
Explanatory Style in the Context of Culture

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THE CROSS-CULTURAL PERSPECTIVE
IN PSYCHOLOGY

The issues addressed in cross-cultural psychology are as diverse as the issues addressed in psychology itself, because they are borrowed from the various fields of psychology (e.g., social, developmental, and personality psychology). Cross-cultural psychology, however, takes a unique perspective. It analyzes psychological phenomena in a cultural context by examining them either between cultures, or within a selected single culture (Berry, 1980a; Triandis 1980).

A jointly held definition of culture is difficult to come by as it is defined in very diverse terms (Kroeber & Kluckhohn, 1952). Marsella (1978) viewed the definition of culture as dependent upon the specific predictions of the investigators, and Segall (1984) even suggested giving up the search for a generally accepted definition of culture. Common to the various definitions is the notion that culture is the manmade part of the human environment (Herskovits, 1948). This manmade part extends to physical objects, which constitute the physical culture (e.g., roads, buildings, tools) and to subjective responses to what is manmade, which constitute the subjective culture (e.g., myths, roles, values, and attitudes; Triandis, 1980). Cross-cultural researchers generally tend to focus on cultures or subcultures that differ substantially in their physical and subjective aspects.

Cultural comparisons are useful for various research purposes. The first is to determine whether or not certain psychological theories are universal. For exam-
ple, there is evidence that the judgment of facial expression is transcultural (Ekman & Friesen, 1969, 1971; Ekman, Friesen, O'Sullivan et al., 1987). Also, McClelland (1961) claimed universality for his theory of the development of achievement motivation, in which he specified socialization antecedents of achievement motivation. But later, de Vos (1968) in Japan, and LeVine (1966) with three different Nigerian ethnic groups, found only a limited degree of transcultural applicability of McClelland's developmental ideas.

A second approach employs cross-cultural research for the purpose of testing psychological theories. Accordingly, cultures that are high or low on variables critical to the theory of interest are examined. For instance, Witkin and Berry (1975) theorized that interaction styles systematically affect cognitive functioning in terms of perceptual differentiation and organization. They tested this notion by comparing agricultural and fishing/hunting cultures, because these two kinds of cultures are known to organize their social lives quite differently. This approach to cross-cultural psychology is particularly valuable whenever specific variables of a theory cannot be readily manipulated in the laboratory (e.g., cognitive or interpersonal styles), or should not be manipulated for ethical reasons (e.g., anxiety).

A third approach tries to identify specific ecological or cultural factors that shape aspects of psychological functioning. For example, Triandis, Vassiliou, Vassiliou, Tanaka, and Shanmugam (1972) selected cultures in which life events were unpredictable (because of frequent wars, revolutions, floods, tornadoes, etc.) and compared these with cultures characterized by highly predictable life events in terms of people’s readiness to value, enjoy, and engage in planning. The findings pointed to “predictability” as a facilitating factor of planning. Referring to principles of reinforcement (i.e., planning is only rewarded in a setting with predictable events), this observation finds an easy (albeit post hoc) explanation.

Theory testing (i.e., the purpose of the second approach) and making inferences on how aspects of a culture influence psychological functioning (i.e., the purpose of the third approach) can also be achieved by analyzing a changing culture over time (Berry, 1980b, 1989; Berry, Poortinga, Segall, & Dasen, 1992; Segall, 1986). For the purpose of theory testing one would look for a culture changing with respect to psychological variables specified in the respective theory. From any changing culture, however, one may make inferences from changes in cultural aspects that preceded (and therefore might have promoted) the observed changes in psychological functioning.

Although each of these approaches has its merits, they are all plagued by methodological problems. A major problem is to ensure that the psychological variables of interest are comprehended and expressed in a similar manner within the cultures under comparison. For instance, if the concept of frustration were of interest, one were to compare cultures in which frustration finds a similar manifestation. Otherwise, one would falsely interpret a qualitatively different expression of frustration across cultures as an indication of differences in the level of frustration. This problem looms large whenever psychological variables
that are well-known and widely studied in one culture (e.g., a developed culture) are imposed on another culture (e.g., a developing culture). This approach of trying to compare general principles across different cultures has been labeled etic in cross-cultural psychology (Berry, 1969, 1980a; Pike, 1967).

A different line of research—mostly represented by anthropologists and ethologists—studies psychological phenomena by exploring the peculiarities of their expression within a single culture of particular interest or concern. This approach has been labeled emic. However, when psychological concepts (e.g., frustration) are understood differently in different cultures, it is no longer very enlightening to compare such concepts across cultures. Each culture stands on its own, and it is the detailed description of individual cultures and the understanding of the intricacies of their functioning that is of primary interest.

