

CHAPTER 11

CULTURE AND SELF-EFFICACY IN ADOLESCENTS

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The goals set by individuals at different times in their lives reflect the developmental tasks of those particular periods in the lifespan (Havighurst, 1972). Robert Havighurst proposed that a combination of cultural and biological demands as well as individual contexts create developmental tasks and that the way in which an individual meets these demands influences that individual's well-being and success with future tasks. A key task for adolescents is to form an identity that they will carry over into adulthood (Aquino & Reed, 2002; Arnett, 2002; Harter, Waters, Whitesell, & Kastelic, 1998). According to Havighurst (1972), this overarching responsibility includes mastering educational and vocational demands, establishing mature relationships with peers, and becoming a socially responsible member of society. At this crossroad, adolescence may be thought of as a time during which the role of the individual changes from being the recipient of one's culture to becoming an agent carrying that culture.

The competencies adolescents develop when solving their developmental tasks are rooted in the demands of the respective culture. Thus the types of competencies developed by adolescents may differ across cultures. However, adolescents of all cultures eventually develop competen-

Self-Efficacy Beliefs of Adolescents, 245–265
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Oettingen, G., & Zosuls, K. M. (2006). Culture and self-efficacy in adolescents. In F. Pajares & T. Urdan. (Eds.), *Self-efficacy beliefs of adolescents*. (p. 245-265). Greenwich, CT: Information Age Publishing.

cies in mastering the transition from being shaped by the culture to yielding to the demands of the prevailing culture. They increasingly are responsible for acting in line with what is expected from them culturally and what is necessary to optimize their physical and mental well-being (Grigorenko & O'Keefe, 2004).

In this chapter, we investigate the role that self-efficacy beliefs play in adolescents successfully solving this transition. We first provide an overview of how adolescents' efficacy beliefs differ between Asian and Western cultures. We then argue that cultures, by affecting their institutions (e.g., family, school) as well as by affecting the selection and weighting of the sources of self-efficacy appraisal, shape efficacy beliefs. We conclude with the contention that, in modern cultures where norms no longer play a central role in guiding action, efficacy beliefs become pivotal for adolescents' successful transition into adulthood.

ADOLESCENTS' SELF-EFFICACY IN ASIAN VERSUS WESTERN CULTURES

Expectations and Self-Efficacy

Following the neo-behaviorist tradition of Edward Chace Tolman (1932), the concept of *expectation* has been the most powerful cognitive variable predicting motivation and performance. Expectation—subjective judgments about how likely it will be that certain future events will occur or not occur—are based on past experiences and thus reflect a person's performance history (Bandura, 1977; Mischel, 1973). Expectancy judgments may be *self-efficacy beliefs*, defined as individuals' judgments of capability to execute a certain behavior required for a desired outcome, or *outcome expectations*, defined as individuals' belief that a certain behavior will actually result in a desired outcome (Bandura, 1997). Expectancy judgments may also be conceptualized as general expectations, that is, expectations as to whether a desired outcome will or will not occur (Heckhausen, 1991; Oettingen, 1995). No matter how expectancy judgments are conceived, a strong body of literature shows that optimistic, positive expectations of success foster effort and persistence and, ultimately, successful performance. Findings on the beneficial effects of optimistic expectations emerge in various life domains, such as in school, work, and sports, in the interpersonal domain, and in the domain of physical and mental health (see Bandura, 1997; Scheier & Carver, 1992; Seligman, 1991; Taylor & Brown, 1988).

Among the various forms of expectancy judgments, efficacy beliefs have emerged as the most important predictor of motivation and perfor-

mance (Schunk & Pajares, 2002). Research has supported a consistent link between strong efficacy beliefs and achievement (Multon, Brown, & Lent, 1991; Robbins et al., 2004). Children and adolescents who have strong efficacy beliefs exert more effort and exhibit greater persistence. They also show a higher level of engagement in learning and employ more effective problem solving and learning strategies. Finally, they are plagued by fewer negative emotional reactions in the face of obstacles and are more likely to take on challenging activities and goals (Pajares & Miller, 1994, 1995; Pintrich, 2003; Zimmerman, 2000; see also Bandura, 1997). All of these attributes foster motivation and successful performance, and thereby successful mastery of impending developmental tasks.

