Neil Gandal, Sonia Roccas, Lilach Sagiv, Amy Wrzesniewski<sup>1</sup>

# **Personal Value Priorities of Economists**

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# Abstract

Economists often play crucial roles in designing and implementing public policies; thus it is of importance to better understand the values that underlie their decisions. We explore the value hierarchies of economists in four studies: The first two studies examine whether value differences exist between students of economics and other social sciences students. The final two studies examine how value priorities important to economics students relate to identification with the organization and work orientation. Taken together, our findings indicate that economists have a distinctive pattern of value priorities that may affect their work-related perceptions and attitudes and hence impact their policy decisions and recommendations.

Key-words: economists, policy makers, self-interest, values.

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<sup>&</sup>lt;sup>1</sup> Gandal: Tel Aviv University, Michigan State University, and CEPR; Roccas: corresponding author, <u>soniaro@oumail.openu.ac.il</u>, The Open University of Israel; Sagiv: The Hebrew University; Wrzesniewski: New York University

# Introduction

Currently there is a debate raging on the allocation of spectrum policy, the alternatives being either a property based approach vs. a commons based approach.<sup>2</sup> The property advocates argue that spectrum rights are best allocated by selling spectrum to the highest bidder (typically via an auction) because this will insure the efficient allocation of spectrum. The commons advocates argue that spectrum is not a tangible thing and that interference between radio waves is no longer a problem given the advances in wireless technology; hence a commons approach is the appropriate one. We could explain the difference in policies in terms of knowledge and expertise, but it's possible that the advocates have different values regarding the use of the market system and that these values affect their policy positions.

As the above example illustrates, policy decisions are guided by complex specialized knowledge, not easily understood by the public. (For example, do radio waves collide and what are these emerging wireless technologies?) Policy decisions hence depend to large degree on the professionalism of policy advisors. However, people's decisions are affected not only by the conscious, proper use of the knowledge they hold. To a large extent they reflect underlying beliefs, assumptions and goals. In other words, they reflect personal values of the policy makers. In this research we examine personal values of policy-makers to be and some of the possible implications.

Values are conceptions of the desirable that guide the way persons select actions, evaluate people and events, and explain their actions and evaluations (cf. Kluckhohn, 1951; Rohan, 2000; Rokeach, 1973; Schwartz, 1992). Values express what people believe to be good or bad, and what

<sup>&</sup>lt;sup>2</sup> This example comes from "Spectrum policy: property or commons?" by Bill McCarthy, April1, 2003, available at the Mobile Radio Technology web site <u>http://iwce-mrt.com/ar/radio\_spectrum\_policy\_property</u>.

they think should or should not be done. Thus, examining the values of policy makers provides important insights for some of the factors underlying their perceptions, attitudes and decisions.

To examine values we draw on Schwartz's theory of personal values. According to Schwartz values differ in the motivational goals to which they are directed (Schwartz, 1992). Schwartz identified ten value types forming a circular structure. The distinctiveness of the ten values and their structural relations has been verified in the vast majority of the more than 200 samples from 65 countries (Schwartz, 1992; 1994; Schwartz & Sagiv, 1995).

The relationships between the ten value types can be summarized into two basic conflicts. The first conflict is *self-enhancement vs. self-transcendence*. Self enhancement values emphasize the pursuit of self-interest by focusing on gaining power and control over people and resources (power) or by demonstrating ambition and competence according to social standards and attaining success (achievement). These values conflict with self-transcendence values that emphasize serving the interests of others: expressing concern and care for those with whom one has frequent contact (benevolence) or expressing acceptance, tolerance, and concern for all people regardless of group membership (universalism).

The second conflict is *openness to change vs. conservatism*: Openness to change emphasizes openness to new experiences: autonomy of thought and action (self-direction), novelty and excitement (stimulation). These values conflict with conservatism values that emphasize preserving the status quo: commitment to past beliefs and customs (tradition), adhering to social norms and expectations (conformity) and preference for stability and security for self and close others (security). Hedonism values share elements of both openness and self-enhancement and are in conflict with self-transcendence and conservatism values.

In the current research we focus on the values of economics students. Economists play a central role in forming and implementing public policy. They hold key positions in governmental and other public institutions where they advise policy makers in diverse areas such as international trade policy, monetary & fiscal policy, and regulatory policy. It is thus important to study the factors that implicitly affect the perceptions and attitudes of economists, which are likely, in turn, to influence the policies they adopt and endorse.

