groups and at social gatherings; they love excitement and tend to a rather cheerful nature.

Persons with *low* scores on the ‘extraversion’ scale tend to ‘introversion’, i.e. they describe themselves much more as contained (but not unfriendly), independent, balanced and avoiding excitement. Introvert persons are not afflicted with social anxiety, but they rather prefer to be on their own. Thereby they are however not unhappy or pessimistic.

The scale „**Openness to Experiences**” (culture) captures how much a person is interested and seeks activities that provide her/him with new experiences, adventure, and impressions.

Persons with *high* scores often report to have a vivid imagination, to perceive their own positive and negative feelings clearly, and to have an interest in many personal and public processes. They describe themselves as inquisitive, intellectual, imaginative, and fond of experimenting and loving art. They are rather ready to question existing norms and explore new kinds of social, ethic, and political moral concepts. Their judgement is independent, their behaviour is often unconventional; they test new ways of action and prefer variety.

Persons with *low* scores rather tend to more conventional behaviour and to have rather conservative attitudes. They prefer what they already know and reject new ideas; they would rather control their emotional reactions.

The scale “**Agreeableness**” describes, similarly to the scale “Extraversion – Introversion”, interpersonal behaviour.

Persons with *high* scores come across others with understanding, benevolence, and compassion. They try to help others and are convinced that those will behave just as helpful.

They tend to exhibit interpersonal trust, be co-operative as well as compliant, and have a strong need for harmony.

Persons with *low* scores describe themselves as more distrustful towards the intentions of other people and more egocentric. They behave more in a competitive than in a co-operative way. Uncooperative people are probably not as well liked as agreeable people. However, in many situations it is very important and helpful to be able to fight for one’s own interests.

The scale “**Conscientiousness**” refers to the active planning processes, organization and accomplishment of tasks.

Persons with *high* scores describe themselves as determined, ambitious, diligent, persistent, disciplined, strong-minded, reliable, punctual, accurate, dainty, and exact. Concerning academic and occupational achievements, such behaviour is socially desired. Although, this behavioural pattern first of all appears desirable, one shouldn’t forget that exacting demands and over particular orderliness are less positively assessed.

Persons with *low* scores describe themselves as rather careless, indifferent, and non-persistent. They show less strong dedication to achieve their goals.

The following schedule enable you to compare yourself with your fellow students of your own country as well as to the students from West and/or East Germany, Poland, Czech Republic and Bulgaria.

Table 1: Means und standard deviation for the „Big Five“ personality characteristics: MRS-20

	Extraversion		Agreeableness		Conscientiousness		Emotional Stability		Openness to Experience	
	MW	SD	MW	SD	MW	SD	MW	SD	MW	SD
West Germany*	-	-	-	-	-	-	-	-	-	-
East Germany (N= 101)	2,70	0,95	2,80	0,67	2,62	0,78	3,04	0,84	3,03	0,75
Czech republic (N= 8)	2,5	0,44	3,00	0,71	2,69	0,78	3,38	0,46	3,13	0,52
Poland (N= 103)	2,30	0,83	3,06	0,73	2,65	1,01	3,65	0,76	2,67	0,64
Bulgaria*										

* For this scales data were not collected in West Germany and Bulgaria.

MW: mean, SD: standard deviation, N: sample size

(minimum value: 1, maximum value 6)

(high scores mean, people rather tend to more emotional stability ,Extraversion, openness to experiences, agreeableness and conscientiousness;

low scores mean, people rather tend to less more emotional stability, Introversion, little openness to experiences, little agreeableness and little conscientiousness)

Table 1 makes evidently that the average value for the scale „Emotional Stability“ in East Germany is 3.04, for Poland it is the highest with 3,65. In comparison with the other countries it means, students from Poland are the most stable in Emotion, while students from East Germany are the most unstable in Emotion.

Table 2 clarifies the value distributions over the individual scales of the MRS-20 and the country allocation. For example 11% of the East German participant have got a value on the scale "Extraversion" of 2,75 and 14,7% of the Polish students obtained the value 2.0 on this scale. Furthermore it becomes evident, where your position is compared with your fellow students. An example: You are student in East Germany. In your individual evaluation you achieved a value on 4 for the scale "Extraversion". That means, your value on this scale lies in the high range compared with the other East German students, because 93 % have a smaller value than you and 7% a higher value.

