

CHILDREN'S ECONOMIC SOCIALIZATION: SUMMARIZING THE CROSS-CULTURAL COMPARISON OF TEN COUNTRIES *

David LEISER

Ben-Gurion University of the Negev, Beer Sheva, Israel

Guje SEVÓN

Swedish School of Economics and Business Administration, Helsinki, Finland

Daphna LÉVY

Ben-Gurion University of the Negev, Beer Sheva, Israel

This paper summarizes the cross-cultural study of economic socialization detailed in the previous papers in this issue. The sample was drawn from 10 countries: Algeria, Austria, Denmark, Finland, France, Israel (town and kibbutz), Norway, Poland, West Germany, and Yugoslavia and administered to children age 8, 11 and 14. The topics covered were: (a) understanding who decides what, and why (prices, salaries, savings and investment, the mint); (b) reasoning: how well do children appreciate the consequences of economic events of national dimension; (c) attitudes: how do they account for the economic fate of individuals. In addition to the tabulation of answer types to individual questions, we subjected the data in each main part of the questionnaire to a Multi-Dimensional Scaling (MDS) analysis. The progression with age is clear and in line with previous investigations in various countries. The differences between countries are harder to interpret and reasons for this are discussed.

The previous papers contain detailed discussion of national data. The time has now come to compare the data in the different countries. This should allow us, in principle, to derive more general conclusions on children's understanding, reasoning and attitudes about the economic world. Our developmental findings should be very robust. The

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Correspondence address: D. Leiser, Dept. of Behavioral Sciences, Ben-Gurion University of the Negev, P.O. Box 653, Beer Sheva, Israel, E-mail: kdbg100@bgunos.bitnet. G. Sevón, Swedish School of Economics, Arkadiagatan 22, 00100 Helsinki, Finland, E-mail (internet): sevon@csi.fi.

sheer size of the sample is of course an elementary advantage: there are about 350 subjects in each age group. Further, the international composition of the sample renders it relatively immune from the vagaries of national circumstances.

In addition, comparing the responses of children living in different economic, political and cultural surroundings allows us to study the plasticity of children's conceptions, and the role of other factors, beyond the cognitive, in shaping their understanding and attitudes.

Method

Population

The sample was drawn from 10 countries: Algeria, Austria, Denmark, Finland, France, Israel (town and kibbutz), Norway, Poland, West Germany, and Yugoslavia.¹ The sample consisted of three age groups: 8, 11, and 14 years, which we will call S, M and L respectively. An attempt was made to minimize age variance by interviewing children within a month of their birthday. Every effort was made to adhere to this guideline at least for the youngest age group. There were about thirty children for every age group, an equal number of boys and girls. The children were chosen from what we termed 'the mainline standard regular middle class school' in each country. Children were interviewed individually.

The questionnaire

Three categories were covered:

(1) *Understanding*:² questions about who decides what, how and why. The questions concerned prices, salaries, savings and investment, the minting of money.

(2) *Reasoning*:³ these questions tapped children's ability to appreciate the consequences of economic events of national dimensions: a

¹ In Algeria, 8 and 14 years old; in Norway, 8 and 11 years old.

² Adapted from Leiser (1983).

³ New questions, designed by David Leiser.

drop in prices, the finding of expensive minerals, and extreme policies: the abolition of taxes, and the distribution of money.

(3) *Attitudes:*⁴ in this short section, we tried to ascertain their views on the economic fate of individuals: the causes of poverty/wealth, the consequences of poverty/wealth, and the causes of unemployment.

Analysis

The questionnaire was prepared by David Leiser, in English, and circulated amongst the participants for comments, with suggested scoring categories. The revised version was sent again to all the participants, and translated. The suggested scoring categories were based on pilot studies in Israel, and were not necessarily appropriate for all countries. On the other hand, there had been but few requests for changes from the participants, before they had interviewed and analysed their national samples. We therefore consolidated the additional categories suggested by the national studies into a new, not very different scoring scheme, which was again circulated amongst the researchers, asking them to recode the data as needed. We then dropped any category used in fewer than 1/3 of the cases (country \times age), and computed proportions of answers on the remaining response categories only. The scoring categories and proportions are given in the Appendix at the end of this issue. The data analysis below is based on those proportions.

Our procedure may well have obliterated some subtleties of the national data. These are, however, presented in the national studies in this journal. The main lines of development and differences between countries should remain relatively unaffected by this treatment, and may even come out more clearly.

Results

As will be seen in detail, the progression with age is clear, while the differences between countries are harder to interpret. In the following pages, we will present the results, mostly following the questionnaire step by step and occasionally drawing together coherent sets of find-

⁴ Adapted from a questionnaire by Stacey and Singer (n.d.).

ings. Before embarking on this, a caveat: since we dropped from our analysis categories of answers which were seldom used, the analysis is biased toward a comparison of the frequencies for those categories that were represented at all ages and in most countries. Additional aspects of the subjects' answers are not brought out by our data reduction procedure. In particular, with increasing age, subjects gave a wider range of answers, and their specific answers become also more subtle.