Developmental Task: School Achievement

Despite these findings, a growing body of research reveals cultural differences in mean levels of self-efficacy and in the relationship between self-efficacy and achievement. Culturally-based differences in academic self-efficacy may have their origins in the respective cultural values stemming from historical, sociopolitical, and economic influences. These values are particularly salient in the developmental tasks arising in school. Adolescents spend more time in school than in other places outside the home, and most developmental tasks with which adolescents are confronted in school need to be solved in school. Consequently, schools have a considerable impact on adolescent development (Eccles, 2004; Eccles & Wigfield, 2002). Characteristics at the classroom, school, district, and community level influence student performance (see Williams, 1998) and thus academic self-efficacy. Thereby, adolescents' own interpretations of their experiences in school are critical mediators between school characteristics and students' academic-related thoughts, feelings, and behaviors (Eccles, 2004).

In some East Asian cultures, school features such as high achievement standards, an emphasis on hard work and effort (versus ability), and performance feedback focusing on weaknesses have been considered to influence the efficacy beliefs of children and adolescents. Salili, Chiu, and Lai (2001) observed that a sample of Hong Kong high school students scored lower on self-efficacy than did immigrant Chinese Canadian and European Canadian high school students. Comparing the two groups of Canadian students, the authors reported that although the immigrant Chinese Canadian students spent more time studying and attained higher grades than did their European Canadian counterparts, the Chinese Canadian students did not differ significantly from the European Canadian students

in self-efficacy. The authors suggested that the difference in level of self-efficacy between Hong Kong and Canadian students of both ethnicities was likely due to differences in criteria for success in the two contexts. Hong Kong high schools set extremely high standards of achievement and are geared toward the brightest and highest achievers. Students in Hong Kong are typically given large amounts of homework and are seldom praised for good work, but they are frequently admonished for poor performance. Thus, the academic context in Hong Kong appears to give the average student fewer experiences that would be conducive to the development or maintenance of strong efficacy beliefs.

Self-efficacy may not be as strong in cultures that place little emphasis on self-reliance and agency (Skinner, Schindler, & Tschechne, 1990). However, Karasawa, Little, Miyashita, Mashima, and Azuma (1997) found that Japanese children exhibited action-control beliefs about school performance in general that are similar to those of children from Western cultures. But Japanese students had relatively independent conceptions of personal agency related to *effort* and *ability* compared to American, Russian, and German students. Compared to children in these cultures, Japanese children had lower agency beliefs related to ability and higher agency beliefs related to effort. These results are supported by other researchers who have found a consistent tendency among Asian students to attribute successes and failures to effort rather than to ability, in contrast to students from Western countries who tend to make more ability-based attributions (Holloway, 1988; Yan & Gaier, 1994). The authors concluded that these differences in the Japanese children may stem from a number of sources. Japanese students are typically assigned materials and given feedback that emphasizes effort rather than ability. Furthermore, performance feedback is typically highly private and therefore may impede social-comparison processes that might otherwise promote assessment of ability (Karasawa et al., 1997).

Other measures of efficacy-related beliefs have also shown lower scores among children and adolescents from Asian cultures. Despite outperforming non-Asian American students on a verbal task, Asian American high school students exhibit weaker efficacy beliefs and higher levels of fear of failure than do non-Asian students (Eaton & Dembo, 1997). Apparently, values derived from high parental expectations play a greater role in the motivation and achievement behavior of Asian American students than of non-Asian students. Familial aspirations have also been found related to differences in English achievement between first-generation and third-generation high school students (Urdu, 2004). When controlling for perceived family aspirations, the better performance of first-generation students (from Asian and Latin American cultures) compared to third-generation students disappeared. This implies that the stronger

achievement of the first-generation students was partly due to the perceived demands of their families, which were less acculturated than were their third-generation counterparts.