Table 2: frequency distributions (in %) from the particular scales from the MRS-20 regarding the distribution of the average values over the country sample

(For this scales data were not collected in West Germany and Bulgaria.)

Extraversion							Agreeableness						
	East-Germ.		CZ		PL			East-Germ.		CZ		PL	
value	%	cum-mulati ve %	%	cum-mulati ve %	%	cum-mulati ve %	value	%	cum-mulati ve %	%	cum-mulati ve %	%	Kum-muliert e %
1,00	3,0	3,0	0,0		7,8	7,8	1,00	0,0	0,0	0,0		1,0	1,0
1,25	5,0	8,0	0,0		4,9	12,7	1,25	1,0	1,0	0,0		0,0	1,0
1,50	8,0	16,0	0,0		9,8	22,5	1,50	2,0	3,0	0,0		0,0	1,0
1,75	7,0	23,0	0,0		9,8	32,3	1,75	5,0	8,0	12,5	12,5	1,0	2,0
2,00	7,0	30,0	37,5	37,5	14,7	47,0	2,00	10,9	18,9	0,0	12,5	5,9	7,9
2,25	9,0	39,0	0,0	37,5	8,8	55,8	2,25	11,9	30,8	0,0	12,5	7,9	15,8
2,50	9,0	48,0	12,5	50,0	11,8	67,6	2,50	6,9	37,7	0,0	12,5	10,9	26,7
2,75	11,0	59,0	25,0	75,0	9,8	77,4	2,75	11,9	49,6	37,5	50,0	16,8	43,5
3,00	6,0	65,0	25,0	100,0	6,9	84,9	3,00	22,8	72,4	0,0	5,0	13,9	57,4
3,25	9,0	74,0	0,0		4,9	89,2	3,25	8,9	81,3	37,5	87,5	13,9	71,3
3,50	9,0	83,0	0,0		3,9	93,1	3,50	7,9	89,2	0,0	87,5	8,9	80,2
3,75	6,0	89,0	0,0		2,0	95,1	3,75	5,0	94,2	0,0	87,5	5,0	85,2
4,00	4,0	93,0	0,0		2,9	98,0	4,00	3,0	97,2	0,0	87,5	6,9	92,1

4,25	1,0	94,0	0,0		0,0	98,0	4,25	2,0	99,2	12,5	100,0	5,0	97,1
4,50	4,0	98,0	0,0		1,0	99,0	4,50	10,8	100,0	0,0		2,0	99,1
4,75	2,0	100,0	0,0		1,0	100,0	4,75	0,0		0,0		0,0	99,1
5,00	0,0		0,0		0,0		5,00	0,0		0,0		0,0	99,1
5,25	0,0		0,0		0,0		5,25	0,0		0,0		0,0	99,1
5,50	0,0		0,0		0,0		5,50	0,0		0,0		0,9	100,0
total	100%	100%	100%	100%	100%	100%	total	100%	100%	100%	100%	100%	100%

