

Sex and Social Class as Determinants of Future Orientation (Time Perspective) in Adolescents

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Hypotheses concerning the effects of sex and class on future orientation were tested on 100 boys and girls between the ages of 14 and 16. Future orientation was measured in various domains of life, constituting either private or public areas of concern (e.g., family, environment), on the dimensions of density (number of hopes and fears voiced by the subject), extension, and optimism-pessimism. As predicted, middle-class adolescents, as compared with lower-class adolescents, voiced more hopes and fears relating to public life and fewer in the private sphere, and they manifested a more extended future orientation in the private as well as the public spheres. They also judged the distant future more optimistically in two out of three public areas of concern. The lower-class girls were more optimistic than the middle-class girls in the occupational domain. As predicted, the lower-class boys voiced more hopes and fears in the occupational domain and manifested a more extended future orientation than the lower-class girls. On the other hand, the girls of both classes voiced more hopes and fears in the private sphere than the boys of either class. The results are interpreted through theories of socialization and role behavior.

Time perspective may be defined as an individual's cognitions concerning the content, placement, and unfolding of relevant events in his past, present, or future. Prior research has attempted to establish relationships between time perspective (especially as directed toward the future) and societal type (traditional vs. modern: Kluckhohn & Strodtbeck, 1961; Mönks, 1967), social subgroups (e.g., deviance: Barndt & Johnson, 1955; Jessor, Graves, Hanson, & Jessor, 1968) and personality characteristics (Platt, Eisenmann, Dellisser, & Darbes, 1971; cf. also Doob, 1971).

In the body of literature just mentioned, a frequent assumption has been that social and

cultural conditions affect a person's time perspective as well as his social behavior. In particular, *future* time perspective has been seen as a cause or correlate of the tendency or capacity to delay rewards (cf. Mischel, 1973) and of achievement motivation (cf. Heckhausen, 1967). The capacity to delay rewards in turn has been considered a precondition for social success and upward mobility, a view that has not remained unchallenged (cf. Kasakos, 1971; Nowotny, 1975).

In the present authors' view, an important though indirect contribution to the discussion about the "functional" meaning of future time perspective (e.g., its relevance for success in society) would be to investigate future time perspective empirically by taking into account a number of relevant psychological aspects or dimensions, and in particular, by including an affective component (i.e., the evaluative-emotional meaning an individual's future has for him). Thus this article focuses on some of the dimensions of future orientation and how these are influenced by sex and social class, that is, by special social roles that have become effective as a result of certain socialization experiences.

Future orientation here refers to an individual's attitude—in particular, his cognitions and feelings—toward his future. The nar-

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rower term *future time perspective* refers to the cognitive component (e.g., density and extension, described below) of future orientation, which is in line with its use in the relevant research literature. For the most part, the present article uses the term *future time perspective* when referring to literature in which this term was used.

This study includes the following aspects of future orientation (as dependent variables): (a) content-structural (density), (b) temporal-structural (extension), and (c) affective (optimism-pessimism).

The term *density* refers to the number of events whose occurrence a person hopes or fears in various domains of life.¹ By *extension* we mean the length of the future time span being envisaged by a person. It is operationalized as that event which the subject places farthest in the future. This definition is identical with that of Wallace (1956, pp. 240-241).

Optimism is defined as the positive difference between the evaluation of the future and the evaluation of the present, a negative difference (*pessimism*) indicating a pessimistic view of the future. This definition is in line with that of Teahan (1958, p. 38).

An additional dependent variable, termed *internal-external control*, is defined as a person's belief as to whether events are controlled by himself or by external forces.

A more detailed analysis of the concept of future orientation and its various dimensions can be found in Trommsdorff and Lamm (1975).

One of the first investigations of future time perspective has already dealt with its dependence upon social class as a consequence of differential socialization. LeShan (1952) investigated the effects of class-related parental reward and punishment methods, concluding that children from the lower class are more present oriented and children from the middle class are more future oriented. LeShan asked middle- and working-class children to invent stories and found that the stories of middle-class children covered a longer period of time and extended more into the future than did those of working-class children. There have been numerous challenges of this investiga-

tion, and aspects of both its content and its method have been criticized.