In addition to the tabulation of answer types to individual questions, we subjected the data in each main part of the questionnaire to a Multi-Dimensional Scaling (MDS) analysis, so as to obtain a general image of the similarities and differences of the many groups in our sample.

(1) Understanding

The main differences in this section involve the age trend in development. As the MDS also brings out (see fig. 6 below), different countries exhibit parallel development, despite the specific differences between them.

Prices and salaries

How are prices determined? Several trends are worth noting. As they grow older, fewer and fewer children think the shopkeeper decides as he sees fit; there is an increase in those who connect the selling price to the purchase price, and an even clearer increase in those who couple both the production cost and the profit of the shopkeeper. There is also a mild increase in the remaining answer categories ('the price is as much as the market will bear', and 'the government decides') and a concomitant decrease in the 'don't know (henceforth: d.k.)' answers (see fig. 1).

What does the shopkeeper do with the money? There is a drop in those who think of a private use only (30%, 20%, 10%); the 'd.k.' answers disappear (10%, 5%, 0%); and the proportion of those who mention the shop only hovers around 25%. The realization that both types of uses (private and shop) occurs progressively (18%, 39%, 48%).

Who pays salaries? There is a steady increase with age in those who mention both the 'boss' and the government, and the government only, and a simultaneous slight decrease in those who mention the boss only. The 'bank' and 'd.k.' categories drop to zero (fig. 2).

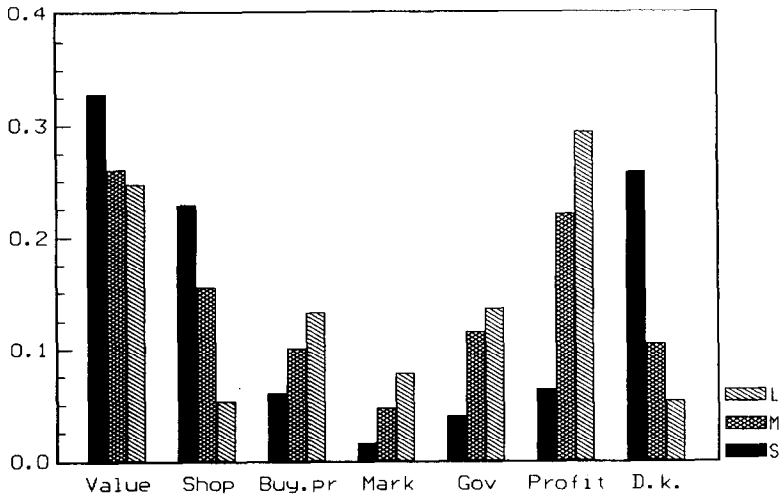


Fig. 1. How are prices determined? (by age).

Who decides the amount? Here there is a slight increase in the awareness of the role of the government.

How to earn more? Only five countries gave us their answers: Algeria, France, Poland, West Germany and Norway, and these exhibit

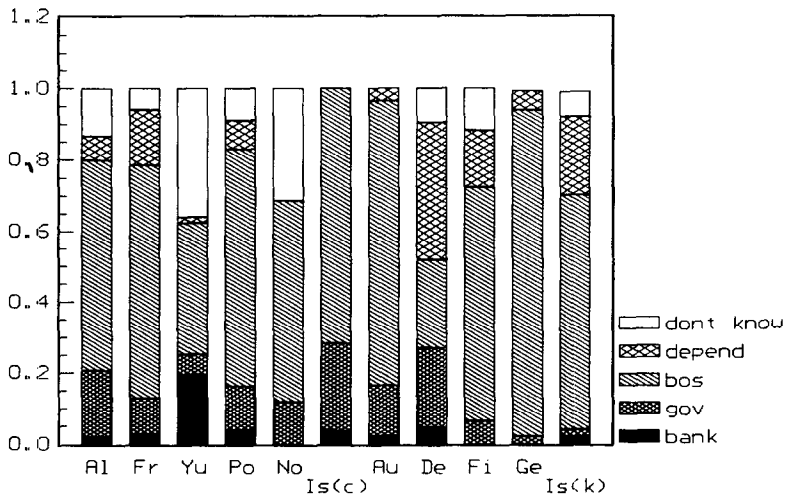


Fig. 2. Who pays salaries? (by country).

very disparate patterns of answers. Thus, strikes are (more precisely, were) deemed impossible in Poland, but are mentioned as the main means to increase one's salary in Norway (75%). For Algerians, working more to earn more is almost never mentioned, whereas it is the most common answer in Poland. Again, whereas changing jobs is a primary solution in those two countries, it is never mentioned in Norway. The intermediate age for Algeria and the older age for Norway are missing, and most countries are simply not represented. There is therefore no basis for tracing the developmental course on this question.