EXPLANATORY STYLE

People's causal attributions for positive and negative events are determined by both the situation and the individual. The situation, for example, offers information about covariation (Kelley, 1967; McArthur, 1972). Aspects of the situation that are seen as covarying with the event are prime candidates to be specified as causal factors. More specifically, if the critical event shows low consensus (i.e., few individuals act alike in the same situation), high consistency (i.e., high congruence of behavior in recurring situations) and low distinctiveness (i.e., high congruence of behavior across various situations), attributions to internal (something about the self), stable (it persists or recurs over time), and global (it affects many situations) causal factors are made.

Different individuals develop personal styles of explaining positive and negative events (Peterson & Seligman, 1984a). A specific example of such a style is the tendency to make internal, stable, and global attributions for negative events and external, unstable, and specific attributions for positive events (Abramson, Seligman, & Teasdale, 1978; see chapter 1, this volume). This explanatory style has been linked to depression, because it implies that the future holds an abundance of negative events, whereas positive events are hard to come by (see Brewin, 1985; Peterson & Seligman, 1984a; Sweeney, Anderson, & Bailey, 1986). A closer look reveals, however, that depressive individuals only exhibit a less optimistic explanatory style in comparison to the strong preference of nondepressive individuals for self-serving attributions. Depressive individuals' attributions for positive and negative events are relatively even-handed (i.e., their explanations of positive and negative events are similar on internality, stability, and globality; Raps, Peterson, Reinhard, Abramson, & Seligman, 1982), whereas nondepressive individuals evidence more lop-sidedness (i.e., they explain positive events more by internal, stable, and global factors than negative ones). An extensive discussion of the link between explanatory style and depression is covered in chapter 5, this volume.
The pessimistic explanatory style does not have to encompass all aspects or domains which are of importance to a person’s life. For instance, a person may entertain an optimistic explanatory style in the interpersonal realm, but may fail to do so in the achievement domain. In such a case it will be the negative events in the achievement domain only which put the person at risk for depression (Metalsky, Halberstadt, & Abramson, 1987).

In the literature, two different assessment techniques have been employed to measure explanatory style. Most common is the Attributional Style Questionnaire (ASQ; Peterson et al., 1982). This questionnaire requires respondents to generate causes for 12 hypothetical events, 6 positive and 6 negative, and to subsequently rate them on the dimensions of internality, stability, and globality (chapter 2 contains a detailed description of the ASQ). Explanatory style can also be assessed by content analysis of any written or spoken verbal expression that contains causal explanations. This is known as the Content Analysis of Verbatim Explanations (CAVE; Peterson, Luborsky, & Seligman, 1983; Zullow, Oettingen, Peterson, & Seligman, 1988). The CAVE technique allows for the analysis of explanatory style in texts, modern or ancient, written in English or other languages, irrespective of the content domains that are covered. The only prerequisite is that the texts contain identifiable causal attributions for negative and positive events. These causal statements are extracted from the texts and given to independent raters who score them in terms of internality, stability and globality; interrater reliability is high (Zullow et al., 1988). The CAVE technique has been validated in that it yields the typical relationship between pessimistic explanatory style and depression (Peterson, Bettes, & Seligman, 1985; Peterson et al., 1983). Moreover, explanatory style extracted from interview material and open-ended questionnaires significantly correlated with and predicted psychological and physical health (Peterson, Seligman, & Vaillant, 1988; Seligman & Elder, 1986).

Explanatory Style Across Cultures

The analysis of explanatory style across cultures must first deal with the previously described major cross-cultural methodological problem: How can we ensure that the measurement procedures employed actually capture the same concept of optimistic/pessimistic explanatory style across the cultures to be compared? The ASQ procedure (Peterson et al., 1982) entails the problem that the events listed in the questionnaire are rather culture specific (e.g., an unsuccessful date or becoming rich). These events are closely related to the concerns of people who live the American way of life. Therefore, they are appropriate for research conducted in the United States. For comparisons across cultures, however, they create a host of problems: Members of different cultures might not assign the same importance to these events, they might differ in terms of the valence that they attach to them, or may fail to imagine that these events will actually happen to them. Whenever items on the ASQ are experienced as artificial or alien by members of certain cultures, the measurement of explanatory style may not be reliable or valid. When re-
searchers compared intellectual performances across cultures (Berry, 1980a; Brislin, Lonner, & Thorndike, 1973) similar concerns led to the development of so-called culture-free or less culture-bound intelligence tests.

The CAVE technique offers a way around the development of a culture-free ASQ. Because this technique can be used to CAVE all types of texts, it should be possible to select comparable texts from various cultures and thus to determine the prevalence of an optimistic–pessimistic explanatory style. The content of these texts is not alien, because they are produced by these cultures. In addition, the researchers rating the causal statements extracted from these texts do not have to be familiar with the background of the respective culture. Because the raters' task is not to evaluate the content of the causal attributions but, instead to judge them along the structural dimensions of stability, internality, and globality, the CAVE technique is particularly suited for cross-cultural comparisons.