Greene and Roberts (1961) faulted LeShan's (1952) statistical procedure and came to the conclusion that his results were not clear. Kendall and Sibley's (1970) analysis elicited the fact that the length of the stories that the children in LeShan's study had to write down had an influence on the temporal extension of those stories: The longer the story, the greater was the extension of the future time perspective. Those authors concluded that the relationship between social class and extension of future time perspective in LeShan's study was artificial. Ellis, Ellis, Mandel, Schaeffer, Sommer, and Sommer (1955) and Judson and Tuttle (1966) were not able to replicate LeShan's findings despite improved methods of statistical analysis. In contrast, Graves (cited in Lessing, 1968) reported a difference between the two social classes with regard to the extension of future time perspective, which is in line with LeShan's (1952) findings.

There are undoubtedly many reasons for the lack of clear-cut evidence on the role of social class. One of them may be the implicit assumption that the structure of the individual's future orientation (and future time perspective) is the same in all domains of life. However, Frank (1939) has already pointed out that a person can develop multiple orientations toward the future that are directed in each case toward various aspects of his private or public life, a point that has been widely disregarded in research up until now.² One important advance that we hoped to accomplish through the present research was to obtain support for our assumption that future orientation consists of various dimensions, each of which has to be measured separately. These various dimensions—density, extension, and optimism—as well as the additional measure, perceived control, may be affected in different ways by the social attributes under investigation.

¹ See Kastenbaum (1961), who limited his definition of *density* to the quantitative aspect.

² Lessing (1971) recently tried to distinguish between private and public future orientation.

Social Class and Future Orientation

We assume that future orientation is determined by past and present experiences. Accordingly, the structure and the content of future orientation must be dependent upon the frequency (quantity) and structure of past and present relationships of interaction between the individual and his environment. In the lower class—more so than in the middle class—these relationships are characterized by many factors that together could be described as a syndrome of family orientation: nonmembership in secondary groups and organizations, helplessness and uncertainty in contact with local authorities and social institutions, and apathy in connection with events and developments in the public domain. A person of the lower class looks for and finds protection in the particularized solidarity of primary relationships within the family against a universalistically organized outside world (Oevermann, 1969; Popitz, Bahrdt, Jüres, & Kesting, 1967). The fact of a family-centered value orientation within the lower class (Neidhardt, 1968; Rosen, 1956) can be seen as a correlate of this social withdrawal.

On the basis of these observations, it can be assumed that the members of the lower class primarily focus on private concerns in their future orientation and that persons of the middle class turn comparatively more of their attention to public concerns. Thus, we propose the following hypothesis:

Hypothesis 1: In comparison with middle-class adolescents, more of the lower-class adolescents' hopes and fears are concerned with private matters.

In his well-known study of the "achievement syndrome" Rosen (1956) showed that lower-class children have a passive, family-oriented, and present-oriented value system. In contrast, children of the upper classes were described as being active, individualistic, and future oriented, all of which are favorable prerequisites for the development of greater achievement motivation.

A large number of other findings concerning class-dependent socialization are in accord with Rosen's results. Pearlin and Kohn

(1966) showed that in comparison with the child-rearing practices of the lower class, those of the middle class are aimed more toward strengthening the self-confidence and self-responsibility of the child. In addition, with regard to the development of cognitive style (Witkin, Dyk, Faterson, Goodenough, & Karp, 1962) and cognitive abilities (Hess & Shipman, 1965) as well as language behavior (Bernstein, 1959; Bock, 1972; Oevermann, 1972), the socialization milieu in middle-class families is relatively better suited for developing abilities and promoting goal striving. These class-related behavioral differences are reinforced even further by secondary socialization in the school (Deutsch, 1965).

