SOCIAL IDENTITY INFLUENCES ON ENVIRONMENTAL ATTITUDES AND BEHAVIORS

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Abstract. The present study examines the relations between values and social identity, their influence on assessing natural environment and one's options to do something to improve the state of environment. The sample consisted of 416 residents of Hiiumaa island (representative random sample of the adult population). Social identity was measured using the abridged version of Collective Self-Esteem Scale (Crocker & Luhtanen 1992) and composite indexes of self categorization; value orientations were measured using the abridged version of the Schwartz value scale; composite indexes of environmental attitudes and behaviors were constructed. The author emphasizes the fact that identification with a group serves as a basis for behavior regulation, which is accompanied by collectivistic values and the following of group interests.

Introduction

The given study observes how social identity and the relevant values influence attitudes and behavior towards natural environment. Tajfel (1978, 1982) has proposed a useful definition of social identity as the part of an individual's self-concept which derives from his knowledge of his memberships of a social group (or groups) together with the value and emotional significance attached to that membership.

The identification of individuals with a group gives human behavior certain super-individual strength of activity. Social identity appears a regulator as long as people behave differently towards those with whom they do not identify themselves. It is caused by the fact that identity is accompanied by a definite trust-mistrust (Therborn 1991). The more essential a social group appears for a person, the more he is dominated by collective norms and values. The size of the groups may vary from an individual to the whole population of the world. Social identification begins to decrease when we move higher in hierarchy, towards bigger and more abstract groups. While in bigger groups it is difficult to stress

social motives, in smaller subgroups it is possible that social motives or orientation towards cooperation appear maximal.

Individuals subject their interests to common interests when they identify themselves with social advantage, when the advantage of a certain group is very clearly expressed and connected with that certain group only. When the resources can be approached by several different groups, the consequences can be worse (Brewer & Schneider 1990).

A successful economy of resources has usually taken place in small communities. These groups are characterized by stability, little mobility of population, and the fact that the majority of the members of the group consider economizing on these resources important.

Identity and environment

The connection of individuals with their social and physical environment is a multidimensional phenomenon wherein it is possible to differentiate between at least two essential dimensions. Thus Riger and Lavrakas (1981) have defined such dimensions as 1) rootedness – or physical attachment; and 2) bondedness – or social involvement.

The first – connection with a location or place attachment is an emotional bond of individuals or groups with their environment (Altman & Low 1992:2). Sometimes the notion of place identity is used as a synonym for place attachment. According to Korpela (1995:19) place identity appears in the form of cognitive aspects (meanings) composed by physical environment and its components, which are used by people to regulate, either consciously or subconsciously, their selfexperience in the given physical environment. Older people and people in a poorer socio-economic situation show stronger place attachment (McAndrew 1998). Riger and Lavrakas (1981) have presented the number of years lived in a given location, as well as the ownership of a property, as factors influencing place attachment. Thus place attachment is accompanied by time dimension, which is connected with recognition of one's roots and a defined wish to be connected to the place in the future. An example of time criterion could be the wish that one's children would live in a given place. The ownership of a property indicates economic investments of an individual. It has been found that owners display stronger place attachment than tenants (Logan & Spitze 1994). At the same time it can be assumed that the presence of property, as well as connection with a place, increase connection of individuals with their social group and through that influence their environmental evaluations. In identification an essential role is played by the relations with the neighbors and support received from them (Meschi & Manor 1998). Unlike the relationship between place attachment and environmental evaluations, which has been relatively extensively studied, the relationship between collective identity and natural environment has received comparatively little attention (Kaufmann & Zimmer 1998). While dealing with

collective identity, we proceed from the theory of social identity. Tajfel (1978, 1982) has proposed a useful definition of social identity as the part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership. The theory of social identity was developed by Henri Tajfel and John Turner in 1979 (Tajfel 1981, Tajfel & Turner 1979). The theory includes three main ideas – categorization, identification and comparison.

The theory of self-categorization (Turner 1991) makes it possible to analyze human self and connections between the self, social norms and social context. One of the aspects of self is the cognitive aspect - the way individuals categorize themselves. When a person identifies himself as a member of a group, his selfconcept becomes depersonalized, i.e. people tend to see themselves in the light of such common stereotypes, which identify their group membership (the characteristics that define their common social identity) and they tend not to perceive themselves as single individuals having their peculiarities (Hogg & Turner 1978). The adaptation of categories to oneself has been depicted in the theory of social identity through the following process. Firstly, people categorize themselves as a special social category or attribute a social identity to themselves. Secondly, they develop and learn stereotypical norms corresponding to the given category. Thirdly, they adapt their behavior to the norms, therefore their behavior becomes more normative, when the given social identity is prevailing or actual (Hogg & McGarthy 1990). Thus, the stronger the person's identification with a group, the more he tries to adjust his behavior with the norms of the given group, because an identity which gets actualized in certain context, determines values, attitudes and understanding that lead the activity of the person. The categories used with regard to group membership or at personal level, are consensualized, conventional and socially constructed and in addition they depend on a specific historic context (Turner et al 1987). For instance, in national context a person begins to behave in the way he thinks the members of the given group are expected to behave (Anderson 1993).

Social identification

In addition to cognitive aspects, also emotional aspects of group processes are accentuated in the theory of social identity. When social categorization changes self-identification of an individual and creates a value system, then from the moment when categorization becomes effective, and a person identifies himself as a member of a group, he acquires an identity not only in his own view but also in that of the others. Thus the position of a person in social network is identified. Tajfel defined *social identification* as knowledge about belonging to a group, together with emotional meaning and value being attached to that belonging. Social identity serves as an essential basis of self-esteem and has a vital importance for estimating oneself (Tajfel 1978:63). Group membership is also

accompanied by a "collective self-esteem", reflecting the pride a person feels in belonging in the group (Luhtanen & Crocker 1992). Brewer (1981:356) assumes that belonging in a group is accompanied by a depersonalized trust in the other members of the group, i.e. that the people within the group can be trusted, whereas trusting the members of another group may be connected with a greater risk.