Conscientiousness							Emotional Stability						
	East-Germ.		CZ		PL			East-Germ.		CZ		PL	
value	%	cumulative %	%	cumulative %	%	cumulative %	value	%	cumulative %	%	cumulative %	%	cumulative %
1,00	0,0		0,0		5,0	5,0	1,00	1,0	1,0	0,0		0,0	
1,25	3,0	3,0	0,0		5,0	10,0	1,25	0,0	1,0	0,0		0,0	
1,50	4,0	7,0	12,5	12,5	9,0	19,0	1,50	4,0	5,0	0,0		0,0	
1,75	7,9	14,9	0,0	12,5	5,0	24,0	1,75	4,0	9,0	0,0		1,0	1,0
2,00	9,9	24,8	12,5	25,0	7,0	31,0	2,00	7,0	16,0	0,0		2,0	3,0
2,25	18,8	43,6	12,5	37,5	8,0	39,0	2,25	7,0	23,0	0,0		4,0	7,0
2,50	14,9	58,4	12,5	50,0	9,0	48,0	2,50	9,0	32,0	0,0		3,0	10,0
2,75	9,9	63,3	12,5	62,5	15,0	63,0	2,75	10,0	42,0	12,5	12,5	4,0	14,0
3,00	8,9	77,2	0,0	62,5	10,0	73,0	3,00	11,0	53,0	12,5	25,0	9,9	23,9
3,25	6,9	84,1	12,5	75,0	7,0	80,0	3,25	10,0	63,0	37,5	62,5	8,9	32,8
3,50	5,0	98,1	12,5	87,5	4,0	84,0	3,50	9,0	72,0	12,5	75,0	14,9	47,7
3,75	2,0	91,1	12,5	100,0	5,0	89,0	3,75	13,0	85,0	12,5	87,5	13,9	61,6
4,00	3,0	94,1	0,0		3,0	92,0	4,00	4,0	89,0	0,0	87,5	12,9	74,5
4,25	2,0	96,1	0,0		0,0	92,0	4,25	6,0	95,0	12,5	100,0	11,9	86,4
4,50	3,0	99,1	0,0		2,0	94,0	4,50	4,0	99,0	0,0		2,0	88,4
4,75	0,9	100,0	0,0		4,0	98,0	4,75	0,0	99,0	0,0		4,0	92,4
5,00	0,0		0,0		1,0	99,0	5,00	0,0	99,0	0,0		5,9	98,3
5,25	0,0		0,0		0,0	99,0	5,25	1,0	100,0	0,0		1,7	100,0
5,50	0,0		0,0		1,0	100,0	5,50	0,0		0,0		0,0	
total	100%	100%	100%	100%	100%	100%	total	100%	100%	100%	100%	100%	100%

Openness to Experience													
	East-Germ.		CZ		PL			East-Germ.		CZ		PL	
value	%	cumulative %	%	cumulative %	%	cumulative %	value	%	cumulative %	%	cumulative %	%	cumulative %
1,00	0,0		0,0		1,0	1,0	1,00						
1,25	1,0	1,0	0,0		0,0	1,0	1,25						
1,50	0,0	1,0	0,0		4,0	5,0	1,50						
1,75	5,0	6,0	0,0		4,0	9,0	1,75						
2,00	3,0	9,0	0,0		9,9	18,9	2,00						
2,25	13,0	22,0	0,0		13,9	32,8	2,25						
2,50	11,0	33,0	12,5	12,5	17,8	50,6	2,50						
2,75	12,0	45,0	25,0	37,5	12,9	63,5	2,75						
3,00	9,0	54,0	25,0	62,5	12,9	76,4	3,00						
3,25	13,0	67,0	12,5	75,0	9,9	86,3	3,25						

3,50	8,0	75,0	0,0	75,0	5,9	92,2	3,50						
3,75	12,0	87,0	12,5	87,5	4,0	96,2	3,75						
4,00	6,0	93,0	12,5	100,0	3,0	99,2	4,00						
4,25	2,0	95,0	0,0		0,8	100,0	4,25						
4,50	4,0	99,0	0,0		0,0		4,50						
4,75	1,0	100,0	0,0		0,0		4,75						
5,00	0,0		0,0		0,0		5,00						
5,25	0,0		0,0		0,0		5,25						
5,50	0,0		0,0		0,0		5,50						
total	100%	100%	100%	100%	100%	100%	total						

sample size: East Germany N= 101, Czech Republic N= 8, Poland N= 103

(minimum value: 1, maximum value 6)

(high scores mean, people rather tend to more emotional stability ,Extraversion, openness to experiences, agreeableness and conscientiousness;

low scores mean, people rather tend to less emotional stability, Introversion, little openness to experiences, little agreeableness and little conscientiousness)

Entrepreneurial potential

The ‘**Entrepreneurial Potential**’ questionnaire provides you with information on six personality orientations that are assumed to relate to entrepreneurial success (e.g. Shane, Locke & Collins, 2003; Rauch & Frese, 2000). These orientations are (1) Openness to Changes (2) Initiative and Preparation to take Risk (3) Belief in own Capabilities (4) Taking Responsibility (5) Entrepreneurial Activity and Intention, and (6) Entrepreneurial Motivation. You rated how much various statements describing those behaviours and attitudes applied to you on a scale from 1 = "completely wrong" to 5 = "completely correct". After averaging the 5 to 6 items for each orientation, your personal score was derived. Your score can vary from 1 ‘low’ to 5 ‘high’, accordingly.