The above observations suggest that socialization practices (and learning experiences) in middle-class, more so than in lower-class, milieus are calibrated toward long-term goal setting (cf. Heckhausen, 1967), a stronger sense of control over events (cf. Lefcourt, 1972, p. 26), and greater optimism as to the realization of one's goals.

Thus we propose the following hypotheses:

Hypothesis 2: In general, middle-class adolescents have a more widely extended future orientation (i.e., in the private as well as the public domain) than do lower-class adolescents. (This represents an attempt, with improved procedures, to replicate the findings of LeShan, 1952, and others cited.)

Hypothesis 3: Middle-class adolescents are more prone to believe that the realization of their hopes and fears depends on themselves (instead of external factors) than are lower-class adolescents.

Hypothesis 4: Middle-class adolescents are more optimistic about their future than are lower-class adolescents.

Sex and Future Orientation

The lower the social status of a family, the more the partner relationships are oriented toward the prevailing sex role stereotypes (Lehr, 1972; Mollenhauer, 1969). The man is regarded as the "instrumental leader" of the family (Parsons, 1964) in the occupational and public domains, whereas the woman is seen as competent in the role of housewife and

child rearer (Myrdal & Klein, 1956). This division of roles and abilities affects child rearing: The child is subjected to sex-specific role expectations and reinforcements (cf. Maccoby & Jacklin, 1974). (The latter do not necessarily remain stable over the entire life span, depending on learning experiences following childhood, cf. Ahammer, 1973; the success of the Women's Movement makes this abundantly clear.)

Lehr (1968, 1969) reported that the career takes on a central position in (German) men's autobiographies, whereas women—even those with an occupation—mainly emphasize the events and problems of their private lives in their life portrayals. This corresponds with the observation that more girls than boys renounce or give up an occupational education in favor of an early marriage (Lessing, 1968; Myrdal & Klein, 1956). Thus a further hypothesis of our study may be stated as follows:

Hypothesis 5: (a) Female adolescents manifest fewer occupational but more family-related hopes and fears than do male adolescents. (b) Female adolescents have a more extended future orientation in the family domain and a shorter one in the occupational domain.

With higher social status of parents, the sex-specific socialization patterns referred to above are less prevalent (see Lehr, 1972; Mollenhauer, 1969). Therefore, Hypothesis 5 is confined to lower-class adolescents.

METHOD

Sample

Subjects were 50 male and 50 female adolescents between the ages of 14 and 16 who were selected from either of two types of German schools—a "Hauptschule" or a "höhere Schule"—in a West German industrial city. (The former kind of school is the direct extension of elementary school: Pupils go through nine "classes"; after graduation the students obtain a full-time job or an apprenticeship. The latter kind of school corresponds to the United States high school, preparing pupils for a university.) Subjects participated in response to advertisements posted in the schools, in which 5 Deutsche Marks were promised per hour of participation. The lower-class sample (half of the subjects) consisted exclusively of Hauptschule students, where the head of family had solely a Hauptschule education. The

middle-class sample consisted of high-school students where the head of family had completed high school or university.

Design

The first two independent variables were sex and social class, with two levels each, yielding four cells of 25 subjects. The two-fold measure of optimism-pessimism (difference between present and future) provided a third (within-subjects) factor (near vs. distant future), with two levels (in 5 years, in 20 years). The factors were all "fixed"; within-subjects measurement existed in the case of near versus distant future.

Dependent Variables

The dependent variables were measured through questionnaires that the subjects had to complete in group sessions of about three persons each.

Density. On the first page of the questionnaire the subjects listed their hopes, and on the second page, their fears. In each case the answering period was limited to 10 minutes. These raw data were categorized with the help of Cantril's (1965) scheme (agreement in 86% of the cases) by two independent judges. The original 23 categories of Cantril's scheme were reduced to 3 major categories in the private sector (family, occupation, personal development) and 3 in the public sector (economy, politics, environment). The number of listed hopes and fears in the 6 areas, divided by the total number of hopes and fears, served as the index of density. These proportions, since they were not normally distributed, were transformed with $\arcsin \sqrt{x}$ to permit an analysis of variance (Winer, 1962, p. 221).