Developmental Task: Entering Professional Life

Efficacy beliefs steer occupational considerations and related life choices (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). Furthermore, cultural differences in self-efficacy regarding career decision-making should reflect the way in which adolescents and young adults are expected to solve this developmental tasks. In a study comparing Taiwanese and American students, Mau (2000) observed that Taiwanese students scored significantly lower on a measure of career decision-making self-efficacy (assessing beliefs that one can successfully set vocational goals, seek occupation-related information, plan, solve problems, overcome obstacles, and appraise one's performance). This difference in self-efficacy may reflect differences in the ways in which adolescents and young adults make their career decisions in Asian versus Western cultures. American students are actively encouraged to make their own career decisions, and thus they need to develop competence in establishing a career path. In contrast, in many Asian cultures, students conform to familial and societal norms and often follow a career track that is more clearly laid out for them. Thus career decision-making self-efficacy may be far less relevant in Taiwan and in other Asian cultures compared to many Western cultures.

Developmental Task: Emotional Independence

Although we have focused on cultural differences in level and predictive value of self-efficacy related to developmental tasks in the achievement and vocational domains, culture should influence adolescents' self-efficacy in a number of other domains relevant to their development, including physical and mental health. Indeed, research suggests that self-efficacy may be less important for mental health in some Asian cultures. Stewart et al. (2004) found that generalized self-efficacy was a weaker predictor of depressive symptoms in Hong Kong adolescents than in American adolescents. Self-efficacy was also lower among Hong Kong adolescents, supporting the findings reported earlier. Stewart et al. posited that in cultures that place strong value on obedience and respect for authority, young people may be less attendant to their efficacy beliefs and other expectancy judgments. The researchers also found higher levels of

depressive symptoms among the Asian adolescents and suggested that these same cultural norms may decrease vulnerability to acting out but increase vulnerability to depressed mood.

SUMMARY

The research reviewed above suggests that adolescents raised in Asian cultures hold weaker efficacy beliefs than do adolescents raised in Western cultures. These findings pertain to self-efficacy for mastering developmental tasks in three domains: achievement, vocation, and emotional independence. We called particular attention to the academic domain, in which Asian adolescents reported lower self-efficacy than did adolescents in Western cultures despite having more successful mastery of respective developmental tasks. The observed differences in self-efficacy may originate in the values of the cultures themselves. Specifically, cultural values may influence the formation of self-efficacy through its influence on the proximal context and on the psychological processes of efficacy appraisal. It is this influence we now address.

SELF-EFFICACY AND CULTURAL VALUES

In this section, we first specify three critical dimensions of cultural values and then describe how they might exert their influence on the school environment and on selecting and weighting the sources that are responsible for efficacy appraisal. We then present studies with children and adolescents in East and West Germany before and after unification that support our reasoning.

Three Dimensions of Cultural Values

Material factors in the environment—in particular, value systems—exert influence on adolescents' development within different cultures (Greenfield, Keller, Fuligni, & Maynard, 2003). Attempts to empirically investigate cultural differences have identified a number of dimensions of cultural values (Hofstede, 1997; Triandis, 1989). Geert Hofstede analyzed cultural value systems in matched samples of employees in the same multinational business in more than forty countries and identified various dimensions of cultural differences, among them individualism/collectivism, power distance, and uncertainty avoidance. These dimensions have provided a useful framework for examining how cultural values are

expressed in major societal systems and institutions and thereby affect efficacy beliefs.

The *individualism/collectivism* dimension has received the most attention in cross-cultural research (e.g. Triandis, 1989; see also the dimension of independence versus interdependence, Markus & Kitayama, 1991). Collectivist cultures promote the view that people belong to in-groups that demand lasting loyalty and from which members cannot easily free themselves. In return, people receive protection from the in-group. In contrast, individualist cultures promote the view that people look primarily after their own welfare and their immediate family's interests. They value an autonomous definition of the self and individual goals more than group goals (Triandis, McCusker, & Hui, 1990).

In cultures with large disparity in power, or *power distance*, people are expected to accept inequality in power. This is especially true for the less powerful members of the culture. People in cultures with small power distance value a more equal distribution of power.