The training process of economists usually starts in university departments. We hence focus on university students and conduct four studies: The purpose of the first two studies was to examine whether value differences exist between students of economics and other social sciences students. In Studies 3 and 4 we examined how value priorities important to economics students relate respectively to identification with the organization and work orientation. Taken together, our findings indicate that economists have a distinctive pattern of value priorities that may affect their work-related perceptions and attitudes and hence impact their policy decisions and recommendations.

#### Study 1: Do economists have different values than other people?

Although no study has assessed the values important to economists, several studies have pointed out differences in values-related behavior between economists and other people. In the first study that compared economists and non-economists, Maxwell and Ames (1981) found that free riding was significantly higher among economics graduate students than among other student groups. Using an ultimatum bargaining game, Carter and Irons (1991) compared the behavior of economics students with those from other disciplines and found that economics students exhibited the most self-interest. Finally, using a prisoner's dilemma game, Frank, Gilovich and Regan (1993) found that when it was not possible for respondents to commit to their strategies<sup>3</sup>, economists defected much more often than non-economists. Collectively, these findings support the contention that economists are more likely than others to behave in a self-interested manner.

Other results suggest, however, that economists are no more self-interested than other groups. In the same study described above, Frank, Gilovich and Regan (1993) also found that economists reported slightly more hours spent in volunteer activities than non-economists. In addition, Yezer, Goldfarb and Poppen (1996) found that envelopes left in rooms about to be occupied by economics classes were slightly *more* likely to be returned than envelopes left in rooms about to be occupied by non-economics students. In sum, the results are inconclusive. In some settings, there is evidence that economists are more self-interested than others; in other settings no differences were apparent. In this study, we focus on values underlying self-interested versus altruistic behavior.

Five of the ten value types are relevant to the investigation of self-interest versus altruism: achievement, hedonism and power (*self-enhancement* values) emphasize enhancement of one's own personal interests, even at the expense of others. People who emphasize self-enhancement values want to be successful and powerful. They aspire to control people and resources, are ambitious, and wish to gain general acclaim for their successes. We expect economists to attribute high importance to these values relative to people from other disciplines.

Universalism and benevolence (*self-transcendence* values) emphasize promotion of the welfare of both close and distant others. People who attribute importance to self-transcendence values emphasize concern for others. They value social justice and equality, as well as responsibility, loyalty, and helping those who are in need. We expect economists to attribute low

<sup>&</sup>lt;sup>3</sup> Commitment in this context means that defection (at a later stage) after agreeing to cooperate is not possible.

importance to these values relative to people from other disciplines.

# Method

Two samples of Israeli college students participated in this study:

- *Sample 1:* 97 students of economics (65 female).
- Sample 2: 165 students from other social science disciplines, primarily communications, political science, and sociology (83 female).

The students were informed that participation in the study was voluntary, and completely anonymous. Students received a small monetary compensation (approximately \$5) for taking part in the study.

The importance that respondents attributed to each one of 56 single values as guiding principles in their lives was measured with the Schwartz (1992) value inventory. Respondents rated the importance of each value as a guiding principle in their life on a 9-point scale that ranged from "opposed to my principles" (-1), and "not important" (0), to "of supreme importance" (7). The asymmetry of the scale reflects the natural distribution of distinctions that individuals make when thinking about the importance of values, observed in pretests when building the original scale. Because values are typically seen as desirable, they generally range from somewhat to very important. The standard indices recommended in Schwartz (1992, 1994) were used to measure the priority given to each type of value.<sup>4</sup>

# Results

Column 1 of Table 1 presents the means and standard deviations of the value types for the sample of economics students. Column 2 presents the value priorities of students from other

departments. The differences between the values of the two groups were tested using a MANOVA analysis. The department (economics vs. other departments) was the independent variable, and importance attributed to achievement, power, hedonism, universalism and benevolence values were dependent variables.

# Table 1 about here

Economists placed more value on achievement (F(1,259)=16.02, p<.001), hedonism (F(1,259)=5.68, p<.02), and power (F(1,259)=4.15, p<.05). Similarly, economics students attributed less importance to universalism values than did students from other disciplines (F(1,259)=8.83, p<.01). Contrary to our expectations, there was no significant difference between economists and non-economists in the importance attributed to benevolence (F(1,259)=1.43, n.s.).