Extension. As a further assignment, each subject had to indicate for each of his hopes and fears how old he thought he would be at the time of the materialization of the corresponding hope or fear. The maximal difference between the subject's perceived future age and his current age for each given category (public and private domains and their subdivisions) was then used as the index of extension. These scores were transformed with $\log x$ (to yield normal distributions) to justify analyses of variance.

Internal versus external control. Next, each subject indicated, for each of his hopes and fears, whether he thought its fulfillment depended more on himself or on external factors. For this, four answer categories were provided: (a) "depends on me only," (b) "depends more on me than on chance and external circumstances," (c) "depends more on chance and external circumstances than on me," and (d) "depends on chance and external circumstances only". The proportion of hopes and fears that a subject categorized as internally controlled (Categories a or b), relative to the whole number of hopes and fears, was used as his score for data analysis. This score was calculated for both the private and the public areas as well as for the total number of hopes and fears. Because of a lack of normal dis-

tribution, these scores were transformed with $\arcsin \sqrt{x}$ to permit analyses of variance.

Optimism-pessimism. On the last two pages of the questionnaire the subject had to list, for each of 10 private and 10 public areas of concern, his position "at the present," "in 5 years" (near future), and in "20 years" (distant future).³ The positive extreme of the 11-point scale was 10 (best conceivable situation), its negative extreme 0 (worst conceivable situation). This was an adaptation of the aspiration ladder developed by Cantril (1965).

For the purposes of data analysis, the 20 items were condensed into three categories of the private domain (labelled family, occupation, and personal development) and three public categories (economics, politics, and environment), which in terms of content were designed to correspond roughly to the six previously mentioned areas of the density and extension variables.

The 10 "private" items were as follows: "my personal relations within my family," "my sexual relations," "my interpersonal contacts" (subdomain *family* and interpersonal relations); "my health," "my independence," "my inner satisfaction," "the realization of my real abilities" (subdomain *personal development* and self-actualization); "my financial situation," "my attainments in school or occupation," and "free time to practice interests not related to school or occupation" (subdomain *occupation*).

The 10 "public" items were as follows (all relating to West Germany, unless otherwise noted): "economic capacity" (subdomain *economics*); environmental pollution (subdomain *environment*); "relations with Eastern European countries (including East Germany)," "equal chances of education and advancement for all Germans," "criminality," "integration of Western European countries and peoples," "freedom of expression of opinion," "peace in world," "mutual helping and considerateness," and "tolerance and acceptance of minorities (e.g., foreign workers, homosexuals)" (subdomain *political* and social concerns).

In each of the subdomains and in the two main groups, which is equivalent to the sum of all 10 private or public items, the mean difference between the future (near or distant) and the present was calculated. Positive differences indicated an optimistic judgment, negative differences, a pessimistic one. The distribution of these data was normal, thus permitting $2 \times 2 \times 2$ (Sex \times Class \times Near Versus Distant Future) analyses of variance. Near versus distant future constituted a within-subjects factor.

RESULTS

Tables 1 and 2 contain the means and standard deviations for the dependent variables and the significant results of the analyses of variance. In the case of significant interaction effects, simple-effects F values were calculated (Winer, 1962, p. 174 f. and p.

340). The degrees of freedom for all listed F values are 1 and 96.

Results For Class

Density. Hypothesis 1 was confirmed: The middle-class adolescents listed more (i.e., greater proportions of) public ($p < .005$) and fewer private ($p < .005$) hopes and fears than did the lower-class adolescents. Furthermore, lower-class subjects listed more concerns in the occupational sphere than did middle-class adolescents ($p < .05$). It should be remembered that this refers to *relative* measures of public and private concerns (i.e., the proportion of concerns, relative to total concerns, voiced in the respective categories).