Summarizing, eight-year-old children consider the relation prices/goods as absolute and intrinsic. There is one *fair* price: charging more is possible, but dishonest (we interpret as a moral judgment the near universal negative answer to question 1.2.: 'Can the shopkeeper ask as much as he wants?' Until they are aged to-11, children do not understand that shopkeepers make money only if they charge higher prices than those they pay (Danziger 1958; Burris 1983; Furth 1980; Jahoda 1979; Berti and Bombi 1988). At about the same age, money is paid to the worker not because of their needs (finalism/altruism) but in *exchange* of some work done. There are thus two independent circles of exchange: money-goods and money-work, trade and industry. Younger children do not coordinate the entrepreneur as producer/provider of goods with the person who pays the workers' salary. The two facets begin to be integrated from age 11-12 on. This integration is manifested in their realization that the price of goods reflects the costs incurred, including the workers' wages.

Savings and investment

What can one do with extra money? Fig. 3 shows several trends: d.k. answers drop rapidly, charity stays fairly stable, at about 15%, as does the very pedestrian 'consume more' (about 20%). The two interesting answers involve banks: bank as storage drops sharply (35%, 35%, 14%), while bank as investment increases even more sharply (14%, 34%, 53%), to become the dominant answer.

As was noted in a previous study (Leiser 1983), younger children are aware of the existence of interest, but fail to understand it. To integrate the lending function of the bank with its safekeeping function is beyond them. Jahoda (1979, 1983) also found complete ignorance of interest by 11-year-olds, and comprehension by a few 13-16-year-olds

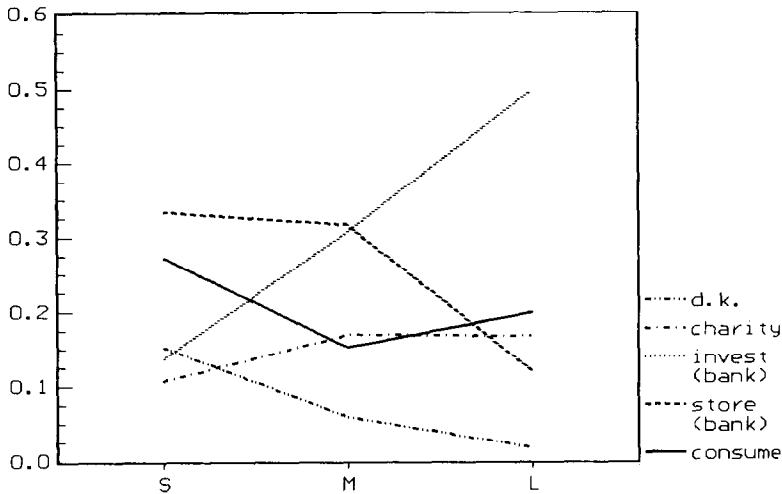


Fig. 3. Uses for extra money.

that it makes a profit by charging a higher interest on loans than it pays on deposit, and that the same money is involved in both cases. Similarly, Berti and Bombi (1988) distinguish five levels of 'bank understanding': (1) bank as source; (2) bank as safe; (3) bank lends money; (4) bank loans the money deposited; (5) understand interest and interest differential. They found that at age 11–12 (the oldest group interviewed), half the children were still at levels (2) and (3); our international sample corroborates this. Children understand how a bank makes a profit later than they realize that shopkeepers make their profit by charging more than they pay their suppliers.

Previous cross-cultural studies about banking found that children are more advanced in Hong Kong (Ng 1982, 1985) and in the Netherlands than in Scotland (Jahoda and Woerdenbagch 1982). The explanations proposed were that the 'business ethos' is stronger in Hong Kong, while banking is of greater importance and information about it more available in the Netherlands. In our sample, we found that sophistication in the use of banks (i.e., proportion of 'invest' answer versus that of 'storage' answers) splits the sample into three groups. Most advanced are children from Denmark and Finland; then come those from France, Poland, Israel (both kibbutz and city) and West Germany; the lower ones are Algeria, Yugoslavia, Norway and Austria.

Without any knowledge about the relation between work and the source of money, belief in a 'charitable institution' (social security, council, Fiat) as a *source* of money solves, for the children, the logical puzzle of the source of money. An alternative solution is the *Government*, which will be discussed below. Charity also serves the complementary function, that of *sink* for money. This solution is adopted as a function of the emphasis on giving charity in each country. The countries that mentioned charity most often in this context were Yugoslavia, Algeria and France, and, to a lesser extent, Denmark and Finland.⁵ Denmark and Finland are more of welfare states than the other countries mentioned. In welfare states there is less need for charity, and as people consider paying taxes as their tribute to charity, there is not much extra charity offered. Unfortunately, we found no public statistics on how much charity is given in different countries. Further, the high frequency of 'charity' answers in Yugoslavia and Algeria should also be seen in the context of the very low frequency of 'bank investment' answers in those countries (see above).

Factory

Why open a factory? The age evolution shows the *profit motive* becoming dominant (52%, 67%, 75%). The second set of motives mentioned are the 'finalistic' or 'altruistic' motives: a chair factory is opened because people need more chairs. This type of answer tends to decrease in importance with age (21%, 17%, 12%). Finally, a small proportion mentions social status: 'becoming a boss' (4%, 5%, 9%) (fig. 4).

In Sevón and Weckström (1989), two different conceptions of economics were presented. The first may be called the *happy family*. According to this picture, economic actors care for one another, factories are created to fulfill existing needs for products, and the government is responsible for making everything work smoothly, giving each one its due, preventing various excesses etc.