### Discussion

Economics students differed in their value priorities from other social sciences students: the former attribute importance to power, achievement and hedonism values more than the latter. The findings concerning altruistic values are more complex: Students of economics attribute less importance to universalism values than did other students. However they attribute nearly the same importance as others to benevolence values. Universalism and benevolence values place emphasis on care for the welfare of others. Universalism, however, relates mainly to others in a general sense, that is, to society as a whole. Individuals who attribute high importance to universalism care about social justice, and equality. Benevolence values, on the other hand, focus on the preservation and enhancement of the welfare of people with whom one is in frequent contact. Thus we might

<sup>&</sup>lt;sup>4</sup> For more evidence regarding reliability and validity, see Schmitt, Schwartz, Steyer and Schmitt (1993), Schwartz

summarize by saying that economists make good friends or neighbors, but are relatively less concerned with the welfare of people who are not part of their "in-group."

These findings may help to interpret the inconsistencies found in past research: In mixed-motive games, economists behaved less cooperatively than others, while in other settings (mainly in field experiments examining altruistic behavior), economists behaved no differently than others. We argue that the two opposing patterns of behavior reflect two different situations: Mixed motive games represent a highly competitive setting that enables individuals who emphasize self-enhancement values to express them, by competing with others. Thus, in such settings, economists tend to behave more competitively than others. In contrast, field experiments that examine altruistic behavior usually do not include explicit competition. Behavior in such setting may reflect the importance attributed to benevolence values and therefore no differences are found between economists and others.

Two processes could lead to the differences found between economics students and students from other disciplines. First, a self-selection process may be operating in which students who emphasize self-enhancement values could be particularly attracted to studying economics. Second, students may undergo socialization processes during their studies. Thus the training provided by economics departments could affect the importance students attribute to different values.

The two processes are not necessarily mutually exclusive. Past research has found evidence for both processes. Frank, Gilovich and Regan (1993) found that students generally showed a tendency towards more cooperative behavior in prisoner dilemma games the nearer they were to graduation, but this trend was absent for economics majors. The authors interpreted these findings as providing some evidence of a training effect (Frank, et al., 1993). In contrast, Carter and Iron

<sup>(1992),</sup> Schwartz and Sagiv (1995), Schwartz, Verkasalo, Antonovsky and Sagiv (1997).

(1991) found in an ultimatum bargaining game that differences in behavior were already present in a group of entering freshmen. Thus, their findings provide support for the self-selection process. In Study 2 we tested the selection versus socialization processes.

#### **Study 2: Selection vs. Socialization Process**

To test whether the value priorities characteristic of economics students were the result of self-selection or of the training they received, we compared two additional samples of economics students. One sample reported their values during the first week of their freshmen year, and the other at the end of that year. Increased importance of self-enhancement and decreased importance of universalism values relative to the freshmen year would indicate that training in economics affected values. Self-selection would produce the value pattern found in Study 1 both at the beginning and at the end of the freshmen year.

#### Method

Two samples of Israeli college students participated in this study. *Sample 1:* 199 economics students (82 female) reported their values the first week of their freshmen year. *Sample 2:* 152 economics students (62 female) reported their values two weeks before the end of the freshman year.

Values were examined with the same instrument used in Study 1. The survey given to the participants in the first sample included two additional measures: after reporting their personal values participants received a questionnaire measuring their identification with the economics department and their perception of its status.

# Results

To test the robustness of our findings in Study 1, we first compared the economic students in Study 2 with the non-economics students in Study 1. As found in Study 1, economics students attributed higher importance to self-enhancement values and lower importance to universalism (but not benevolence) values (all F > 8.0, all p < .005).

Column 1 of Table 2 presents the means and standard deviations of the value types for the economics students who participated in the study during the first week of their freshmen year. Column 2 presents the value priorities of economics students sampled at the end of their freshmen year. The differences between the values of the two groups were tested using a MANOVA analysis.

### Table 2 about here

The sample (beginning vs. end of the freshmen year) was the independent variable, and importance attributed to achievement, power, hedonism, universalism and benevolence values were dependent variables. There were virtually no differences between the value priorities of the two samples, and none of the differences were statistically significant.

#### Discussion

Our findings indicate that the value differences between students of economics and students from other disciplines were already apparent before students were exposed to training in economics. Economics education, at least in the first year, did not lead to attributing more importance to values expressing self-interest. In sum, our findings support a self-selection process, and do not support a socialization process explanation for the value differences.