Traditionally, when cross-cultural researchers focus on texts they tend to select folktales, because these are assumed to contain the central values of a culture worthy to be passed on from generation to generation (Brislin, 1980). For example, when McClelland (1961) attempted to demonstrate the prior necessity of achievement motivation for economic development, he content-analyzed stories in children's storybooks or readers in 30 countries with respect to the frequency of achievement themes. He then correlated this variable with measures of economic growth assessed 25 years later (such as per capita income and electrical production per capita). McClelland considered these stories to be "cultural products" that reflected the average level of achievement motivation, and he interpreted the positive correlations observed as support for his hypothesis that economic growth is preceded by high levels of achievement motivation.

In the following study (Oettingen & Morawska, 1990), we set out to demonstrate that CAving written cultural products such as folktales, songs, proverbs, and prayers allows a reliable and valid assessment of a culture's explanatory style. We chose a culture that has clearly separated domains for two reasons (i.e., the religious and the secular domain). First, we wanted to demonstrate that explanatory style can be coded reliably within each of the different domains. Second, and even more importantly, we formulated hypotheses about the degree of optimism that should be expressed in the writings belonging to these different cultural domains, because support for these hypotheses may then be taken as an indication that explanatory style is assessed validly by the CAVE procedure.

CAVING SECULAR AND RELIGIOUS NARRATIVES:
19TH-CENTURY RUSSIAN JEWRY

We focused on written materials that were part of the Russian Jewish culture at the end of the 19th century and selected popular writings that belonged either to the secular or to the religious domain of this culture (Oettingen & Morawska, 1990). The religious written materials were expected to evidence an optimistic
explanatory style, because the Jewish religion promises the arrival of the Messiah, and religion in general serves the function (among other things) of providing relief from a dismal earthly existence by instigating hope for salvation (James, 1902/1961; Marx, 1843–1844/1964). In fact, Gorsuch (1988) reported that religious persons are less anxious, less suicidal, and in better physical and mental health than those who are not religious. The secular writings were expected to be characterized by a less optimistic explanatory style. Secular life for Russian Jews has always been hard (McClelland, 1961). Toward the end of the 19th century they faced an increasingly precarious civil-political situation, such as pogroms and anti-Jewish laws (Baron, 1976; Greenberg, 1956).

Written materials were selected in consultation with scholars of Russian Judaism. The religious material consisted of the standard liturgy and prayers (e.g., “Daily Prayers,” “Sabbath and Festival Prayers,” “High Holiday Prayers” by Birnbaum, 1949, 1951; “Lamentations” by Rosenfeld, 1986, Zlotowitz, 1983) and popular religious stories (Ben-Amos & Mintz, 1970; Buber, 1948, 1975). The secular material included “Yiddish Folk Songs” (Rubin, 1979), “Yiddish Folk Stories” (Howe & Greenberg, 1954; Howe & Wisse, 1979), and “Yiddish Proverbs” (Ayalti, 1949).

Causal statements about events that were clearly good or bad from the point of view of the Jewish culture were extracted. Neutral events and those that had both good and bad elements were discarded. Events included facts (e.g., the Jewish people are oppressed), descriptions (e.g., the Rabbi gave good advice), or emotional expressions (e.g., we have no fear). The extracted units (which included both event and attribution) had to contain a clear causal relationship between the event and the attribution; the explanation was not merely a description or justification of the event. Finally, the causal statements were divided into religious or secular ones on the basis of their content. This amounted to 239 religious statements (the cause referred to God or divine issues) and 380 secular statements (the cause referred to worldly issues, human characteristics, or human action).

The causal statements were then presented in a randomized order to three trained raters who were blind to both the hypotheses and the sources of the statements. The raters scored each statement (using 7-point scales) on the stability, globality, and internality of the causal factor mentioned. Interrater reliability was high for both religious and secular statements on each dimension (all Cronbach alphas > .75). This demonstrates reliability of the CAVE technique, even when it is applied to texts taken from another culture and a different time in history.

As hypothesized, the religious statements were more optimistic than the secular statements. For religious statements we observed optimistic lop-sidedness; positive events were attributed more to stable and global factors than were negative events ($t$ score = 7.6, $p < .001$). The parallel pattern of data was not found for the internal dimension. A simple explanation for this is the fact that the cause referred to in religious statements was generally God. Therefore, positive events
could not be attributed more internally than negative events. A less optimistic pattern of attributions emerged for secular statements. Here we observed the so-called even-handed, or pessimistic explanatory pattern. Explanations for both positive and negative events similarly referred to stable and global as well as internal factors. Even-handedness implies less optimism than lop-sidedness and is commonly observed with depressed students, patients, and children (Raps et al., 1982).