People in cultures of strong *uncertainty avoidance* are easily distressed by new, unstructured, unclear, or unpredictable situations. They try to avoid these situations by maintaining strict codes of conduct and a belief in absolute truths. Members of such cultures tend to be compulsive, security seeking, intolerant, aggressive, and emotional. In contrast, people in cultures of weak uncertainty avoidance value being relaxed, tolerant, risk accepting, and contemplative.

How Do Cultural Values Affect Self-Efficacy Appraisal?

We assume that culture reveals its effect on the efficacy beliefs of adolescents by affecting the systems and institutions in which adolescents are embedded: the family, the school, and the community. Hofstede (1986) posited that because families and schools are fundamental institutions of virtually all societies, they both reflect the social role patterns of a given culture and are important means by which cultures are transmitted from one generation to the next. These contexts also provide sources of efficacy appraisal. Understanding how cultural values affect these major societal systems may clarify the processes that make adolescents' self-efficacy appraisals vary across cultures. Thus, we now examine how the three dimensions of cultural values described above may affect the institutions of family and school.

Cultural Values Affect Educational Context

Hofstede (1986, 1997; see also Triandis, 1989; Triandis et al., 1990) contended that families in cultures high on collectivism teach their ado-

lescents to love and respect the needs of their in-group. In school, adolescents pursue performance goals demonstrating required competencies more than learning goals of expanding one's competencies (Ames, 1992; Dweck & Leggett, 1988; Nicholls, 1984). They create a social reality that makes their performance outcomes noticeable to their collective. In cultures high on individualism, adolescents are expected to learn how to learn, and performance outcomes are seen as instrumental to realizing one's individual potential rather than meeting the approval of one's in-group.

Hofstede's (1986, 1997) ideas on how power distance or power disparity affects family and school life focus on adolescents' relation to authority. In cultures with a large power differential, adolescents are taught to obey their parents and to treat them as superiors. Education is teacher-centered (Stipek, 1988), and the curriculum is supposed to reflect the wisdom of the educators, who are not to be contradicted or criticized. In contrast, in cultures with a small power differential, adolescents are encouraged to express their views freely in the family and to treat parents as equals. Education in school is child-centered (Stipek, 1988, 1991). Teachers expect students to initiate communication, speak up and criticize, and to find their own direction and pace of learning.

Hofstede (1986, 1997) speculates that in families and schools of cultures adhering to values of strong uncertainty avoidance, foreign influences are experienced as a source of high threat and stress, and emotional reactions and self-righteousness are prevalent. Teachers are expected to have the right answers and to speak in a formal manner (Stroebe, 1976). Intellectual disagreement is interpreted as personal offense. Adolescents adapt to highly structured, unidimensional teaching strategies (Rosenholtz & Rosenholtz, 1981; Rosenholtz & Simpson, 1984) where materials are predefined and explicit. Rules are readily embraced. In contrast, adolescents in cultures of weak uncertainty avoidance are curious about new and foreign experiences and respond reflectively rather than emotionally to ambiguities (see also Sorrentino, Raynor, Zubek, & Short, 1990). Teachers are not expected to be all-knowing, and they take intellectual disagreements as challenges. Adolescents deal effectively with multidimensional teaching strategies that entail only partially-structured learning materials, general instructions, and flexible, individualized pacing.

Cultural Values Affect Selecting and Weighting of Efficacy Sources

To understand how cultural values may influence self-efficacy beliefs, it is necessary to explore the processes of efficacy appraisal. Bandura (1997)

has specified four information sources of efficacy information, the first of which is *mastery experience*. Success fosters a strong sense of efficacy, particularly when achieved in the face of adversity. Failures result in a weak sense of efficacy, especially when experienced early and frequently and cannot be attributed to lack of effort or unfavorable circumstances. The second source of efficacy appraisal is the *vicarious experience* by which attainments achieved by similar others are modeled. Successes attained by similar others raise the observer's sense of efficacy, but failures diminish it. The achievements of similar others may also influence efficacy appraisal by providing a standard of comparison against which one's actions can be judged. Achievements such as school grades are judged relatively, and one's own efficacy is inferred by comparing one's attainments to those of one's peers. Performance evaluations by others, or *social persuasions*, can also influence one's sense of efficacy. Active attempts at persuasion are particularly effective when communicators are endowed with competence and authority. A fourth information source results from the *physiological reactions* that one experiences when confronted with difficult performance situations. For example, feeling one's heart beating during an important test would indicate a low level of self-efficacy, whereas "staying cool" would be a sign of high self-efficacy.