Extension. In addition, hypothesis 2 was confirmed: Middle-class subjects had a more extended future orientation than did the lower-class subjects in the private ($p < .005$) as well as in the public category ($p < .005$).

Internal versus external control. Hypothesis 3 was confirmed only in the public category, with greater internal control indicated by middle-class persons than by lower-class persons ($p < .005$).

Optimism-pessimism. Hypothesis 4, as originally stated, was on the whole not confirmed by the data. Instead, a more differentiated statement has to be made. Middle-class adolescents judged the distant future more optimistically in the public subdomains of politics (simple-effects $F = 34.41$; $p < .005$) and environment (simple-effects $F = 12.32$; $p < .005$) than did lower-class adolescents.

With regard to the private sphere, there was a significant ($p < .01$) Sex \times Social Class interaction in the occupational domain: For this category lower-class girls judged the future more optimistically than did middle-class girls (simple-effects $F = 8.79$; $p < .005$); this was not the case for boys.

An additional finding that may be noted here is that both class groups face the distant future with greater optimism than the near future ($p < .005$, in the private as well as public domains).

³ The 10 private items and the 10 public items correspond to the future-related concerns that were most often voiced in surveys by Lamm (Note 1) and Trommsdorff (Note 2).

TABLE 1
MEANS, STANDARD DEVIATIONS, AND *F* VALUES FOR DENSITY, EXTENSION, AND INTERNAL-EXTERNAL CONTROL

Variable	Middle-class boys		Middle-class girls		Lower-class boys		Lower-class girls		Factor	<i>F</i> _a
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Density ^b										
Private sphere	.78	.29	.69	.30	.94	.15	.87	.21	Social class (A)	15.42
Family	.26	.16	.33	.19	.28	.18	.47	.21	Sex (B)	10.02
Occupation	.39	.24	.23	.15	.54	.24	.28	.16	A	4.37
Personal development	.13	.13	.12	.09	.11	.10	.12	.12	B	20.25
Public sphere	.22	.29	.31	.30	.06	.15	.13	.21	A	13.22
Economy	.06	.11	.05	.07	.01	.04	.02	.04	A	9.60
Politics	.14	.18	.21	.22	.04	.09	.09	.14	B	3.99
Environment	.02	.04	.05	.06	.01	.09	.02	.06	A	13.74
									B	5.08
Extension ^c										
Private sphere	24.60	17.09	26.88	20.54	21.48	17.66	10.68	9.01	A	8.80
Family	17.88	18.64	20.40	20.30	12.28	14.17	8.96	7.46		
Occupation	14.24	13.24	13.28	11.80	16.52	14.29	6.56	7.68	A × B	4.87
Personal development	4.04	8.69	10.24	20.14	4.96	10.99	1.84	4.08		
Public sphere	14.28	21.73	16.02	15.67	5.44	13.24	7.92	14.55	A	10.27
Economy	7.40	14.40	8.48	12.40	2.32	8.44	.44	1.50	A	11.52
Politics	13.68	21.60	13.28	15.59	4.60	10.94	7.48	14.64	A	7.09
Environment	3.76	13.14	8.00	11.53	.12	.60	.88	2.37	B	5.11
									A	11.88
Perceived control ^d										
Total	.57	.20	.52	.30	.56	.17	.45	.17	B	5.09
Private sphere	.53	.24	.47	.23	.55	.19	.43	.19	B	4.77
Public sphere	.04	.09	.05	.07	.01	.04	.02	.06	A	9.22

Note. For boys and girls of both social classes, $n = 25$.

^a For all *F* values, $df = 1, 96$. Only significant *F* values ($p < .05$ or better) are given here.

^b Number of hopes and fears listed for each respective category, divided by the total number of hopes and fears (Value $\times 100 = \%$).

^c Number of hopes and fears listed for each respective category, divided by the total number of hopes and fears (Value $\times 100 = \%$).

^d Number of hopes and fears adjudged by the subject as internally controlled, divided by total number of hopes and fears mentioned in the respective category (Value $\times 100 = \%$).