Our two hypotheses were thus confirmed. Explanatory style can be measured cross-culturally using the CAVE technique, and religious statements were found to be more optimistic than secular statements. Next, in order to show that our findings were not just specific to the Jewish culture, we attempted a replication.

RUSSIAN ORTHODOX CHRISTIANITY:
A REPLICATION STUDY

Written materials were selected from the religious and secular domains of 19th-century Orthodox Christian peasantry. This culture shared the same geographic location and political system with the Russian Jewry of our first study. The religious materials included “Daily Prayers,” “Sunday Prayers,” “Festival Prayers,” “Russian Lenten” (Holy Trinity Monastery, 1979, 1963, 1973, 1974, 1975; the Holy Transfiguration Monastery, 1974) and religious stories (Holy Trinity Monastery, 1985; see Oettingen & Morawska, 1990, for a detailed list of all stories used). The secular materials were taken from “Russian Folk Songs” (Reeder, 1975), “Russian Fairy Tales” (Guterman, 1985), and “Russian Proverbs” (Langnas, 1960).

Causal statements from these sources (134 religious and 369 secular) were extracted and scored by three raters along the dimensions of stability, globality, and internality. Again, interrater reliability was high for both religious and secular statements on all three dimensions (all Cronbach alphas > .72). As in the previous study, we found lop-sided explanations in the religious domain for the stable and global dimension ($t = 2.6, p < .01$), whereas even-handed explanations were observed in the secular realm. Religious statements were more optimistic than secular statements.

The results of the two studies are remarkably similar. First, there is high interrater reliability for causal statements of both religious and secular domains. Second, the hypothesis that religious causal statements are more optimistic than secular causal statements was confirmed for both the Russian Jewish culture and the Russian Orthodox Christian culture. This pattern of findings suggests that CAving solves the central methodological problem in cross-cultural psychology, which is measuring psychological concepts with high reliability and validity at the cultural level.

Explanatory style can be assessed effectively at a cultural level by CAving. Therefore it now seems possible to explore the question of what aspects of a
culture lead to an optimistic explanatory style, and which favor pessimistic explanations. The present studies do not speak to this issue, because explanatory style as assessed in both religious and secular cultural products is similar for Russian Jewry and Orthodox Christianity. The only difference was more optimism in explaining positive events for Jewish religious statements than for Orthodox Christian statements \((t = 4.4, p < .001)\). It is difficult, however, to pinpoint the features of Russian Jewish and Orthodox Christian cultures responsible for this difference. Possibly the Jews, being a minority in late 19th-century Russia (Baron, 1976; Greenberg, 1956) might have faced even more precarious living conditions than the Orthodox Christian peasants and thus more readily turned to religion for salvation. But a myriad of other features of the two cultures also qualify as potential causes of this difference, these being related to the respective ways religious and secular lives were conducted. Apparently, if one wants to explore features of cultures that affect explanatory style, one must proceed more systematically and select cultures that differ only in the aspect that is expected to make a difference—all other things being equal. At first glance, there does not seem to be a good solution to this methodological demand, but the study to be described next actually comes pretty close.

DO CULTURAL FEATURES SHAPE EXPLANATORY STYLE? A COMPARISON OF EAST AND WEST BERLIN NEWSPAPER REPORTS

In 1984, at the time when this study (Oettingen & Seligman, 1990, Study 2) was conducted, East and West Berlin were still separated by the wall and thus resembled a cultural laboratory: Because East and West Berlin originated from one culture with the same political system before 1945, they were extremely similar on many different physical and subjective cultural features save the variable which split the city apart between 1945 and 1990—the political system. In addition, the ecological (e.g., climate) and biological factors (e.g., gene pool) are shared. This setting was thus ideal to explore the question of whether the political system and its consequences, in this case socialism in East Berlin versus social capitalism in West Berlin, does affect explanatory style. Variables such as dialect, upbringing, weather, and other factors that also might shape the development of explanatory style cannot readily qualify as alternative explanations.

We speculated that the differences in political systems of the East and the West part of the city would be so pervasive and prominent that they would achieve a difference in explanatory style on a cultural level. This would be quite a spectacular product of politics in light of the fact that on an individual level explanatory style is very change-resistant (Burns & Seligman, 1989). We further speculated that, because the East Berlin government needed to build a wall to prevent people from leaving their home city, there should be less optimism about
the future in East Berlin than in West Berlin. In a country that suggests that
good events recur more often and on a broader basis than bad events (i.e., an
optimistic or lop-sided pattern of explanatory style), people should not need to
be forced to stay in their home city.