People may not always have access to all of the sources of efficacy appraisal. The opportunity for vicarious experiences, for example, may be limited because there are few competent models available. Moreover, individuals may sample selectively and weight and integrate the information available in their preferred manner. The persuasive efforts of others may be readily embraced if the feedback is positive but may be defensively disregarded if negative. These considerations imply that forming beliefs of personal efficacy is a complex appraisal process that entails selecting, weighting, and integrating information from multiple sources. It is in this appraisal process that culture may play its influential role. Thus, cultural values may affect not only the type of information provided by the various sources, but also which information is selected and how it is weighted and integrated in efficacy judgments.

Selecting, Weighting, and Integrating Cultural Information

In collectivist cultures, adolescents should be sensitive to feedback from the in-group so that they may adjust their behavior to meet the norms of the group (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). Evaluation by in-group members should be the source of efficacy information that is predominantly selected and weighted, with modeling by other in-group members also being influential. To the contrary, adolescents in

individualist cultures should focus their self-appraisals of efficacy on information concerning their personal performance attainments (e.g., improvements or declines; see Rosenholtz & Rosenholtz, 1981). Further, whereas adolescents in individualist cultures may be more in tune with their private emotional states, adolescents socialized in collectivist cultures should direct their emotional responses more to the preference of their in-group (Markus & Kitayama, 1991).

Under conditions of a large power differential, evaluations of authorities such as parents and teachers should be especially selected and weighted in efficacy appraisal. In addition, parents and teachers should be readily taken as models and as convincing persuaders. Finally, unquestioned authority of teachers may heighten negative emotional arousal, thus leading emotional states to become prevalent sources of information for self-efficacy judgments. In contrast, in cultures of low power differential, adolescents become creators of their own development, sampling information comparatively free of authorities' influences.

In cultures of strong uncertainty avoidance, teachers give regular and frequent feedback on the same assignments. In this monolithic structure, students know where they stand in the social comparative judgment of their own efficacy. Moreover, the verbal communications of important persuaders such as teachers, parents, and peers are phrased unambiguously and reflect a high degree of social consensus. Adolescents of families and schools in less uncertainty avoidance cultures face more ambiguity when it comes to appraising their efficacy. Social ranking by performance attainment is less possible because of individualized instruction. Hence, inferences from performance attainments as well as from vicarious experiences provide leeway for personal interpretation. This permits self-enhancing attributions and judgments of capability linked to relatively stronger efficacy beliefs (Bandura, 1986; Taylor, 1989).

Summary

To explore why the self-efficacy beliefs of adolescents from Asian cultures are weaker than those of adolescents from Western cultures, we have considered how cultural values as defined by Hofstede (1997) may affect both the features of the proximal cultural environment (i.e., its institutions such as the family and the school) and the psychological processes of efficacy appraisal (i.e., performance experience, vicarious performance, persuasion, and physiological processes). We hypothesize that valuing collectivism, large power distance, and high uncertainty avoidance will lead to comparatively weak efficacy beliefs because self-efficacy is appraised by selecting and weighting information provided by the in-group, by a

respected authority, and by unambiguous norms and rules. To the contrary, we hypothesize that valuing individualism, small power distance, and low uncertainty avoidance will lead to comparatively strong efficacy beliefs, because self-efficacy is appraised by selecting and weighting information provided by various past accomplishments, by messages from a variety of individuals without overwhelming authority, and by ambiguous contexts allowing for multiple interpretations. We will discuss findings supporting these hypotheses as well as the contention that both the educational environment and the selecting and weighting of the different information sources are at the mercy of the relation between cultural values and efficacy beliefs. These findings are derived from an experiment of culture in East and West Berlin.