The orientation “**Openness to Changes**” refers to recognizing opportunities in the environment in the sense of “Are there opportunities to become entrepreneurial active?” Being an entrepreneur means little daily routines. An entrepreneur must able to be open to possible innovations, i.e. he must recognize and then exploit business opportunities, accordingly. In order to be successful he has to adjust to changes fast and flexible.

Persons with *high* scores in ‘openness for changes’ see changes rather as challenges than threats. They see chances in changes and are ready to take the challenge. They tend to describe themselves rather as flexible, curious, and innovative.

Persons with *low* scores are rather sceptical towards new things and tend to be conservative. They are not very likely to become successful high-growth entrepreneurs.

The facet "**Initiative and Preparedness to take Risks**" refers to the will to enact entrepreneurial opportunities and persist in the face of obstacles. The entrepreneur should know how to estimate risks and act accordingly.

High initiative and preparedness to take risks refers to person who describe themselves as acting and planning independently in order to achieve their goals. They also assess uncertainties and possible negative consequences and take calculated risks.

Persons with *low* scores in 'initiative and preparedness to take risks' usually stick to the task they go assigned and are more likely to wait for other people's instructions. They pursue their goals less stringent and foresighted. In unclear and complex situations they risk little or nothing.

The orientation "**Belief in own Capabilities**" reflects how much faith a person has in her/his own abilities. If a person believes in his/her own capabilities he/she is more likely to cope with critical situations actively. Persons' with high efficacy beliefs trust that they have the capabilities necessary to exploit entrepreneurial opportunities. A strong belief in one's own efficacy develops when a person successfully accomplishes tasks and attributes those accomplishments to their abilities. Entrepreneurs frequently face complex, unexpected, critical or ambiguous situations. If a person believes in his/her abilities and actively approaches such situations, they probability to master the situation successfully increases. Persons with *high* scores expect to have sufficient authority over their own actions and thus master unexpected, complex or ambiguous situations successfully. Person with *low* scores are rather not convinced to have such action authority.

"**Taking Responsibly**" concerns to what extend a person is willing to bear the consequences of his/her actions and take responsibility for them. Being an entrepreneur means that one's decisions are critical not only to the economic success or failure of the company but also, e.g. for the company's employees. Thus, the readiness to take on responsibility is a prerequisite for entrepreneurial action.

Persons with *high* scores on this scale act rather self-determined under unclear or less favourable conditions. They typically do not avoid taking on tasks that include responsibility and are willing to bear the consequences of their actions.

Persons with *low* scores do not seize opportunities out of their own initiative. They rather wait what happens and prefer less responsible tasks.

“Entrepreneurial Activity and Intention” refers to intentions to found a business, to carry the associated risk and confidence in one’s own entrepreneurial abilities all with regard to business foundation. Persons with *high* scores do not avoid the uncertainties that the foundation of an enterprise yields. Persons with *low* values would rather not take this risk.

“Entrepreneurial Motivation” refers to the specific goals associated with a business foundation. Goals are considered to be one of the most important motivators. They are particularly motivating and ‘action effective’, if they are precise, sub-goals are developed and appropriate plans for their achievement are set up. According to the goal setting theory (Locke & Latham, 1990 after Rauch & Frese, 1998) ambitious and specific goals are particularly motivating, and therefore they positively affect entrepreneurial success. *High* scores in this orientation are associated with high, specific goals motivating a potential entrepreneurial career. *Low* scores speak for goals that are rather less often associated with successful entrepreneurial careers.

Table 3 indicates the mean and standard deviation from the entrepreneurial potential. It makes evidently that students from Bulgaria have the most entrepreneurial motivation, while students from East Germany have the lowest entrepreneurial potential.