Having established significant differences in values, we now turn our attention to the consequences of having different value priorities. Values express motivational goals, and affect people's focus of attention (e.g., Ruscher & Fiske, 1990; De Dreu & Boles, 1998), the way they interpret information (e.g. Sattler & Kerr, 1991; Van Lange & Liebrand, 1989), and the types of things they worry about (Schwartz, Sagiv, & Boehnke, 2000). Consequently, values are strongly linked to the opinions people hold: Values are related, for example, to socio-political attitudes (Rokeach, 1973), religiosity (Schwartz & Huismans, 1995; Roccas & Schwartz, 1997), decisions in social dilemmas (Feather, 1995), and voting (Barnea & Schwartz, 1998). In our next two studies we focused on organizational membership and work motivation and examined how they are affected by the importance attributed to self-enhancement versus self-transcendence values. In Study 3 we focus on identification with groups. In Study 4 we examine work orientations.

#### **Study 3: Identification with groups**

People are motivated to identify with groups that are generally seen in a positive light rather than with groups that are seen negatively, because the former are more useful in maintaining a positive sense of self (Tajfel & Turner, 1979; 1986). The relation between group status and identification has been examined both in experimental studies, generally based on artificial groups, and in correlational studies, generally based on real groups. These studies consistently showed that people tend to identify more with high status groups than with low status groups (e.g. Ellemers, van Knippenberg, de Vries, & Wilke, 1988; Ellemers, Doosje, van Knippenberg, & Wilke, 1992; Ellemers, 1993; Mael & Ashforth, 1992). The relation between group status and identification, however, depends on one's personal value priorities (Roccas, 2003). The importance attributed to self-enhancement and self transcendence values moderates the relationship between status and identification: people who attribute high importance to self-enhancement are much more sensitive to their group's status than those who attribute low importance to these values. Thus, the relationship between status and identification is much higher among those who attribute high importance to self-enhancement values than among those who attribute low importance to these values. Roccas, 2003).

In this study, we examined the relationship between group identification and perceived group status among members of two groups: a group of economics students who, as shown in Studies 1 and 2, attribute particularly high importance to self-enhancement values, and a group of employees of an environmental organization. We chose the latter group because we expected them to emphasize (opposing) values of self-transcendence. We tested the hypothesis that identification with one's group would be related to the perception of the group's status among economics students but not among members of the environmental organization.

### Method

Two samples were included in this study:<sup>5</sup>

- Sample 1: 199 respondents from Study 2.<sup>6</sup>
- Sample 2: 124 employees of an environmental organization (72 female, mean age 30.41 SD=11.12) who answered through a mail survey (50% response rate).

Identification was measured with a 12-item questionnaire ( $\alpha$ =.85), which assessed the

degree to which the respondents attributed importance to their group membership either as students of economics or as employees of the environmental organization. Some of the items were based on questionnaires developed by Brown and Williams (1984), and by Mael and Ashforth (1992). Sample items included: Being a (name of group) is an important part of my identity; When I talk about (name of group) I usually say 'we' rather than 'they'; It is important to me that I am a (name of the group). Respondents indicated their agreement with the statements, on a 7-point scale ranging from strongly disagree (1) to strongly agree (7).

Perceived group status was measured with a 4-item questionnaire ( $\alpha$ =.86), which assessed the degree to which the respondents perceived their group as having high status. Sample items included: (name of group) is considered to be prestigious; Members of (name of group) are considered to be successful. Respondents indicated their agreement with the statements, on a 7-point scale ranging from strongly disagree (1) to strongly agree (7).

# Results

Column 3 of Table 2 presents the means and standard deviations for the value types of the employees of the environmental organization. We compared these values to those of the economics students sampled during the first week of their freshmen year (column 1).<sup>7</sup> The differences between the values of the two groups were tested using a MANOVA analysis. The group (economics vs. environmental) was the independent variable, and importance attributed to achievement, power, hedonism, universalism and benevolence values were dependent variables.

The two groups differed extensively in their values: Economists attributed a higher degree of

<sup>&</sup>lt;sup>5</sup> In both samples, participation was voluntary, without monetary reward, and the questionnaires were anonymous.

<sup>&</sup>lt;sup>6</sup> Two participants were dropped from analyses due to incomplete responses.

<sup>&</sup>lt;sup>7</sup> The same results would be obtained by employing column 2 rather than column 1.

importance to achievement (F(1,318)=38.03, p<.001), hedonism (F(1,318)=37.61, p<.001), and power (F(1,318)=103.38, p<.001) values. Accordingly, employees of the environmental organization attributed significantly more importance to universalism (F(1,318)=84.90, p<.01) and benevolence (F(1,318)=23.89, p<.001) values.