AN EXPERIMENT OF CULTURE: EAST AND WEST BERLIN

East and West Berlin before unification were ideal settings in which to investigate the relation between sociocultural values and efficacy beliefs. Over centuries, East and West Berlin shared a cultural and historical background as well as one political system. But between 1945 and 1990, East Berliners and West Berliners lived under the different political systems of communism and social-capitalism. Possible differences between East and West Berlin can therefore be readily interpreted as stemming from these political system differences and their economic, social-structural, and educational consequences. The effects of political system differences on the educational context are of particular relevance for academic self-efficacy.

East and West Berlin Schools

East and West Berlin schools before unification differed in cultural values and educational contexts. Values in East Berlin were more directed toward collectivism, large power distance, and uncertainty avoidance. In East Berlin, the educational program, guided by official party doctrine, aimed to develop harmonious socialistic personalities by teaching all students to evaluate themselves “adequately,” that is, consistent with the authorities’ evaluations of their competence and personal attributes (Franz, 1987; Waterkamp, 1990). In school, performance feedback was given to each child by the teacher and by the “class collective” from first grade. Further, performance evaluations were publicized and children were asked to critically evaluate themselves in front of the entire class. A strictly uni-dimensional style of teaching (Rosenholtz & Rosenholtz, 1981)

was practiced in which children in a given grade level were confronted with the exact same materials, tasks, and tests and were bound to the same pacing, irrespective of their potential or interests. This structure facilitated differential evaluation by the teachers and by the class collective, making a child's performance rank highly salient. Finally, the school and leisure domains overlapped considerably (i.e., children from one classroom met again in the same constellation in the afternoon), making it even more difficult to change their social realities. Because it favored public performance evaluations and standardized teaching strategies, the East Berlin school context should have fostered children's precise estimation of their potential and discouraged self-serving, overly positive self-evaluations.

In contrast, West Berlin schools did not focus on self-evaluations and favored more vague and private performance evaluations starting as early as Grade 2. In addition, in West Berlin, more individualized and multidimensional teaching styles prevailed. Finally, school and leisure time were less likely to overlap in West Berlin. Thus, children were given more interpretative leeway in forming their subjective senses of efficacy.

East and West Berlin: A Cross-Sectional Study

In June 1990, before unification of the two Germanys, we assessed the efficacy beliefs and recorded the mathematics and verbal grades of more than 300 East Berlin children from two schools, Grades 2 to 6 (Oettingen, Little, Lindenberger, & Baltes, 1994). We compared the data to a matched study in West Berlin conducted in 1991 involving over 500 children. As measured by the Control, Agency, Means-ends Instrument (CAMI; Skinner, Chapman, & Baltes, 1988), East Berlin children had a lower sense of academic self-efficacy than did West Berlin children. That is, they had less confidence in their ability to exert effort in school, they considered themselves to be less smart, and they thought they would have less luck. The differences began in the third grade and were also evident in Grades 4 through 6. At the same time, East Berlin children conformed more readily to their teachers' performance evaluations than did West Berlin children, as indicated by stronger correlations between their self-efficacy and the course grades they received from their teachers (Oettingen et al., 1994).

In 1991, one year after the first assessment, but still before the East Berlin school system adopted West Berlin's educational policies, we returned to the East Berlin schools in an effort to replicate the findings (Oettingen & Little, 1993). At this point, we also administered Raven's Progressive Matrices test. We hypothesized that the observed differences between East and West Berlin children's self-efficacy and conformity

would be due to the children with lower Raven scores because once they enter school, they are more frequently confronted with negative performance feedback that contradicts their naïve optimism. Therefore, the children with lower scores on the mental measure may have needed to revise their initial naïve performance optimism to a greater extent than would the children who obtained higher scores. Moreover, because of the initial negative performance feedback, lower scoring children should more readily accept future failure feedback than higher scoring children. Most importantly, this effect should be particularly pronounced in school systems aiming at “adequate” self-evaluation, that is, more in East Berlin than in West Berlin. Our hypotheses were confirmed. We observed that the differences in mean levels of self-efficacy and in conformity of efficacy appraisal were particularly due to the children with lower Raven scores (Oettingen & Little, 1993).