TABLE 2
 MEANS, STANDARD DEVIATIONS, AND *F* VALUES FOR OPTIMISM-PESSIMISM

Sphere	Near vs. distant future	Middle-class boys		Middle-class girls		Lower-class boys		Lower-class girls		Factor	<i>F</i> *
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Private	<i>c</i> ₁	1.12	1.09	.57	.80	.63	1.29	1.19	1.23	Near vs. distant future (C)	15.50
	<i>c</i> ₂	1.41	1.41	.91	1.11	1.02	1.29	1.23	1.72		
Family	<i>c</i> ₁	.85	1.07	.61	1.01	.57	1.80	1.04	1.24	C	37.93
	<i>c</i> ₂	.69	1.80	.53	1.43	.46	1.96	.76	1.61		
Occupation	<i>c</i> ₁	.77	1.76	-.03	1.40	.44	1.82	1.45	1.40	C	7.40
	<i>c</i> ₂	1.52	1.74	.65	1.49	1.15	1.54	1.94	2.19		
Personal development	<i>c</i> ₁	1.74	1.60	1.19	1.26	.89	1.39	1.45	1.98	C	6.07
	<i>c</i> ₂	2.02	1.90	1.45	1.59	1.07	2.01	.99	2.43		
Public	<i>c</i> ₁	.11	.59	.34	.89	.39	1.06	.76	1.39	C	19.69
	<i>c</i> ₂	.83	1.49	.91	1.80	.87	1.30	.99	1.60		
Economy	<i>c</i> ₁	.04	1.02	.36	1.25	.32	.75	.68	1.46	B × C	5.89
	<i>c</i> ₂	.24	1.83	.40	1.96	.84	1.43	.80	1.66		
Politics	<i>c</i> ₁	.46	.50	.81	.56	.66	.74	.97	.89	B × C	5.11
	<i>c</i> ₂	1.22	1.04	1.58	1.22	1.22	1.09	1.39	.98		
Environment	<i>c</i> ₁	-.16	1.31	.20	1.32	.68	1.68	.64	2.98	B × C	5.11
	<i>c</i> ₂	1.04	2.72	1.12	2.96	.80	3.15	.80	3.49		

Note. Difference between evaluation of future in 5 years and of present = *c*₁; difference between evaluation of future in 20 years and of present = *c*₂. Per life domain and per subject, the difference between evaluation of future in 5 years and of present was highly significant (*F* values indicate optimism, negative scores pessimism. The original scale ranged from 0 (worst possible position) to 10 (best possible position). For boys and girls of both social classes, *n* = 25.

* For all *F* values, *df* = 1, 96. Only significant *F* values (*p* < .05 or better) are given here.

Results for Sex

Density. Hypothesis 5a was confirmed in the occupational subdomain: Males voiced more hopes and fears than did females ($p < .005$; see Table 1). The female adolescents of both classes voiced more hopes and fears in the private domain than did the male adolescents of both classes ($p < .005$). Surprisingly, the females—independently of class level—voiced more hopes and fears in the public areas of politics ($p < .05$) and environment ($p < .05$) than did the males.

Extension. Hypothesis 5b was confirmed in the occupational area: Lower-class boys had a more extended future orientation than did lower-class girls (simple-effects $F = 9.87$; $p < .005$).

Internal versus external control. For the total of hopes and fears, males perceived more internal control than did females ($p < .05$). This difference was also significant in the private category ($p < .05$) but not in the public category.

Optimism–pessimism. Sex-related differences concerning optimism–pessimism were not manifested in any of the life domains, except with respect to the effect of social class (see Discussion section).

DISCUSSION

Effect Of Social Class On Future Orientation

Our hypotheses concerning the effects of social class on the three dimensions of future orientation—density, extension, and optimism–pessimism—were confirmed by these data: Middle-class adolescents are more long-term directed in their future orientation than are lower-class adolescents, and this holds for hopes and fears related to private as well as public concerns.⁴ In general, the middle-class adolescents are more intensively concerned with developments and processes in the public domain than are the lower-class adolescents and are more apt to believe that the materialization of their hopes and fears is dependent on themselves.