The other conception describes the economy as an *instrument*. It correlates with the person socialized as the 'economic man'. According to this view, the individual tries to interact with the economy – conceived as a complex, objective mechanism – to his best advantage.

⁵ The other countries have a frequency of zero, which may mean that the absence in those countries is an artifact of the coding scheme.

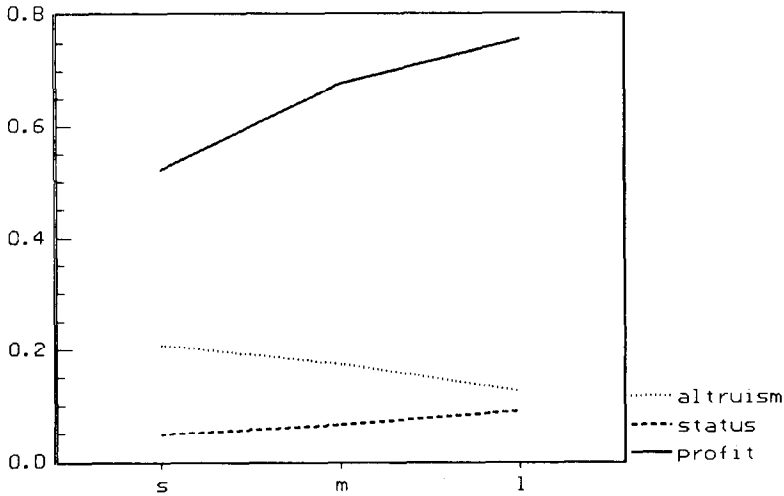


Fig. 4. Why open a factory?

The economy is part of what Furth (1980: 3) calls the societal world, a term that:

‘... refers to the life of the community as an interrelated whole with its institutions, rules and customs, its services and product. This societal world “out there” is experienced by adults as distinct from what may be called the personal life or the self in relation to other people.’

According to Elster (1985) each of us seems split between a private and a public self:

‘The “economic man” within us strives for personal hedonic satisfaction. He regards other people as so many means to his own selfish ends – or as constraints and obstacles to his pursuit of happiness. The “social man”, by contrast, is governed by moral and social norms. He is kept on course by his concern for other people, and by their approval or disapproval of his behaviour. The problem is to understand the relation between these two homunculi that – like the short-term and the long-term interest – constantly vie for our attention’.

Elster claims that all people show features of both homunculi. However, one side may be dominant in certain conditions. When it comes to reasoning about economic events, though, it seems as if younger children (aged 8 and 11 years) show more features of ‘social man’, a public self, whereas children aged 14 display the ‘economic man’. The older ones, thus, have a perspective on economic affairs that arrives from a more individual, private point of view; the economy is

viewed as an instrument for the own pursuit of happiness (Sevón and Weckström 1989).

The answers to our question on opening a factory exemplify the two perspectives. The answers of young children are often charitable: a factory is needed to give working places and salary to the poor. The reason to open a factory is to create its output for those who need it. Still, most of even the youngest children are aware of the profit motive and this trend increases with age, while interest in the output itself decreases. In other words, older children come to see factories in the sense of a capitalist economy. Factories exist as sources of profits for whoever owns them, rather than as a way of producing what is required for the common wealth.

The instrumental approach requires a more sophisticated understanding than the happy family conception. Jahoda (1983) found that young Zimbabwe children (9–11) whose parents were engaged in retail trading or in farming and trading, especially when children helped, did understand the profit motive at an earlier age than the Western children (Jahoda 1979) in Scotland, the Netherlands (Jahoda 1983) or England (Furth 1980). The happy family view seems to be more prevalent among girls than boys (Leiser and Ganin, in preparation).

Individuals may continue to hold to the 'happy family' view at any age. Our finding (Leiser and Zaltsman, this issue) that the frequency of altruistic answers does not decrease with age in the kibbutz, whereas it does so among city children, illustrates this very well. In a recent investigation of adults' naive theories of economics, Salter (1986: 183) drew a related distinction. Cluster analyses of the main concepts appearing in adults' economic analyses led Salter to distinguish two basic types of tacit theories, which he dubbed the *supply* and the *demand* view. In the supply view, '... actions by individuals much like oneself drive important events. That is, the major causal forces in the economy are connected to the (aggregated) activities of individuals.' In the demand view, 'abstract forces operating "out there", are the major causal agents: the individual has a minor role while actions in an essentially isolated causal system affect the individual.' This distinction seems to be the adult form of the one presented here. Salter also notes that the first view 'implies a stronger notion of personal responsibility than the second view'.

Is it still possible to open a factory today? The proportion of children who denied this is very low (below 15% on average, across

ages) except for France (23%) and Yugoslavia (35%) where the proportion did change between 1988 and 1990, in keeping with the economic changes there. In particular, only nine percent of Polish children thought it impossible. We had suspected that some children might naively believe that the heroic period of economic creation had come to an end before their time. As it turns out, children at all ages do see the economy as a modifiable system, where enterprise and innovation have their place, at least within the structural confines of the economic system they know.