Implications of This Study

As we have shown, a growing body of literature suggests that a strong sense of efficacy promotes cognitive and self-regulatory learning skills. It also reduces fear of failure, raises aspirations, and fosters effortful action and successful behavior. A weak sense of efficacy achieves the contrary. Accordingly, East Berlin children who had lower self-efficacy than West Berlin children should have suffered comparatively more from the cognitive, affective, and behavioral disadvantages linked to this weak sense of efficacy.

Moreover, findings on the correlation between self-efficacy and teacher evaluations suggested that the East Berlin children with lower Raven scores accepted the public and unambiguous feedback of their teachers more readily than did their West Berlin counterparts. Because the feedback was highly veridical in East Berlin, it should have contradicted the naïve optimism of the children with low Raven scores, thus leading to a weak sense of efficacy. Consequently, the East Berlin children with low scores on this measure should have particularly suffered from the problematic consequences of a low self-efficacy. For example, they may have suffered from fear of failure and may have exerted little effort and persistence. This, in turn, should have reduced the successful mastery of impending developmental tasks. In summary, our findings suggest that the East Berlin educational background provided a disadvantage for the children with low Raven scores. Regrettably, these are precisely the children who would have benefited most from the motivational advantages of a strong sense of efficacy.

East Berlin in Transition: A Longitudinal Study

Our hypothesis that the political system and the respective educational goals and practices influenced the development of children's sense of efficacy would be further supported, if, after East Berlin adopted the West Berlin school system in the fall of 1991, the East Berlin data pattern began to resemble that of the West Berlin sample. Indeed, in the spring of 1992, after East Berlin students had been taught according to the West Berlin educational model for one year, the East Berlin children's level of agreement between their perceived self-efficacy and their teachers' performance evaluations decreased to that of West Berlin students (Little, Lopez, Oettingen, & Baltes, 2001). It seems, then, that surrendering the educational goal of receiving "adequate" self-evaluation lessened East Berlin students' agreement with the teachers' performance judgments. It may also be that, after the fall of the wall, a diminished respect for the authorities' evaluations lessened students' readiness to give in to the teachers' evaluations. In contrast, the level of self-efficacy did not change. After one year of being taught under the West Berlin educational model, East Berlin children still believed less in their capability to exert effort, to be smart, and to have luck in school than did their West Berlin counterparts.

Unlike conformity, the level of self-efficacy does not only depend on the teachers' performance evaluations. The other three information sources of efficacy appraisal may explain why the level of self-efficacy did not increase to the West Berlin level at the same time. However, we expect that, in time, the level of East Berlin students' beliefs will eventually parallel those in West Berlin.

Supportive Evidence in Adolescents

How well do the differences in the political systems and their consequences serve as an explanation for the observed differences in East and West Berlin children's sense of efficacy and in the students' conformity with the teacher evaluations? We found similar patterns of results from studies conducted by other researchers, with different samples, in different places, and with different instruments.

Hannover (1995) found that adolescents with low academic performance from various schools in East Germany were less convinced of their academic potential than were adolescents in a West German comparison group, but there was no difference among students with strong academic performance. Also, East German youngsters conformed more readily to their teachers' evaluations than did their West German peers. Ettrich,

Krause, Hofer, and Wild (1996) demonstrated the lessening of East Berlin adolescents' conformity level to the West Berlin level after the introduction of the West Berlin school system. East German and West German adolescents who were tested in 1993 (i.e., after the East Germans had been taught according to the West German model for two years) no longer showed differences in conformity. However, as we observed in our younger participants, the East German adolescents continued to evince a lower sense of efficacy than did West German adolescents.

Supporting the notion that different cultural values were endorsed by former East German and West German adolescents, Reitzle and Silbereisen (2000) found that, in 1991 (during the immediate aftermath of the unification of Germany), East German adolescents endorsed a higher degree of collectivist values such as politeness, family safety, respect for tradition and social order than did West German adolescents, and they were less likely to endorse individualistic values such as social power (control or dominance over others) and freedom. By 1996, these differences were attenuated. More in line with the values endorsed by West German adolescents, East German adolescents showed less of an emphasis on collectivist values.