Table 3: means and standard deviation for the scales from the entrepreneurial potential for the country sample

	Entrepren. Activity and Intention	Opennes for Changes	Initiative and Risk-taking	Belief in own capabilities	Responsibility taking	Entrepren. Motivation
West Germany (N=130)	MW: 3,48 SD: 0,73	MW:3,68 SD: 0,57	MW: 3,86 SD: 0,50	MW: 3,79 SD: 0,58	MW:4,18 SD: 0,54	MW: 3,47 SD: 0,91
East Germany (N=282)	MW: 3,25 SD: 0,70	MW: 3,61 SD: 0,53	MW: 3,80 SD: 0,49	MW: 3,68 SD: 0,52	MW: 3,94 SD: 0,58	MW: 3,36 SD: 0,88
Czech Republic (N=117)	MW: 3,42 SD: 0,68	MW: 3,64 SD: 0,59	MW: 3,82 SD: 0,51	MW: 3,58 SD: 0,56	MW: 4,08 SD: 0,60	MW: 3,42 SD: 0,90
Poland (N=343)	MW: 3,35 SD: 0,78	MW: 3,89 SD: 0,51	MW: 3,95 SD: 0,51	MW: 3,66 SD: 0,56	MW: 4,06 SD: 0,57	MW: 3,83 SD: 0,83
Bulgaria (N=134)	MW: 3,64 SD: 0,70	MW: 3,85 SD: 0,54	MW: 4,21 SD: 0,49	MW: 4,01 SD: 0,534	MW: 4,26 SD: 0,62	MW: 4,20 SD: 0,67

MW: mean, SD: standard deviation N: sample sizee

(minimum value: 1, maximum value: 5)

(high scores mean, people tend to high entrepreneurial activity and intention, high initiative and risk-taking, high responsibility taking and high entrepreneurial motivation, and also high belief in own capabilities and more opennes for changes, low values rather mean the opposite)

Action strategies

Action regulation theory defines actions as goal-oriented behaviour that is steered by the individuals’ cognitive plans (Frese & Zapf, 1994, quoted after Zempel, 2003, Hacker, 1986). Correspondingly, action strategies are personal proceedings used by individuals to organize

and plan their actions and efforts in order to accomplish tasks (Zempel, 2003). Four different action strategies can be distinguished, and are briefly presented in the following:

1. Complete (top-down) Planning

Characteristic of the complete planning strategy is the systematic and anticipating development of actions (Hacker, 1986). Starting from a major goal, sub-goals are systematically formulated. Thus, the planning strategy implies that a person has a comprehensive representation of the whole work process and that he/she needs considerably longer planning time (Frese et al., 2000). A person using the planning strategy knows the meaning of many different situations and problems that may come up during the work flow. That is, he/she has a broad knowledge which allows him/her to develop alternative plans in foresight of problems (Zempel, 2003).

Characteristic for a planned work style is an extensive analysis of different situations and the corresponding planning of diverse possibilities how to handle those situations. This allows purposeful control of the action and the situation.

2. Reactive Strategy (momentary strategy)

In contrast to the complete planning strategy, goal-related decisions are not formulated in advance when the dominant action strategy is 'reactive'. These decisions are rather made 'on-the-spot' when the situation requires it (Zempel, 2003). That is the person reacts mostly to current events.

A person using dominantly a reactive action strategy will not have extensive, foresighted knowledge about the work flow, but rather interprets information in the specific context (Hacker, 1986). Planning of action sequences is mostly limited to specific activities. The execution of which is at the centre of attention. A reactive working style means to react direct and flexible to situational demands.

3. Opportunistic Strategy

Similarly to the reactive strategy no systematic planning is carried out, i.e. major goals are not systematically dismantled into sub-goals. Rather, the planning process may begin at each action stage and be resumed in every direction (Zempel, 2003) Thus, a person using the opportunistic strategy starts out with some rudimentary planning, but may easily deviate from his/her plan whenever an opportunity arrives to do so and then result in an unsystematically sequence of action steps. The person may change spontaneously between specific tasks and

abstraction levels. In summary, this describes a working style with some planning, however this planning is less complete than in the planned working style. Especially in complex and uncertain situations it may be very profitable to pursue different options simultaneously.