Mint

Who prints the money? The age trends are as follows: The concrete answer 'factory', while of course technically correct, drops somewhat (15%, 10%, 10%), as do 'others' and 'd.k.'. 'Government' as an answer increases (15%, 25%, 38%) and so does 'bank' (28%, 31%, 31%). Observe that this last category could originate from two different sources: either it is as a concrete answer, on a par with 'factory' (perhaps even inferred from seeing the miraculous output of automatic teller machines), or in the sense of a central bank. The latter itself may be a very advanced answer, more accurate than Government, or a superficial consequence of seeing the bank's name on the aptly called banknotes in many languages. In any event, considerations of the degree of independence of the central bank with respect to the government were doubtlessly remote from our subjects.

The roles of the government

We have several reasons for focussing on children's grasp of the economic roles of the government. First, the government is an important actor in the economy of a country; although the Central Bank usually decides on the rate-of-interest and the amount of money, in most countries the government has a major influence on these issues. In addition, the government decides on the subsidies to different industries, on taxes, and it also controls some purchase prices. Second, the degree to which the government controls the economy differs from one country to another. For example, in some countries the government is a main actor in the wage bargaining on the central level. In some countries it is also an employer of a large number of people. This invites interesting cross-national comparisons.



Fig. 5. Roles of the Government (by age). (Not adjusted for 'don't know'.)

How is the government's role perceived by the children? There are different role images attached to the government depending on the way the economy as a whole is conceptualized. In the 'happy family' model, its role is that of overall regulator. For people who see economic forces as an instrument, the government is one of many actors whose decisions may influence the working of this instrument. For both types of models, the government might become an important explanation for past and current economic events, either as a God-like providence who arranges things for the best, or as a scapegoat.

In an earlier study of Israeli children (Leiser 1983), we mentioned the difficulty in deciding whether the prevalent view of the government as a main actor was based on the factual role of the government, or on some other basis.

To investigate this issue further, we defined two new variables: 'government', which was the sum of the frequencies of government answers to questions on price determination, salaries and factories; and *don't know*, the sum of d.k. answers for the same questions (fig. 5).

There is a significant negative correlation between d.k. answers and government answer (Pearson $r = -0.48$; $p = 0.014$). It is not just the effect of age (Pearson r (age, don't know) = -0.46 ; $p = 0.020$). A multiple regression analysis shows that 'Government' and 'Age' do predict 'd.k.' answers fairly well (Multiple R : 0.605, $p = 0.0067$;

Government: $\beta = -0.400$ $p = 0.03$; Age: $\beta = -0.371$ $p = 0.045$). This pattern of results suggests that 'government' answers do substitute to some extent for 'd.k.' answers. This is readily understandable. As suggested in the earlier study (Leiser 1983) children below the age of eleven understand individuals and their mode of action, while larger collective entities and the aggregated affects of many individuals are harder for them to grasp. Their understanding is distorted, with people-like entities serving as explanatory principle, substituting where possible for unintelligible market forces. The 'government' can indeed serve as a welcome peg.

When will it though? There are considerable differences between countries. The frequency of Government answers divides the countries in three groups. The largest number of such answers was found amongst Israeli children, which replicates the results obtained with a lower class sample (Leiser 1983). An intermediate group is formed by Denmark, Norway, Poland, and Algeria; few of such answers are given by children from Yugoslavia, Austria and Finland.

Several factors may be responsible for these differences. Cultures differ in the relative acceptability of admission of ignorance and of guessing. The degree of pressure exerted by the interviewers and their skill in eliciting answers have an effect too. Most importantly, for the Government to function as a universal explanation, it must have a sufficiently high profile in the national life, economically or perhaps even only politically. These factors are hard to disentangle. For instance, the Finnish government has a low profile, while the Israeli Government is very dominant, both in the economic and in the political sphere. Further, in Finland, it is bad to be wrong, and better to remain silent. In Israel, it is bad to remain speechless, and pupils are encouraged to try, even guess. The variety of putative factors identified in this one case illustrates why it can be so difficult to find a meaningful pattern in the comparisons across countries.

The size of the public sector is an indicator on how large the government is as an employer. It also gives a hint on how much influence it has, because the role of the government is to regulate the economy. The OECD has comparable statistics for its member-countries on their taxes in relation to GNP (OECD 1986). These statistics can be seen as a measure of the size of the public sector. Denmark, Norway, and Sweden have the highest proportion of taxes in relation to GNP (49.8%–53.5%). Finland, France, Austria, and West Germany

constitute the group with the second largest percentage (37.5%–44.2%), and USA forms the third group with 28.9%. Israel, Yugoslavia, Poland, and Algeria do not belong to the OECD-organization. It is therefore difficult to get comparable statistics from these countries.

If the conception about the role of the government is based on its factual role as employer, that should show up on answers to the question ‘Who pays salaries’. Children of the first group of nations should more frequently mention the Government as the employer paying salary than children from groups 2 and 3. The ratio of government to (government + boss) answers in the answers to question 2.1 (Who pays the salary?) yielded the following results:

- for countries in group 1 (large public sector):
 - Norway 0.23
 - Denmark 0.47
- for countries in group 2 (medium large public sector):
 - France 0.125
 - Austria 0.106
 - Finland 0.132
 - West Germany 0.03

indicating that children are somehow aware of how large an employer the government (state) is in their country.