Table 3 presents the means and standard deviations of identification and perceived status, as well as correlations among identification and status for the two groups. Respondents in both groups identified rather strongly with their respective groups. The two groups differed, however, in the extent to which identification was related to the perception of the status of the group. As expected, among students of economics, identification was strongly related to the perception that the economics department had high status.

# Table 3 about here

Economics students identified more strongly with their department the higher they perceived its status to be (r=0.54 p < .001). In contrast, among employees of the environmental organization, the correlation between perceived status and identification with the organization was close to zero (r=0.12 n.s.).

#### Discussion

Perceiving that an in-group has high status does not always lead to stronger identification with that group. We found that perceived status is related to identification among economic students (who emphasize self-enhancement values), but not so among members of the environmental organization (who emphasize self transcendence values). These findings are consistent with those of Roccas (2003) who found in a series of studies that the importance attributed to self-enhancement and self-transcendence values moderates the relationship between identification and perceived group status.

The two groups in our study differed on other dimensions besides their values. The members of the environmental organization were older, had significant work experience and were asked about identification with their work organization rather than their university department. Could any of these variables account for the weak association we found between identification and status in the environmental organization sample? Findings from previous studies provide some evidence to the contrary: positive relations between status and identification were previously found in adult samples -- both when asked about their profession (Roccas, 1997) and when asked about their alma mater (Mael &Ashfort, 1992). We further discuss some practical implications of our findings in the general discussion.

In Study 4 we explored the relations of self-enhancement versus self-transcendence values to work orientation.

#### **Study 4: Values and work orientation**

Drawing from the work of Bellah et al (1985), Wrzesniewski, McCauley, Rozin and Schwartz (1997) describe three dominant orientations toward work: Job, Career and Calling. People who hold a *Job* orientation focus on the material benefits of work and tend to ignore benefits of different sorts. For them, work is a means to a financial end that allows people to survive, and provides them with resources to enjoy their time away from work. In contrast, people with a *Career* orientation focus on the rewards that accompany advancement through an occupational structure. Work is a venue used to pursue the increased wealth, prestige, and status that come with promotion and advancement. Finally, individuals with a *Calling* orientation work not for financial rewards or for advancement, but for the meaning and fulfillment that work produces for them. They usually believe that their work contributes to the greater good and makes the world a better place. Thus, for them, work is an end in itself.

Why are work orientations important? Wrzesniewski and Dutton (2001) reason that work orientation influences the ways people "craft" their work roles: how they structure their work, define their responsibilities and work objectives, and design their roles and tasks. Thus, work orientation determines, for example, what task structure is likely to yield optimal performance, and which pay-off structures are likely to effectively motivate employees. In Study 4 we examined the ways in which self-enhancement and self transcendence values are related to the three work orientations.

Self-enhancement values reflect the motivation to gain power and control over other people and resources (power values) and to express competence and success (achievement values).<sup>1</sup> These motivations are most compatible with a *Career* work orientation. This orientation focuses on promotion and advancement which brings higher self-esteem, increased power, and higher social standing (Bellah, et al., 1985: 66, Wrzesniewski, et al., 1997). In contrast, emphasizing power and achievement values is inconsistent with the *Job* work orientation, which views work as means to obtain sufficient financial revenue. This view contrasts with the core of self enhancement values which emphasize striving for self advancement, personal achievement and power. Finally, we expect no relation between self-enhancement values and a *Calling* orientation. The latter reflects viewing work as a path for fulfillment and meaning in life. This perception does not promote nor does it block the attainment of self-enhancement goals. We therefore hypothesized that emphasizing power and achievement values will correlate positively with a Career work orientation and negatively with a Job orientation. We expect the relation with Calling orientation to be near zero.

Self-transcendence values reflect care and concern for the welfare of those close to oneself (benevolence), motivation for tolerance and acceptance of others, and concern for all people and for the world (universalism). These motivations are compatible with the *Calling* orientation that reflects the goal of contributing to society and making the world a better place. In contrast, self-transcendence values are incompatible with the Career orientation because the latter focuses primarily on self-interest. Finally, Job orientation does not allow for the attainment of self transcendence goals of care for others. However, as Wrzesniewski, et al (1997) propose, a Job orientation provides people with opportunities to find meaning in their lives outside the work setting. We therefore hypothesized that emphasizing benevolence and universalism values will correlate positively with Calling orientation and negatively with Career orientation. We expect no relation between benevolence and universalism values and Job orientation.