In order to obtain a fair assessment of explanatory style in East and West
Berlin, we selected writings related to a domain that was highly valued in the
East (GDR) and the West (FRG), namely, sports. More specifically, we analyzed
newspaper reports of a representative sports event, the Sarajevo Winter Olympic
Games 1984. The GDR and the FRG participated in the Games as separate
nations. People of all social strata in both East and West Berlin took great interest
in the achievement and the social aspects of the Olympic Games. Also, the
Olympic Games were the only topic that was of concern for both countries and
extensively covered simultaneously by both the East and the West Berlin news-
papers. Finally, in the Olympic Games success and failure were determined by
the same rules for both the GDR and the FRG.

Explanatory style was content-analyzed by using a randomly chosen 50%
sample of all articles from three East Berlin and three West Berlin newspapers.
The events had to be clearly good or bad from the standpoint of the respective
nations, and events happening to competitive nations were excluded from the
analysis. All statements were then rated by a native German speaker. Again
reliability (as assessed by another native German speaker who rated 25% of the
statements) was high for each dimension; Cronbach’s alphas > .71 (for a detailed
description see Oettingen & Seligman, 1990, Study 2).

A strongly lop-sided (optimistic) pattern emerged for causal attributions in
the West Berlin reports; positive events were explained more by stable and global
factors than negative events (t = 7.9, p < .001 and t = 4.0, p < .001, respectively).
In contrast, an even-handed (pessimistic) attributional pattern was observed for
the causal statements in the East Berlin reports (ts < 1.2, ns). The internal
dimension, however, showed a lop-sided pattern for both East and West Berlin
causal statements (ts > 4.0, ps < .001), suggesting that reports on both sides of
the wall took more credit for their successes than they took blame for their
failures.

We were struck by the size of the differences in explanatory style between
East and West Berlin Olympic reports. Despite a performance that was clearly
in favor of East Berlin (the GDR won 24 medals, whereas the FRG won only
4), explanatory style in East Berlin sports reports were less optimistic than in
West Berlin reports. Because the two cities were one before 1945, we can
conclude that the differences in political system over the period of 40 years have
cauused the observed differences in explanatory style. Clearly, Olympic reports
in newspapers are only a very small aspect of culture, and thus might not represent
the cultural explanatory style. But newspaper reports are a cultural product very
much like folktales; they may be assumed to entail the values of the culture for
which they are written.
In East Berlin, newspapers were composed and censored in order to promote the party line. Therefore, it was all the more surprising that despite so much success in an area employed to promote the glory of the system (i.e., international sports competitions), the newspaper reports still reflected a rather pessimistic explanatory style. Apparently, explanatory style escaped the censorship and failed to fulfill the task of promoting the system; at least with respect to the stable and global dimensions. Only when it came to taking more credit for positive events than blame for negative events East Berlin Olympic reports managed to benefit their country.

So far, we have demonstrated that East and West Berlin differ in explanatory style as assessed across matched domains (i.e., competitive sports). Our approach is thus in line with any other cross-cultural research that attempts to document effects of cultural variables on psychological functioning. But we can go a step further. Many researchers have hypothesized a negative relation between optimistic explanatory style and depression. The hypothesis has found strong support at the individual level (for a meta-analysis see Sweeney et al., 1986). Because East and West Berlin show differences in terms of optimistic/pessimistic explanatory style, there is the unique opportunity to check whether the classic relationship between explanatory style and depression also holds at the cultural level. Therefore, we set out to assess depression in East and West Berlin hypothesizing that East Berlin would be characterized by higher levels of depression than West Berlin.

EXPLANATORY STYLE AND DEPRESSION AT A CULTURAL LEVEL: A COMPARISON OF EAST AND WEST BERLIN WORKMEN’S DEPRESSIVE AFFECT

Negative expectations about the future stemming from stable and global attributions primarily lead to affective symptoms of depression (Abramson et al., 1978; Abramson, Metalsky, & Alloy, 1989). In addition, a number of cross-cultural studies suggest that in European cultures a dominant symptom of depression is negative affect, whereas in Asian countries depression manifests itself predominantly via somatization (Chang, 1985; Marsella, 1978; Yamamoto, Yeh, Loya, Slawson, & Hurwicz, 1985). Accordingly, we decided to assess depression in East and West Berlin by focusing on negative affect (Oettingen & Seligman, 1990, Study 1).

In 1984–1985, we could not investigate the predominance of depression in East versus West Berlin by handing out depression inventories to randomly sampled individuals, or by consulting official statistics describing the number of patients hospitalized for depression, suicide attempts, or days off from work. Administering questionnaires was strictly forbidden and thus impossible for us. In addition, there was no access to reliable archival data. (Even in 1990 after the fall of the wall it was impossible for us to retrieve relevant data because proper recording of
depressive prevalence had been strongly discouraged. For instance, we learned that if the rate of a specific disorder was higher than what was expected by party guidelines, the doctors' diagnoses were attacked as too lenient.) Because of these barriers, we decided to unobtrusively observe behavioral signs consistent with depression in East and in West Berlin. Such unobtrusive procedures are rather time and energy consuming, but they have some advantages. For example, they are better suited than self-report measures in cross-cultural psychology, whenever the topic is socially sensitive or undesirable, taboo, or subject to strong normative pressures (Bochner, 1980). This is certainly true for depression.