Multi-dimensional scaling

To get a synoptic view of the data on this part of the questionnaire, we subjected the answer proportions to an MDS⁶ (multi-dimensional scaling) analysis. We considered each combination of a country and an age group as a single case. Every such case was characterized by a response profile, consisting of the proportion of answers given for each answering category in each question of the ‘Understanding’ section of the questionnaire. City-block distances between all the pairs of profiles were determined, yielding a distance triangular matrix. The resulting matrix was fed to an MDS Guttman algorithm, which produced fig. 6.

The algorithm run successively with 4, 3, 2 and 1 dimensions, and the corresponding stress values were 0.08, 0.14, 0.2 and 0.38. A 2-D interpretation is therefore warranted, and indeed, two dimensions are

⁶ All the statistics were computed with the CSS program by StatSoft.

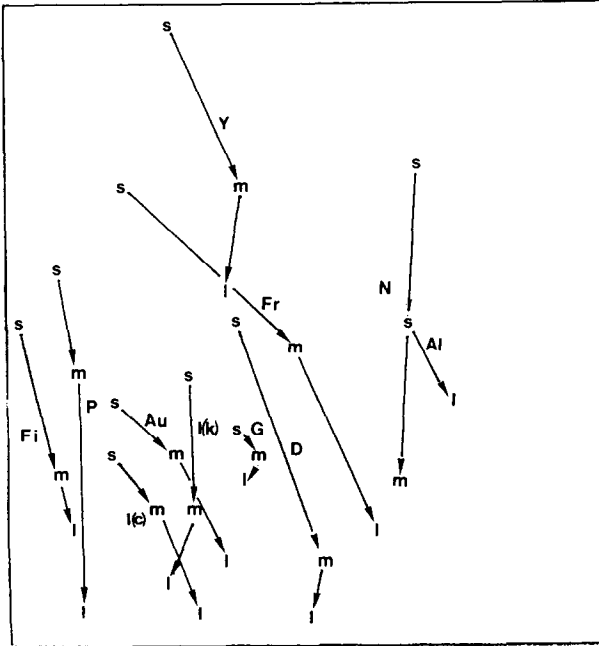


Fig. 6. Multi-dimensional scaling of all Understanding questions.

apparent. The age trend is unmistakable, and runs parallel in all countries, illustrating the metaphoric notion that children in diverse countries exhibit a different but parallel development during the age interval studied.

The perpendicular dimension is much harder to interpret. Along this dimension, the countries are: Algeria, Norway, Yugoslavia and France, Denmark, West Germany, Austria, Israel, Poland, and Finland. One effort was to use Hofstede's (1980) dimensions differentiating countries (power distance, uncertainty avoidance, individualism–collectivism, and masculinity). Many countries appear in both his and our samples. Unfortunately, we found no significant correlations between his interesting four dimensions and our data. Without clearer hypotheses about what differentiates the countries, it seems prudent to reserve judgment about the significance of the data.

(2) Reasoning

The questions in this section tested how far children understood the economic consequences of various events that would significantly affect the national economy.

Drop in shoe prices

'Suppose it were announced on TV that there will be a drop in shoe prices. How would various economic agents react?'

Mother's reaction would be straightforward: she would be glad, buy more shoes, or buy them now. The shopkeeper might be sad (55%: less money) happy (30%: more customers) or both (15%). The reactions of the 'head of the factory'⁷ are similarly unclear: 35% think he will be unhappy, because he will get less money, 30% feel that, on the contrary, he will be pleased since the volume of sales will increase. The rest are dispersed: about 9% feel he will be unhappy, since he will have to work more, about 5% declare he does not care, while about 10% do not know what to expect. Finally, subjects found it hard to anticipate the government's reaction: the proportion of d.k. slides from about 40% to 30%. About twenty-five percent expect the government to be pleased with this economic development. Ten percent think that it *must* be pleased since it brought that change about, while slightly more, about 12%, predict that the government will be displeased. About 7% feel that government members do not care, since they are rich anyway, while a further 10% think that for the government, such issues are a matter of indifference. Curiously, no age trend is to be found in all those answers, except for the mild decrease in the d.k. category.

An unexpected cross-cultural finding was that, in some countries (e.g., France), some subjects, including the youngest, proved skeptical: they declared they simply would not believe the advertisements and announcements, whether commercial or governmental.

Natural resources

What if oil (or diamonds, or gold) were found? The main age trends are as follows: a decrease in those who feel that only the *finders* would

⁷ (*sic*) This might be the owner or the boss. In their sample, Berti and Bombi (1988: 139) found that the concepts only differentiate around age 11. A different age is given by Goldstein and Oldham (1977).

become rich (30%, 25%, 15%); a sharp increase in those who mentioned a *chain* of consequences: one effect begetting another (12%, 30%, 35%); an increase in those who think *everybody* would become richer (30%, 35%, 40%). The share of d.k drops to nil (20%, 12%, 2%).