# Method

Two samples were included in this study:<sup>8</sup>

- Sample1: 88 Israeli university students (45 female, mean age 22.4, SD=1.73)
- Sample 2: 56 American university students in a Masters of Business Administration program who were also employed in full-time jobs (24 female, mean age 28.89, SD=3.44).

Work orientation was measured with a 10-item scale (Wrzesniewski et al., 1997) designed to

assess the strength of each work orientation.<sup>9</sup> Respondents indicated how much each item described how they felt about the work they usually did using a 5-point scale ranging from not at all (1) to very much (5). Sample items included:

- I expect to be in a higher level job in five years (Career);
- My work makes the world a better place (Calling);
- My main reason for working is financial (Job).

### Results

Exploratory factor analysis of the work orientation with an oblique rotation (Promax) forcing three factors accounted for 54% of the total variance in the American sample and 55% in the Israeli sample. Table 4 presents the factor loadings from the three-factor solution, for each sample. In both samples, the three 'work as a career' items were primary loaded on one factor. The three 'work as a job' items were mainly loaded on a second factor. Finally the five 'work as calling' items were primarily loaded on a third factor in the Israeli sample. Four of these five items primarily loaded on this factor in the American sample as well.

#### Table 4 about here

The correlations between personal value priorities and the three factor scores are presented in Table 5. We hypothesized that emphasizing self-enhancement values will correlate positively with Career and negatively with Job work orientation. Findings were highly consistent across the

<sup>&</sup>lt;sup>8</sup> Data were gathered in groups of 30-40 respondents. In both samples participation was voluntary and the questionnaires were anonymous.

<sup>&</sup>lt;sup>9</sup> Values were examined with the same instrument used in Study 1.

two cultural groups, and all hypothesized correlations were in the expected direction. We therefore collapsed the two samples. As expected, achievement values correlated positively with Career orientation (r=.28; p<.05) and negatively with Job orientation (r=.25, p<.05). Emphasizing power values correlated positively with Career orientation, as expected (r=.19; p<.05) but the correlation with Job orientation was near zero (-.01, ns.). Consistent with our expectations, correlations of power values with Calling orientation were essentially zero.

# Table 5 about here

We hypothesized that emphasizing self transcendence values will correlate negatively with Career orientation and positively with Calling orientation. As expected, universalism values correlated negatively with Career orientation (-.30; p<.05) but the correlation between universalism values and Calling orientation was near zero (-.01). Conversely, benevolence values correlated positively with Calling orientation, as expected (.22; p<.05) but the correlation between benevolence values and Career orientation was weak and non-significant. Finally, consistent with our expectations, the correlations of universalism and benevolence values with Job orientation were near zero (.07, -.13).

#### Discussion

The findings of Study 4 support most of our hypotheses regarding the relations of values to work orientation. Career orientation was positively correlated with emphasizing power and achievement values and negatively with emphasizing universalism values. Job orientation correlated negatively with achievement values. Finally, Calling orientation correlated positively with attributing high importance to benevolence values. Findings were highly consistent across the two cultural groups studied. Most important to the current research is the finding that attributing high importance to achievement and power values and low importance to universalism values – that is, having the value profile that is characteristic of economists – is clearly related to having a Career work orientation. In other words, economists are more likely than others to have a Career work orientation and emphasize their own advancement and success in their occupation. Below we discuss some of the theoretical and practical implications of these results.

# **Conclusions and Implications**

We began our investigation by comparing values of students of economics to those of students from other fields of social science. Students of economics attribute more importance to power, achievement and hedonism values and less importance to universalism values than students from other fields. These differences were already apparent at the very first stage of the professional training, and persisted throughout their first year at the university.

What are the implications of endorsing this distinctive value profile? Values influence people in their perceptions and interpretations of situations, and hence direct people in their decisions, choices and behaviors. In the case of policy makers, such decisions and choices are likely to have a strong societal impact. Obviously, decisions of economists and other policy makers are a product of professional judgment. However, even when decisions are based on an explicit analysis of costs and benefits, the valences of these costs and benefits are influenced by personal value priorities. We exemplify this point relying on our findings in studies 3 and 4.

Study 3 focused on the association between identification and perceived status. Findings indicate that group identification is strongly related to perceived group status among students of

economics but almost unrelated to perceived status among employees of an environmental organization. Organizations often look for ways to enhance the identification of their members. Thinking that organizational status has a crucial role in creating and maintaining organizational identification might lead economists to emphasize organizational status at the expense of other factors such as organizational cohesiveness, meaningful mission, or opportunities for personal growth.