With respect to kind of population and setting of observation, ideally, we would want to follow a representative sample of East and West Berliners during most of their daily pursuits. To make the observational method workable, however, we had to limit ourselves to certain sites that are accessible by researchers (e.g., bars, railway stations, parks). We chose bars, because people tend to interact with each other and to stay there for a relatively long period of time. Moreover, a researcher can unobtrusively observe people by taking the role of a patron.

We selected the bars in two typical industrial areas of East and West Berlin that were adjacent, but separated by the wall. Choosing traditional workmen areas guaranteed that the samples of people observed in East and in West Berlin were homogeneous. No foreigners or people of other socioeconomic status (SES) would care to visit these neighborhood bars. Our sample of bars included 31 localities (14 in West Berlin and 17 in East Berlin); workmen met there after work to talk and drink. Thus, the East and West Berlin bars were matched for social class (workmen), kind of work (industry), and gender of the patrons (male), and the observations were made within one single week during the same weather conditions. This matching for socioeconomic background, geographic area, and setting assures that the criteria for recording depression applied equally well for the East and the West Berlin people observed, and thus we avoided that differential manifestations of depression plague our study (see Marsella, 1980).

When observing the patrons of the selected bars, we recorded signs consistent with depressive affect, such as expressiveness versus withdrawal, cheerfulness versus sadness, and confidence versus anxiety in facial and bodily behavior. More specifically, we scored slumped posture as a sign of negative thought (Riskind, 1983) and illustrators (i.e., intentional hand movements illustrating the conversation) as indication of a lack of depressed feelings (Ekman & Friesen, 1974). Also, we scored a mouth with the corners bent down as an expression of sadness; the number of smiles and laughs were scored as indication for no sad feelings (Ekman & Friesen, 1975; Beck, 1967). Finally, we assessed self-adaptors (small adjustment movements, e.g., thumbs down) and protecting the body with one's arms as a sign of insecurity. Interrater reliability for all of these categories as assessed in an independent sample of patrons was high (all rs > .86).

The observations were conducted as follows: The observer entered the bar and sat down in a corner. After a while she chose the nearest person whom she
could watch without affecting his behavior. She then assessed posture and mouth
shape for 10 seconds and thereafter counted the number of illustrators, self-adap-
tors, smiles, and laughs. To assure independence of the observations, the observed
patrons in a given bar were chosen from different groups of people (further, the
sizes of the groups were similar in East and West Berlin bars).

Workmen in East Berlin showed more signs consistent with depression than
workmen in West Berlin. Fewer East Berliners than West Berliners had bent up
mouths, upright postures, and exposed bodies (all $\chi^2$s > 12.0, $ps < .001$). More-
over, fewer illustrators, smiles, and laughs were counted with patrons of the East
Berlin bars as compared to patrons of the West Berlin bars ($Fs \geq 9.5, p < .003$).
Only the difference in the amount of self-adaptors was not significant.

Taken together, the last two studies reported suggest that the negative relation
between an optimistic explanatory style and depression holds even at the cultural
level. We found a comparatively more pessimistic explanatory style and more
signs of depression on the Eastern side of the wall, and a less pessimistic
explanatory style and fewer signs of depression on the Western side of the wall,
when comparing matched domains and matched settings. We were able to search
for the classic relation between explanatory style and depression on a cultural
level, because in our first study we had observed that the socialist system and
its consequences had led to a less optimistic explanatory style in the Olympic
reports than the social capitalistic system.

POLITICAL SYSTEMS AND EXPLANATORY STYLE

The question remains how the political system differences in East and West
Berlin managed to produce differences in explanatory style (and depression).
Before we address this issue, we first want to consider how sure we can be that
the differences in the political system actually brought about a comparatively
more pessimistic explanatory style in East Berlin. After all, the differences in
explanatory style were only found in Olympic sport reports, although such reports
should reflect the respective cultural voices on a representative and pervasive
theme. Clearly, however, more conclusive research is desirable. Because we
found that the CAVE technique can successfully be employed on archival or
historical material, we can go back to the time of the wall and CAVE reports
on other international sports competitions. The only prerequisite is that the GDR
and FRG athletes participated and that there was extensive coverage by both
East and West Berlin newspapers. If one chooses competitions where the FRG
was more successful than the GDR, an even bigger difference in explanatory
style between the East and the West Berlin reports should emerge.