Tax abolition

What if all taxes were abolished? This extreme fiscal policy has a clear pattern: d.k. answers drop precipitously. Those who see good consequences increase somewhat with age (22%, 25%, 34%), those who see bad consequences remain almost stable (34%, 34%, 28%), and mainly, there is a sharp increase in those who see both a good and a bad side to this policy (8%, 15%, 30%).

Money distribution

What would happen if the government were to print lots of money and distribute it to the people? This other monetary policy also shows a clear age trend. As they grow older, fewer and fewer youngsters think it would be *economically* sound (54%, 45%, 36%), and most of them become aware of various untoward economic and social consequences (36%, 50%, 58%). There is also a small and dwindling set that looks for *practical* impediments to the implementation of the policy, rather than for economic and social considerations (12%, 5%, 3%).

(3) Attitudes ⁸

Few age trends were detected in the answer frequencies, and those were weak. The clearer differences in this section are across countries. A graphic illustration is afforded by the MDS (see fig. 7): ⁹ the three age groups of each country are clustered together, while the countries themselves are spread out. Before returning to the general cross-cultural comparisons, let us see the specific questions.

⁸ Since the data on the third question in this section is missing for many countries, our discussion will pertain to the first two questions only.

⁹ Norway and Algeria have so many missing data in this question that their inclusion in this MDS would be misleading.

social status and consequences for society, which needs to tend the poor. Self-esteem and psychological pressure are infrequently mentioned.

The comparison of countries discloses some differences. Thus, in Poland social status is very important, even more so than buying power. This may perhaps be because social status facilitates contact with the suppliers of goods in an economy marked by overall scarcity. Denmark emphasizes self-esteem while the social consequences of destitution are often mentioned in Yugoslavia.

Middle-class attitudes

The neo-Marxist view (Cummings and Taebel 1978) is supported by those findings: middle-class children, who are relatively well-off, tend to think that this is not sheer injustice but the consequence of objective personal characteristics.

'Middle-class' means different things in different countries, and there are differences in the results amongst countries. Some emphasize more personal causes, while for others it is the system which is responsible. Amongst those who favor 'personal' causes, Israel stands out, followed by Finland, Algeria, Poland, Denmark, Austria and France. Only two countries follow the opposite pattern: Yugoslavia, and Norway.

Let us now return to the MDS of attitudes and to the position of the various countries in it. What is the dimension that clusters the countries in fig. 7? An MDS of the *answer categories* (not reproduced here) yielded two clear clusters. One is constituted by three categories: the 'personal characteristics' answers to the question on the causes of wealth and poverty, and on the causes of unemployment, and the 'effect on buying power' answer to that on the consequences of wealth and poverty. When set out against the other answer categories, all clustered closely together, the dimension spanned might be interpreted as that of 'locus of control': high values on 'personal characteristics' and 'buying power' would reflect internal locus of control, a more individualistic attitude. Of especial interest in this context is the kibbutz sample. While there was no difference between the two Israeli samples in fig. 6 (understanding), the two do differ greatly with regard to attitude. Starting at the 'individualistic' end of the scale, children from the collectivities move all the way to the other end.

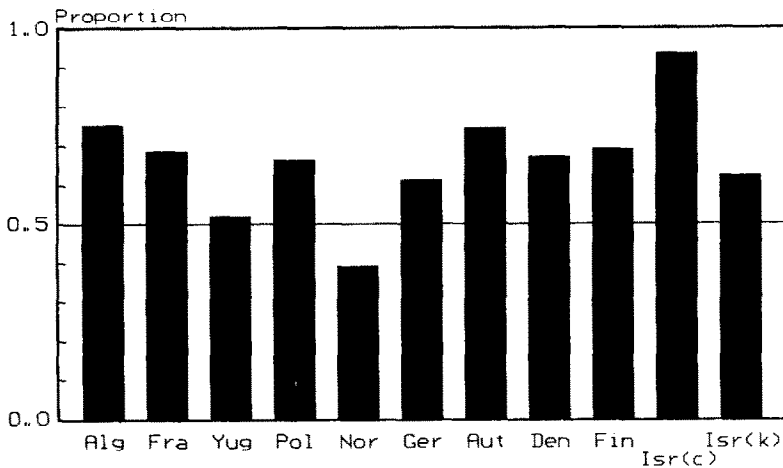


Fig. 8. Locus of Control: Proportion of 'personal' answers out of the sum of 'personal' and 'system' answers to the Attitudes questions.

A compatible alternative would be to observe that fig. 7 corresponds to a North/South divide: above the diagonal are Finland, Germany, and Denmark. Below, Israel, Austria, France and Yugoslavia. This might be a separation by culture: Protestant, Nordic European culture versus Catholic, Jewish, Mediterranean culture.

The horizontal dimension may also be interpreted with the help of one of Hofstede's dimensions, alluded to above, namely 'uncertainty avoidance'. The Uncertainty Avoidance Index, corrected for age is: Finland 54, Denmark 32, West Germany 53, Israel 73, Austria 77, France 73, and Yugoslavia 77. The Spearman rank correlation between the horizontal position and uncertainty avoidance is $r = -0.80$ ($p < 0.05$).