Summary

In line with the East Berlin political system reinforcing comparatively stronger values of collectivism, power distance, and uncertainty avoidance, East Berlin's educational goals were geared towards adequate self-evaluation, and teaching strategies were strictly unidimensional. The differences in cultural values, as well as in the proximal contexts, should have facilitated self-efficacy appraisal based on unambiguous and public performance evaluations by teachers and by peers. Our findings that East Berlin students had both a weaker sense of efficacy and higher conformity than did West Berlin students are consistent with these postulations.

These findings also shed light on the question of why a comparatively lower sense of efficacy is often observed in Asian adolescents compared to Western adolescents. Asian cultures have been characterized by stronger values of collectivism and norm-orientation (Hofstede, 1997; Markus & Kitayama, 1998; Triandis, 1989; and see Kim & Park, this volume) that are expressed in the family and in school contexts. These values are readily embraced by these adolescents. However, the superb mastery of impending developmental tasks in the Asian adolescents despite their relatively weak efficacy beliefs remains a puzzle. We try to shed light on this puzzle by speculating about the action-guiding function of norms versus efficacy beliefs in different cultural contexts.

ACTION-GUIDING FUNCTION OF SELF-EFFICACY ACROSS CULTURES

One could argue that in modern cultures that value individualism, small power distance, and weak uncertainty avoidance, as opposed to collectivism, large power distance, and strong uncertainty avoidance valued in traditional cultures, self-efficacy is important for guiding action. This is because, in more modern cultures, norm-oriented rituals that traditionally have provided assurance and boundaries for acting (by determining who interacts with whom, when, where, and how) are fading (see Boesch, 1982). What, then, provides the basis for action in modern societies? We suggest that, in modern societies, efficacy beliefs are taking over the function of norms and rituals (Oettingen, 1997). Specifically, by reflecting performance histories, self-efficacy provides the necessary assurance to act and shows the boundaries of acting.

These contentions are in line with the findings provided in the first part of our chapter. Although adolescents in Asian cultures tend to show lower self-efficacy, they surpass Western peers in academic performance (Eaton & Dembo, 1997). Assuming that Asian cultures adhere to values of collectivism, large power distance, and strong uncertainty avoidance (Hofstede, 1997; Markus & Kitayama, 1998; Triandis, 1989) expressed in stronger norm-orientation in family and school contexts, we now understand why adolescents in Asian cultures perform well despite relatively weak efficacy beliefs. They are led by the norms of their cultures more so than are adolescents in Western cultures, where they largely rely on their subjective sense of efficacy.

CONCLUSION

We have argued that adolescents solve developmental tasks related to the transition from being the recipient of culture to becoming the carrier of culture. We have also argued that self-efficacy is a critical variable in determining the mastery of this transition. Though adolescents of all cultures are confronted with this transition, research has yielded consistent findings that, despite outperforming their Western counterparts in many critical developmental tasks, adolescents socialized in Asian cultures show weaker self-efficacy than do adolescents socialized in Western cultures.

To solve this puzzle, we analyzed how cultural values affect self-efficacy. We have argued that cultural values determine the proximal contexts of a culture (i.e., its institutions such as the family or school) on the one hand and the psychological processes of efficacy appraisal on the other (i.e., which sources are selected and how they are weighted). Our findings from

our East German and West German students before and after unification are in line with our hypotheses that children and adolescents in sociocultural contexts that value norm-orientation (i.e., valuing collectivism, large power distance, and strong uncertainty avoidance) have lower self-efficacy and are more compliant with the authorities' evaluations than are children and adolescents in sociocultural contexts that value norms to a lesser extent (i.e., valuing individualism, small power distance, and weak uncertainty avoidance).

We also asked why comparatively weak efficacy beliefs in adolescents from Asian cultures should be consistent with comparatively higher performance. In cultures with a strong norm-orientation, which is the case in many Asian cultures, adolescents take family and school norms as a guide for action and thus can excel in mastering their developmental tasks despite a relatively weak subjective sense of efficacy. In Western cultures, however, norm-orientation decreases, and self-efficacy becomes more critical for adolescents to solve their developmental tasks. Thus, in cultures in which norm-orientation is deteriorating, strong self-efficacy is a particularly important cognition for shaping successful development across the lifespan.

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