Such an emphasis might, in the long run, affect the composition of the organization. People choose organizations that fit their personal goals and values (Schneider, 1987; Schneider et al, 1995). Organizations that emphasize status will be particularly attractive to people who attribute high importance to self-enhancement values. This might have undesirable consequences for institutions in which emphasizing self-transcendence values is especially important, such as organizations providing medical care or educational institutions. Returning to spectrum policy in the U.S., the efficiency argument for allocating spectrum via auctions rather than via technical "beauty contests" was made a part of the public policy debate by economists in what was then known as the Office of Plans and Policy at the FCC<sup>10</sup>.

In Study 4 we found that emphasizing self-enhancement values correlates with a Career work orientation. This orientation is therefore likely among economists. A Career orientation may shape organizational environment: As managers, bankers, and financial advisers, economists' decisions and actions may form differential payoff systems and design promotion policies that are best suited for those who hold a Career orientation. This would have consequences for the satisfaction and effectiveness of employees--- people who view their work as a Career would strive

<sup>&</sup>lt;sup>10</sup> Broadly speaking, auctions are efficient in the sense that the license goes to the bidder with the highest value for the spectrum.

in such institutions but those who view work as a Calling might be frustrated.

A Career orientation may also impact economists in their roles as public policy makers. Consider administrators negotiating with teachers' representatives. A Career orientation might lead the administrator to focus on career related and self-interested demands (e.g., salary raise, promotion opportunities) rather than communal related demands (e.g., a demand for smaller classes, resources devoted to students with special needs).

Taken together finding of the present research underscore the importance of achieving better understanding of the value priorities of professionals involved with public policy decisions. Ultimately policies are determined not only by one's expert knowledge but also by one's perceptions' evaluations and values. Our findings call for a general exploration of the value profiles characterizing individuals who choose different professional paths. This line of research will lead to a better understanding of the perceptions, implicit assumptions, and world views underlying the decisions made by individuals in these professions when holding public roles and positions. Barnea, M.F. & Schwartz, S.H. Values and Voting. Political Psychology, 1986, 19, 17-40.

- Bellah, R.N., Madsen, R., Sullivan, W.M., Swidler, A. & Tipton, S. M. Habits of the heart: Individualism and commitment in American life. New York: Harper & Row. 1985.
- Brown, R. & Williams, J. Group identification. The same thing to all people? *Human Relations*, 1984, 37, 547-564.
- De Dreu, C.K.W. & Boles, T. Share and share alike or Winner take all? The influence of social value orientation upon choice and recall of negotiation heuristics. *Organizational Behaviour and Human Decision Processes*, 1998, 76, 253-276.
- Ellemers, N. The influence of socio-structural variables on identity management strategies. In W. Stroebe & M. Hewstone (Eds). European review of social psychology, 4, 27-57. Chichester, England: Wiley. 1993.
- Ellemers, N., Doosje, B., van Knippenberg, A. & Wilke, H. Status protection in high status minority groups. *European Journal of Social Psychology*, 1992, 22, 123-140.
- Ellemers, N., van Knippenberg, A., deVries, N. & Wilke, H. Social identification and permeability of group boundaries. *European Journal of Social Psychology*, 1988, 18, 497-513.
- Feather, N.T. Values, valence, and choice: The influence of values on perceived attractiveness and choices of alternatives. *Journal of Personality and Social Psychology*, 1995, 65, 1135-1151
- Roccas, S. *The Effects of Group and Individual Characteristics and their Interaction on Identification with Groups.* Unpublished doctoral dissertation, The Hebrew University of Jerusalem, Israel. 1997.
- Roccas, S. The effect of status on identification with multiple groups. *European Journal of Social Psychology*, 2003, 33, 351-366.