4. Critical Point Strategy

A person using this strategy is oriented towards first solving the most difficult, uncertain and most important point for him/her, i.e. the critical point (Frese et al., 2000). Only after solving this critical point further steps are planned and new critical points are identified. In contrast to the complete planning strategy, a hierarchical dismantling of a major goal into sub-goals does not take place here. In the situation the person looks only for information that allows him to handle the critical task parts, but the person very well engages in planning concerning this critical point. Some further systematic and foresighted measures are planned using simple rules of thumb and access to some prior knowledge (Zempel, 2003). From various alternatives the one is selected which promises to be most successful. Critical point strategy means that the person is fully concentrated on this very point, the rest of the tasks tend to be deferred.

Some general remarks: Strategies of entrepreneurs

Start-up companies must make fast decisions, so that the planning strategy appears to be not very effective for them, since it needs considerable time to develop a detailed plan and relies on prior experience (Frese et al., 2003). But start-up companies usually do not have experiences.

Frese et al. (2000) showed in a study that the entrepreneur's strategy use predicted their entrepreneurial success. Specifically, critical point strategy was positively related with success, whereas the momentary strategy was negatively related to success (Frese et al., 2000). The most frequently used strategies were a mixture of critical and opportunistic strategy (Frese et al., 2000). This combination was also more successful than the use of one strategy only. That is, when planning is concentrated on one important point in the enterprise development (this corresponds to the strategy of the critical point) and that this 'point' is flexibly dealt with corresponding to external environmental demands (opportunistic strategy). The most unfavourable action strategy combination was opportunistic-reactive strategy, which was related to significantly lower entrepreneurial success (Frese et al., 2000).

Van Gelderen et al. (2000) showed in a subsequent study, that the entrepreneurial environment as well as success itself affects strategy use. While Frese et al. (2000) found that a combination of critical point and opportunistic strategy was relevant for entrepreneurial

success; van Gelderen et al. (2000) found that for established enterprises complete planning is associated with success and reactive strategy with low success. Beside effects of the environment, the researchers found evidence for the fact that strategy use depends also on prior success. High success leads to an increased use of the planning strategy and low success to a more frequent use of the momentary strategy (Van Gelderen et al., 2000).

To sum up, the use of the critical-point strategy is especially successful at the time of business foundation, as fast decisions under uncertainty are required. Company performance subsequently provides the information about the effectiveness of the decisions made and the measures used. Based on these experiences and with the stabilization of the enterprise, a more comprehensive strategic approach will be established over time (Zempel, 2003).

The following schedule enable you to compare yourself with your fellow students of your own country as well as to the students from West and/or East Germany, Poland, Czech Republic and Bulgaria.

Table 4 indicates the mean and standard deviation from the action strategies. The planning strategy is applied more by the East German students, while the reactive, critical point and opportunistic action strategy are used more by the Polish students.

Table 5 characterizes the sample regarding the cumulative values distribution of the four action strategies. For example 17.9% from all participants in East Germany reached the score 15 for the planning strategy, in contrast to the reactive strategy, where only 7.4% of the East German students reached the score 15. Furthermore it becomes evident, where your position is compared with your fellow students. An example: You are student in East Germany. In your individual evaluation you reached a value of 16 for the planning strategy. That means, your value on this scale lies in the high range compared with the other East German students, because 88,5 % have a smaller value than you and 11,5% have a higher value.

Table 4: Means and standard deviation from the four action strategies regarding the country samples

(For this scales data were not collected in West Germany, Czech republic and Bulgaria.)

	planning strategy		reactive strategy		critical points strategy		opportunistic strategy	
	MW	SD	MW	SD	MW	SD	MW	SD
East Germany	14,06	2,35	11,13	2,18	12,13	2,43	11,94	2,38

(N= 96)																		
Poland (N= 103)	13,45	3,00	12,48	2,16	13,32	2,70	13,70	2,11										

MW: mean, SD: standard deviation, N: sample size

(minimum value: 4, maximum: value: 20)

(The strategy with the highest score are used most frequently.)