In regard to their future orientation, lower-class adolescents mainly focus on the private sector, but even in this area their future orientation is less extended than that of their higher-class counterparts. It may well be that this

shortness of time perspective is to a considerable extent responsible for the “restricted planning behavior” (Mollenhauer, 1969) of the lower class.

Effects of social class on optimism were found in the environmental and political subdomains: Middle-class persons are more optimistic but only in regard to the *distant* future. This lack of confirmation of our “total” hypothesis may be explained by the relatively young age of the subjects. It is likely that the influence of class on optimism–pessimism becomes (more) evident at a later age. In the case of the age level tested here, the background of experience may still be relatively similar for the two classes. The amount of frustration in connection with goal striving is presumably still relatively low so that scarcely any negative changes would likely be anticipated in the (immediate) future. As they get older, lower-class persons will probably be more pervasively hampered in their goal-reaching efforts (e.g., because of lower incomes) and have more barriers to overcome than middle-class persons, with the possible consequence of greater pessimism and/or a lowering of aspirations.

A class-related difference concerning optimism, which holds only for girls, will be considered below.

Influence Of Sex Role On Future Orientation

With respect to the *lower-class* adolescents, the present findings confirm earlier evidence that the training for an occupation and further education play a more important role in the plans of boys than in the plans of girls. This is shown by the fact that more of the hopes and fears of boys concern their occupation and that the future orientation of boys with respect to the occupational area is more extended. Considering the *middle-class* adolescents, the occupational future time per-

⁴The rank-order or product-moment correlations were calculated between the dependent variables of density and extension as well as between extension and optimism–pessimism. For density versus extension, they were significant only in some areas, and for extension versus optimism–pessimism, there was no correlation within the four groups of subjects. The correlation tables are available from the authors.

spective of boys is about as extended as that of girls; with respect to density, however, boys again concentrate more on the occupational domain than do girls (main effect of sex role).

What has not been hypothesized is an interaction between sex and social class with regard to the occupational future: Lower-class girls (but not boys) are more optimistic than their (same-sex) middle-class counterparts ($p < .005$). It is possible that the latter are more realistic in their assessment of the barriers that stand in the way of a woman's taking up and practicing an occupation. An alternative interpretation is that possibly middle-class girls have higher aspirations than lower-class girls: They might consider occupations that are more difficult to prepare for, enter, and/or succeed in. Here again, the greater pessimism of middle-class girls would represent a realistic assessment of future possibilities.⁵

As noted above, in the occupational domain girls voice fewer hopes and fears than boys, whereas in the family domain girls voice more hopes and fears than boys. Apparently, based on the traditional distribution of roles and abilities, the family is still the domain in which the woman takes (or is compelled to take) the leading role. This offers a second possible explanation for the comparatively pessimistic attitude of middle-class girls toward developments in the occupational area: On the one hand, they make an effort toward pursuing an occupation, while on the other hand, they realize that in the end, they will still be held responsible for household and children. This anticipation of a double load may have a negative influence on their assessment of their career chances.

Concluding Comments

The findings reported above are based on a (West) German sample. We have interpreted them by means of reference to empirical and theoretical analyses from North American and German research literature. However, caution should be exercised regarding the cross-cultural validity of the present

findings as well as of the theoretical analyses referred to above. The same socioeconomic group may be characterized by different typical socialization patterns for Society (Country) A in comparison with Society (Country) B; if these socialization patterns are causal to future orientation (or some dimension or correlate of it), then different empirical relationships may be expected for the two societies. Thus, even in two countries that are relatively close in their cultural outlook such as West Germany and the United States, there is a fair possibility that the sex-related findings of the present study would not hold for United States adolescents, given the earlier and, presumably, more powerful impact of the Women's Movement in the United States.

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⁵ We are indebted to an anonymous reviewer for suggesting this possibility.

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