Investigations of domains other than sports might also be valuable. For
example, in economics the GDR was less successful than the FRG and thus
differences in explanatory style should be even more pronounced than those we
observed in the Olympic reports. CAving texts in other domains, however, may
pose methodological difficulties because, as noted earlier, there are few topics outside the realm of sports in which both the GDR and the FRG were equally involved and that have been widely covered by both East and West Berlin newspapers. Further, one could try to replicate our findings by comparing the People’s Republic of China with Hong Kong, because there also are two different political systems imposed on the same culture. Here the effects of communism and liberal capitalism on the development of explanatory style can be studied.

Finally, there is the possibility to test our hypotheses by looking at the effects of a changing political situation on explanatory style (and depression). Both the European countries and Hong Kong offer a unique opportunity to observe such effects of political systems’ rapid change on explanatory style. Interestingly, the change goes in the reverse direction for Eastern Europe and Hong Kong. In Europe a social capitalist system (e.g., FRG) is replacing a socialistic system (e.g., GDR), while in Asia a communist system (i.e., PRC) will replace the present capitalistic system of Hong Kong. We would hypothesize that while Eastern Europe will become more optimistic, Hong Kong will become more pessimistic after the respective changes.

Let us assume that the observed differences between explanatory style in East and West Berlin can reliably be attributed to differences in the political systems. The question to be answered then is how the socialistic system managed to suppress a lop-sided or optimistic pattern of explanatory style. After the fall of the wall more firsthand information on the system’s functioning became available. The descriptions of the people who experienced the working of the system at various positions overlap on the following points (Bierwisch, 1990): The system was pervasive, it tried to be present in nearly every conceivable aspect of human life, extending from personal and intimate life (e.g., marriage, faith, childrearing, hobbies) to the public life (e.g., choice of profession, schooling, party activities). It made itself felt throughout a person’s life-span by controlling people in the direction of the party line and its ideology (see also Klien, 1990; Maron, 1992; Waterkamp, 1990). The surveillance was multifaceted; governmental employees officially took part in it, and a still unknown number of people were hired (part time and sometimes by blackmail) to spy on other people for the secret service. All of this was highly effective: In a representative study in the fall of 1990, only 5% of the former GDR citizens said that they were sure nobody used to spy on them (Schöppner, 1991).

The system’s economy was less effective. The economy was also strictly controlled by governmental and party officials, but it turned out to be unable to satisfy people’s needs. Not only was it difficult or impossible to acquire goods common in West Berlin (e.g., fruits, cars, medicine), the available goods themselves were often of poor quality. The system also managed to ruin large parts of the country’s ecology. Finally, it tried to spoil the cultural and scientific life, by forcing researchers and artists either into their ideological closed mindedness or into exile.
It appears, therefore, that positive outcomes were hard to come by in the former GDR. Living conditions were rather grim and if there were successes (e.g., obtaining bricks for one’s unfinished house or acquiring fresh fruits), they had to be achieved by the people’s own efforts (e.g., successful bargaining or persistent queueing). This is reflected in our observation that positive outcomes in Olympic reports are attributed more to internal factors than negative outcomes. Still, individual successes in daily life should have been rather exceptional (though the criterion for success might have differed between East and West Berlin; see M. Baltes & Carstensen, 1994; Oettingen, 1993). As a consequence, people experienced positive events in a few domains only (e.g., had success with organizing bricks but failed to locate concrete), and, in addition, positive outcomes should not have recurred very reliably (e.g., you did not know where and when fresh fruit was available). Such conditions favor specific and instable attributions for successful outcomes, thus promoting an even-handed explanatory style.

Finally, the socialist ideology prided itself on having promoted the equality of people. The GDR might have pursued this goal by curtailing individual successes. Even exceptional performances (e.g., in science or sports) could be turned into something nonreplicable and unreliable by the totalitarian system of the GDR (e.g., by restricting contacts to colleagues or expelling athletes from the national team). For example, even outstanding scientists in the former GDR could not rely on keeping up the contacts to the international community. The system’s officials controlled who could be contacted—when and where (Bierwisch, 1990).

Another doctrine of socialist ideology is its devaluation of religion. As demonstrated in Studies 1 and 2, a lop-sided optimistic explanatory style may flourish in the religious domain, even though the secular domain is characterized by an even-handed explanatory style. This implies that in the socialist system of the GDR people were discouraged from turning to the religious domain as a source of optimism. The fact that the resistance against the system eventually leading to the fall of the wall originated from the people with enduring religious commitments, supports the argument.

EXPLANATORY STYLE AND DEPRESSION IN THE CONTEXT OF CULTURE

How sure can we be that the negative relation between optimism and depression is present on a cultural level? We chose quite different domains to assess explanatory style and behavioral symptoms of depression (i.e., Olympic newspaper reports and workmen at their leisure in bars) and found the predicted negative relationship. Still, there should be further ways to test our hypotheses.