Table 5: frequency distributions (in %) from the action strategies regarding the value distribution over the country sample

(For this scales data were not collected in West Germany ,Czech republic and Bulgaria.)

sample size: East Germany N= 96, Poland N= 103

planning strategy																		
value	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	total
East-Germ.					1,1	1,1	5,3	6,3	11,6	13,7	16,8	17,9	14,7	4,2	3,2	3,2	0,9	100%
cumulative %					1,1	2,2	7,5	13,8	25,4	39,1	55,9	73,8	88,5	92,7	95,9	99,1	100	100%
Poland	1,1			1,1	5,3	4,2	7,4	6,3	5,3	15,8	10,5	15,8	17,9	3,2	3,2	2,1	0,8	100%
cumulative %	1,1			2,2	7,5	11,7	19,1	25,4	130,7	46,5	57,0	72,8	90,7	93,9	97,1	99,2	100	100%

reactive startegy																		
value	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	total	
East-Germ.			1,1	2,1	9,5	8,4	24,2	10,5	17,9	10,5	7,4	4,3	1,0				100%	
cumulative %			1,1	3,2	12,7	21,1	45,3	55,8	73,7	84,2	91,6	99,0	100				100%	
Poland						8,7	9,7	17,5	16,5	14,6	18,4	4,9	6,8	1,0	1,0	0,9	100%	
cumulative %						8,7	18,4	35,9	52,4	67,0	85,4	90,3	97,1	98,1	99,1	100	100%	

critical points strategy																		
value	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	total
East-Germ.			1,0	3,1	2,1	6,3	11,5	14,6	19,8	14,6	13,5	2,1	8,3	1,0	2,1			100%
cumulative %			1,0	4,1	6,2	12,5	24,0	38,6	58,4	73,0	86,5	88,6	96,9	97,9	100			100%
Poland					6,0	5,0	6,0	6,0	16,0	12,0	5,0	24,0	12,0	3,0	4,0		1,0	100%
cumulative %					6,0	11,0	17,0	23,0	49,0	51,0	56,0	80,0	92,0	95,0	99,0	99,0	100	100%

opportunistic Strategy																		
value	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	total	
East-Germ.		1,1		3,2	2,1	11,6	8,4	11,6	20,0	18,9	8,4	7,4	6,3	1,0			100%	
cumulative %		1,1	1,1	4,3	6,4	18,0	26,4	38,0	58,0	76,9	85,3	92,7	99,0	100			100%	
Poland					2,0		5,0	8,0	13,0	17,0	16,0	19,0	13,0	5,0	1,0	1,0	100%	
cumulative %					2,0	20	7,0	15,0	28,0	45,0	61,0	80,0	93,0	98,0	99,0	100,0	100%	

(minimum value: 4, maximum: value: 20)

(The strategy with the highest score are used most frequently.)

Optimism

The concept of generalized optimism of Scheier and Carver (1985) refers to generalized, temporally stable result expectations. When facing difficulties, optimistic people tend to think

that ‘everything will work out fine’. Optimists look into the future and expect positive things will happen to them, whereas pessimists confidently expect bad things for their future (Carver and Scheier, 2001). The concept of optimism does not specify whether it is because of a person’s actions that positive things happen to him/her, or whether it is because of circumstances external to the person (Schwarzer und Renner, 1997). For Seligman (2001) optimists and pessimists differ with regard to how they explain certain situations. These explanations, or attributions, can be differentiated along three dimensions: Stability (temporarily vs. stable), area of application (specifically vs. global) and whether the situation is due to personal or external influence (internal vs. external). Pessimists tend to see causes for unpleasant events as durable and long-lasting, while optimists consider more temporary and sporadic explanations for unpleasant events. In contrast to that, optimists believe in durable reasons for pleasant events, whereas pessimists see them due to temporary reasons.

Pessimists generalize failures, i.e. a failure in a particular realm of life is generalized to other areas of life as well, whereas optimists see failures strictly domain specific. This effect is also reverted for pleasurable events, i.e. optimists believe that positive events generalize to other areas of life, while pessimists see them as unique events. In addition, pessimists think that failures are due to themselves and believe that good things happening to them are due to other people. Optimists however explain failure as due to the influence of other people or the circumstances. They tend to be self-confident. Pleasant events are thought to be due to one’s own actions. The fourth aspect of optimism is ‘hope’, i.e. composed of the above mentioned dimensions area of application and stability. Seligman (2001) regards ‘hope’ as the most important aspect of optimism. Hope means finding temporary and specific reasons to explain bad luck. Whereas the opposite of hope, despair, stems from attributing bad luck to stable, long-lasting as well as unspecific, global causes.