Uncertainty avoidance (in adults) is characterized by an inner urge to work hard; the uncertainty in life is felt as a continuous threat that must be fought; conflict and competition can unleash aggression and should therefore be avoided; there is a great concern with security in life; belief is placed in experts and their knowledge, while ordinary citizens are incompetent compared with authorities, etc. Hofstede (1980) elaborates the dimension as follows:

'Uncertainty avoidance indicates the extent to which a society feels threatened by uncertain and ambiguous situations and tries to avoid these situations by providing greater career

stability, establishing more formal rules, not tolerating deviant behaviors, and believing in absolute truths and the attainment of expertise. Nevertheless, societies in which uncertainty avoidance is strong are also characterized by a higher level of anxiety and aggressiveness that creates, among other things, a strong inner urge in people to work hard.'

Linking this dimension with the questions of this part of the questionnaire has obvious face validity.

A discrepant pattern is formed by the three Polish age groups, where the age trend is strikingly different from that in other countries. Wosinski and Pietras (this issue) suggested that in Poland the three age groups do not only represent the appropriate ages; the country's economic climate changed profoundly, and the subjects' attitudes reflect not only the current situation, but also the national climate in the country during their formative years. More specifically, it only gradually dawned upon the Polish people that their country's economy was in a state of crisis, and even later that major restructuring would be required. The alternation of optimism and pessimism in the country would explain the peculiar arc formed in the MDS by their three samples. If this interpretation is correct – and it was put forward without the benefit of comparative data – the critical period for attitude formation it illustrates is an extremely important finding.

Conclusions

This study compared economic socialization in ten countries. Its data are uncommonly robust, as they rely on a large and carefully matched sample and procedures (990 individual interviews). Beyond the sheer size of the sample, its composition, spread over a broad range of countries, cultures, and political and economic regimes gives it a stability that could never be obtained in any one country.

Many *age trends* were documented in this way, some of which had already been described in previous work (see Berti and Bombi (1988) for the younger age set, and for adolescents Furnham's (1987) review). Understanding deepens and widens with age, while attitudes are fairly stable. One way to summarize several of the trends is that young children conceptualize the economy from the perspective of 'social man', whereas some older children have shifted the conceptualization to that of the 'economic man'.

The comparison of *countries* yielded less intelligible results. Nevertheless, support was found for two tentative conclusions:

When *institutional conditions* differ between countries, this is reflected in the answers. For example, the dominance of the government (public, state) as a (visible) economic actor (for example as employer) is reflected in how frequently the government is mentioned as an actor by the children. The reasoning about a drop of shoe prices forms another clear case.

When *cultures differ* between countries, it is reflected in the answers. Attitudes towards wealth and poverty measured by questions about causes and consequences of wealth, poverty, and unemployment differ between children from different countries. Our results show that values related to economic events vary not only between countries but also within different segments of the same population (Israel). One illustration of this link is that an individual's economic condition is attributed to personal/individual factors and effort (locus of control).

Despite these observations, cross-cultural findings are harder to interpret than age trends. As was noted by Berti and Bombi, children's conceptions are only loosely tied to the available information, so that it is extremely difficult to predict what the effect of a particular environment will be on children's economic conceptions. Several factors may have reinforced this tendency: (1) The *conditions* of the interviews: subjects of a country were often interviewed by the same interviewer, while subjects of different countries were interviewed by different people. (2) The *population*: 'middle-class' may have a very different meaning in Algeria, Yugoslavia and Denmark. (3) The *size* of the sample: if we trace an age trend, we have about 400 subjects in each age group. If we wish to document national differences, there are only 90, and if we restrict our attention to only one age group, such as the oldest, we have only 30 subjects. (4) Guiding *hypotheses*: in a developmental study, one knows what type of trend to look for: from primitive to more elaborated conceptions. Too many comparisons are possible between countries for 'fishing expeditions' to be productive.

From this point of view, we are fortunate to have several such specific comparisons in the collection of papers presented in this issue. Thus, we have a comparison of Yugoslavia before and after the liberalization of the economy; a comparison between a former colonial power (France) and one of its former dominions (Algeria); and a comparison between city and kibbutz in Israel. In each case, specific

differences between the two groups explained the differences in the patterns of answers.

In this summary, we accounted with some success for several patterns in the data by reference to various explanatory dimensions. These explanations were largely post hoc, and the present study, despite its size, remains exploratory. Future international investigations should start off with specific differences, such as the role of the government in labor negotiations and disputes (Leppänen 1988), the size of the public sector, the prominence of the government in the news, the welfare state, the socialist ideology, or dimensions such as those identified by Hofstede (1980): power distance, uncertainty avoidance, individualism–collectivism, and masculinity. These would guide the selection of several relevantly different countries and the design of an appropriate set of questions. In this way, we can hope to deepen further our understanding of how objective factors in a child's environment can affect his developing understanding of economic and social mechanisms.

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