The first set of evidence might come from signs related to depression in other East Berlin domains, such as the workmen’s homes or work places, or else from
other populations such as government officials, teachers, or school children (see Frese, Erbe-Heinbokel, Grefe, Rybowiak, & Weike, 1994; Oettingen & Little, 1993; Oettingen, Little, Lindenberger, & Baltes, 1994; Oettingen, in press). Because behavioral observations cannot go back in time and accurate questionnaire data or statistics do not seem to be available from the times before the fall of the wall, at first sight the East Berlin versus West Berlin comparison seems no longer fruitful for this purpose. However, this multimethod approach would not resolve the more pressing issue of the causal relationship between explanatory style and depression on a cultural level. Did explanatory style in the East and West Berlin reports affect the workmen’s signs of depression or did the signs of depression affect the explanatory style in the reports? Or did the difference in political systems produce both, the differences in explanatory style and the differences in behavior?

An answer to the causal relation between explanatory style and depression on a cultural level might be found by comparing numerous cultures or subcultures, which are high or low on a factor influencing explanatory style. Here, we would be able to use various measures of depression such as official statistics, more extensive observation methods (e.g., via video films) as well as clinically and cross-culturally validated self-report measures. Similar to McClelland’s (1961) work on the relationship between childrearing practices and achievement motivation one could now test the reformulations of the learned helplessness theory of depression (Abramson, Seligman, & Teasdale, 1978; Abramson, Metalsky, & Alloy, 1989) on a broader cultural level. For example, according to the theory, one would predict that a culture teaching its children a lop-sided explanatory style (e.g., by CAving children’s readers, songs, stories) should be characterized by less prevalence in depression than a culture teaching its children an even-handed explanatory style.

Such a cross-cultural study employing many different countries would also clarify whether the differences in economic wealth rather than in explanatory style are responsible for the comparatively higher levels of depressive signs in East Berlin. For example, one could compare the GDR to countries that have a similar economic stature, but do not share the socialistic system. In addition, comparisons between various socialistic countries that differ in terms of economic prosperity would be revealing.

But one can also explore causal questions without taking a multicultural approach; this leads us back to the East Berlin versus West Berlin comparison. Only recently (in the fall of 1991) we returned to our bars (Oettingen, 1994). About 50% of them still existed unchanged: they were the same neighborhood bars with the same type of clientele. The other 50% were closed or had been reopened after renovation. We did not include these in our observational study, because the clientele had changed, too. We also returned to our West Berlin bars, where about 30% had disappeared or were redecorated and therefore were excluded. Two raters observed signs of depression in the East and the West Berlin
patrons using the same category system as we did in 1984. Interrater reliability was as high as before. This puts us in a position to make the same comparison between East and West Berlin workmen as was done in 1984.

Contrary to many West German newspaper reports describing lots of anxiety, insecurity, and hopelessness about the future among the former East Germans (as a response to the change in East Germany's political system), we observed similar frequencies of behavioral signs of depression in East Berlin patrons as compared to West Berlin patrons (except for illustrators which were still more frequent in the East Berlin workmen). The amount of depressive signs on the Western side did not change since 1984; rather, the East Berlin patrons showed fewer signs of depression. As compared to 1984, more East Berlin patrons showed bent up mouths, upright postures, and exposed bodies; moreover, they smiled and laughed more often (all ps < .001) and underlined their conversation more often with illustrators (p < .05) in 1991 than in 1984. This finding is also revealing with respect to the influence of the poverty/wealth factor on depression, because in 1990, the GDR's economy was going bankrupt.

The decline in depressive signs of East Berlin patrons over recent times points to a unique opportunity of investigating the causal relationship between explanatory style and depression in a straightforward manner. If the notion that pessimistic explanatory style causes depression holds also at the cultural level, we should find a change from even-handedness to lop-sidedness in East Berlin's written cultural products in the times (months or maybe few years) prior to the fall of the wall in the fall of 1989. But even if we obtain such a finding, there still is the possibility that depression faded before explanatory style changed from even-handedness to lop-sidedness. Also, both explanatory style and depression might have danced to the same music (i.e., the change of the political system), or it could even be that the political system changes were a function of explanatory style and depression.

Can such questions be answered through cross-cultural research? In the present historical times we see a possibility. Because all of the Eastern block countries are now in the process of changing their political systems, we can extend our research and keep assessing explanatory style and depression over the upcoming years in various East European countries. Some of these countries will change their systems more effectively and quickly than others. Monitoring the three variables of interest over time—explanatory style, signs of depression, and political system change—would finally provide the data that could answer all of the causal questions raised in this chapter.
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