- Roccas, S. & Schwartz, S.H. Church-state relations and the association of religiosity with values: A study of Catholics in mix countries. *Cross-cultural research*, 1997, 31, 356-375.
- Rohan, M. A rose by any name? The value construct. *Personality and Social Psychology Review*, 2000, 4, 255-277.
- Ruscher, J.B. & Fiske, S.T. Interpersonal competition can cause individuating processes. *Journal of Personality and Social Psychology*, 1990, 58, 832-843.
- Sattler, D. & Kerr, N.L. Might vs. morality explored: Motivational and cognitive bases for social motives. *Journal of Personality and Social Psychology*, 1991, 60, 756-765
- Schmitt, M.J., Schwartz, S.H., Steyer, R. & Schmitt, T. Measurement models for the Schwartz Values Inventory. *European Journal of Psychological Assessment, 1993, 9*, 107-121.
- Schwartz, S.H., & Huismans, S. Value priorities and religiosity in four western religions. *Social Psychology Quarterly*, 1995, 58, 88-107.
- Schwartz, S.H., Verkasalo, M., Antonovsky, A. & Sagiv, L. Value priorities and social desirability: Much substance, some style. *British Journal of Social Psychology*, 1997, 36, 3-18.
- Schwartz, S. H., Sagiv, L. & Boehnke, K. Worries and values. *Journal of Personality*, 2000, 68, 309-346.
- Tajfel, H. & Turner, J.C. An integrative theory of social conflict. Reprinted W.Austin & S.Worchel (Eds), The social pshychology of intergroup relations (2<sup>nd</sup> ed.) Chicago: Nelson Hall. 1986.
- Van Lange, P.A.M. & Liebrand, W.B.G. On perceiving morality and potency: Social values and the effects of person perception in a give-some dilemma. *European Journal of Social Psychology*, 1989, 3, 209-225.
- Wrzesniewski, A. & Dutton, J. Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 2001, 26, 179-201.

- Wrzesniewski, A., McCauley, C.R., Rozin, P. & Schwartz, B. Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, 1997, 31, 21-33.
- Yezer, T., Poppen, P. & Goldfarb R. Does Studying Economics Discourage Cooperation? Watch What We Do, Not What We Say or How We Play. *Journal of Economic Perspectives*, 1996, 10, 177 - 186.

# Table 1: Mean Importance Attributed to Value Types by Economics Students and by Students from other Departments (standard deviations in parentheses)

	Value type	Students from Other	Economics		
		Social	Students		
		Science Departments			
-	# of students	165	97		
-	Hedonism	4.23 (1.27)	4.57 (1.38)		
	Power	3.31 (1.21)	3.54 (1.12)		
	Achievement	4.55 (0.95)	4.88 (.89)		
	Benevolence	4.73 (0.96)	4.80 (.83)		
	Universalism	4.25 (0.94)	3.95 (.78)		

# Table 2: Mean Importance Attributed to Value Types by Economics Students and byEmployees of an Environmental Organization (standard deviations in parentheses)

Value type	<u>e</u> Economics students: Economics students:		Employees of
	Beginning of	End of Freshman	environmental
	Freshman year	Year	organization
# of students	199	152	
Hedonism	4.85 (1.26)	4.81 (1.00)	4.13 (1.30)
Power	3.72 (1.08)	3.69 (1.26)	2.71 (1.16)
Achievement	4.91 (0.88)	4.84 (0.96)	4.52 (.98)
Benevolence	4.61 (0.82)	4.65 (0.88)	5.11 (.79)
Universalism	3.87 (0.94)	4.01 (0.95)	4.76 (.89)

	1	1 ,
	Economics students	Employees of
		environmental
		organization
Identification	4.44	4.24
	(1.02)	(.92)
Perceived status	3.23	4.05
	(1.13)	(1.00)
Correlation of identification	.54	.12

 Table 3: Mean Identification, Perceived Status and Correlation of Status and Identification

 of (standard deviations in parentheses)

and status

		USA			IL	
	1	2	3	1	2	3
Career						
My work is a stepping stone	.76	.14	14	.80	.07	.20
I don't think success I measure	.55	10	04	.48	.10	47
by promotion (r)						
Expect to be in a higher	.75	.07	.17	.57	02	19
position						
Job						
Work for financial support	02	.86	14	.10	.67	11
Would retire if could	06	.77	.09	14	.71	39
Have no choice but to work	.11	.74	16	09	.82	18
Calling						
Would work if wouldn't get	.19	38	.67	35	37	.61
paid						
Do the same work in future	20	.33	.71	25	06	.76
My work is important	32	41	.49	.06	22	.76
My work makes the world	10	.22	.15	.05	17	.76
better						
Would choose the same	.06	.05	.86	04	30	.76
profession again						

# Table 4: Factor Loadings (pattern coefficients) of the Work Orientation Items

	All	USA sample	IL sample
	Career		
Achievement	.28*	.44*	.21*
Power	.19*	.31*	.16
Universalism	30*	54*	21*
Benevolence	10	02	17
	Job		
Achievement	25*	22	33*
Power	01	.02	.02
Universalism	.07	.10	.17
Benevolence	13	10	19
	Calling		
Achievement	.04	02	.08
Power	08	09	02
Universalism	01	.02	04
Benevolence	.22*	.14	.29*

# Table 5: Correlations of Values and Work Orientations