You described your own optimism using 10 statements on a scale from 0 = ‘this statement applies to me’ to 4 = ‘this statement doesn’t apply at all to me’. Low values characterize optimistic persons, high values pessimistic persons.

The following schedule enable you to compare yourself with your fellow students of your own country as well as to the students from West and/or East Germany, Poland, Czech Republic and Bulgaria.

Table 6 indicates the means and standard deviations for the scale optimism. It shows that the West German students estimated themselves as the most optimistical, followed by the East German and Bulgarian students.

Table 7 indicates the frequency distributions for the estimation of the scale Optimism. For example 13,5 % from the East German students have a score of 8 on this scale und 0,4% estimated themselves with a score of 19 as pessimistic. Furthermore it becomes evident, where your position is compared with your fellow students. An example: You are student in East Germany. In your individual evaluation you reached a value of 4. That means, your value on this scale lies in the low range compared with the other East German students, because 4,8 % have a smaller value than you and 95,2% have a higher value.

Table 6: means and standard deviation for the scale Optimism regarding the sample

	Optimism	
	MW	SD
West Germany (N= 130)	8,32	2,83
East Germany (N= 282)	9,14	2,96
Czech Republic (N= 117)	10,82	3,03
Poland (N=343)	9,83	3,07
Bulgaria (N=134)	9,58	2,73

MW: mean, SD: standard deviation, N: sample size

(minimum value: 0, maximum value: 24; Low values characterise optimistic persons, high values characterise pessimistic persons.)

Table 7: frequency distributions (in %) regarding the scale Optimism over the country sample (1. data collection)

sample size: West Germany N= 130, East Germany N= 282, Czech Republic N=117, Poland N=383, Bulgaria N=134

cumulative value	West-germ.	cumulativ e %	East-Germ.	cumulativ e %	Czech Rep.	cumulativ e %	Poland	cumulativ e %	Bulgaria	cumulativ e %
0			0,4	0,4						
1			0,0	0,4						
2			0,0	0,4						
3			0,4	0,8			0,3	0,3	0,8	0,8
4	4,0	4,0	4,0	4,8			3,0	3,3	3,9	4,7
5	7,9	11,9	4,4	9,2	1,7	1,7	4,5	7,8	1,6	6,3
6	19,8	31,7	10,2	19,4	3,5	5,2	5,7	13,5	4,7	11,0
7	16,7	48,4	10,5	29,9	3,5	8,7	9,3	22,8	9,4	20,4
8	10,3	58,7	13,5	43,4	13,9	22,6	12,9	35,7	16,5	36,9
9	11,1	69,8	13,5	56,9	16,9	39,5	9,6	45,3	11,0	47,9
10	7,9	77,7	13,1	70,0	10,4	49,9	15,3	60,6	15,7	63,6
11	7,1	84,8	11,3	81,3	15,7	65,6	12,6	73,2	15,0	78,6
12	9,5	94,3	7,3	88,6	11,3	76,9	9,6	82,8	7,9	86,5

13	0,0	94,3	4,7	93,3	3,5	80,4	4,2	87,0	4,7	91,2
14	1,6	95,6	2,9	96,2	7,8	88,2	6,0	93	4,7	95,9
15	1,6	97,6	1,1	97,3	5,2	93,4	2,7	95,7	1,6	97,5
16	1,6	99,1	0,7	98,0	1,7	95,1	1,5	97,2	1,6	99,1
17	0,0	99,1	0,7	98,7	3,5	98,6	1,5	98,7	0,9	100,0
18	0,9	100,0	1,1	99,8	0,0	98,6	0,3	99,0		
19			0,2	100,0	0,0	98,6	1,0	100,0		
20					0,9	99,5				
21					0,5	100,0				
total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

(minimum value: 0, maximum value: 24; Low values characterise optimistic persons, high values characterise pessimistic persons.)

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