Individuals strive to achieve positive social identity, therefore they value more the groups they belong to than other groups. The more positive our feelings towards the group where we belong, the higher is our self-esteem (Luhtanen & Crocker 1992).

Social comparison. When people categorize themselves as group members, their self-assessment is connected with the group, therefore they need to think positively about the group. The theory of social identity relies on the fact that according to certain evaluative characteristics, the members of the group where we belong essentially differ from other people (Tajfel 1978). The theory suggests that one important reason for the difference lies in differentiation of positive traits, which allows the members of the group to improve their self-esteem. Each group member who wants to preserve his positive identity and positive self-assessment tries to maximize the difference between the group where he belongs and other groups, relying on certain dimensions of comparison.

Construction of positive social identity does not presuppose only positive assessment of the group where one belongs, but it is also essential to assess one's group positively in relation with other groups relevant to the given group (Tajfel & Turner 1979). In addition to that, when groups compare themselves to the others according to certain dimensions, and the comparison is not favorable to them, they may find new dimensions allowing them to look better than other groups (Tajfel & Turner 1979).

The theory of social identity allows to deal with groups of different sizes, as at each concrete level of categorization it is accompanied by respective norms, values and evaluations. The influence of social identity to the evaluations given to the environment has received little attention in studies (see Bonaiuto et al 1996). As identity is accompanied by control (White 1992), it should also involve environmental questions. At the same time it has been found that social identity can essentially influence evaluations given to the environment, while it is accompanied by disregard for environmental dangers (Bonaiuto et al 1996).

Social identity is tightly connected with values (Heaven 1999). It is considered that social identity suggests acceptable attitudes and ways of thinking (Vaughan & Hogg 1995). The greatest differences between social identity and values appear on the individualism – collectivism scales. Several authors (Hinkle, Brown & Ely 1992, Triandis 1993:160) have noted that differences between their own group and other groups are much more important for individualists who consider self-realisation and status more essential. Other studies have also pointed out the fact that individuals evaluate their own group differently depending on individualism – collectivism (Luhtanen & Crocker 1992). The role of values in regulation of

attitudes and behavior towards natural environment has been closely studied in the article by Raudsepp (see this journal 2001).

In the given work we rely on the model according to which environment-friendly behavior and assessments can be influenced by hedonistic calculations, values and identity (Shamir 1990). In the context of this study we observe more closely the factors influencing behavior on a more abstract level of regulation – values and identity. When social identity dominates, values more important for the given group are followed. Social dilemmas are solved proceeding from the interests of the given group, not of an individual. On the one hand, when a person behaves according to the conceptions of a certain social group, he is ready for altruism, for solving social dilemmas proceeding from the interests of the given group. On the other hand, when an individual proceeds from his own existential situation the result of his behavior is different. In that case the individual is mainly motivated by hedonistic calculations. On the basis of values and identity it is difficult to predict concrete behavior, but it enables to predict the general tendency of the behavior (Shamir 990).

Method

Sample

Hiiumaa is a small island on the west coast of Estonia with a population of about 10,000 people. The natural environment of Hiiumaa appears one of the least damaged in Estonia. The inhabitants of the island highly evaluate the protection of natural environment. The fact that Hiiumaa belongs to a biosphere reserve, plays an important role in it. Therefore local media channels cover issues of environmental protection more frequently than it is done in other regions of Estonia. In the course of our study carried out in 1999, a questionnaire was applied on a random sample of 416 people (a co-operative study with the Hiiumaa Centre of the West Estonian Archipelago Biosphere Reserve). The initial sample was composed on the basis of a computer-generated random choice. If the person selected was not available, a substitute, sharing the gender and age with the initial respondent, was selected by the computer. 45.9 per cent of the respondents were men and 54.1 per cent women.

Indicators

To measure collective self-esteem an abbreviated and adapted version of the Collective Self-Esteem Scale by Luhtanen and Crocker (1992) was used. Collective self-esteem responds to the notion of social identity used by the theory of social identity (Luhtanen & Crocker 1992). The abbreviated scale had eight questions (five-variant responses from 'I fully agree' to 'I do not agree'). The reliability indicator of the scale alpha was 0.81. (mean 19.97; SD = 5.85).

Value orientations were measured using abridged version of the Schwartz value scale (Schwartz & Bilsky 1987). Schwartz distinguishes 10 (motivational) value types. Definitions and details about value orientations see Raudsepp (2001, Trames in the same issue).

Perception of norm reflects an understanding of how friendly to the environment is the behavior of the neighbors, friends and acquaintances. The questions summarized are: 'how many of your neighbors (inhabitants of your village) try to behave in a way friendly to the environment' and 'how many of your friends and acquaintances try to behave in a way friendly to the environment'. The response options on the four-point scale ranged from 'nobody' to 'the majority'. (Mean 6.12; SD = 1.37).

Perception of local environmental problems reflects the extent to which the respondents are interested in the state of forests and beaches of Hiiumaa, contamination of the environment in Estonia and the state of the subsoil water in their home region. There were 3 response options: 'I am extremely interested', 'I am interested to some extent' and 'I am not interested'. (Mean 3.79; SD = 1.06).

Perception of global environmental problems reflects the extent to which the respondents are interested in the changes in the ozone layer of the earth, acid rains in Europe and the resistance capability of the Northern nature to industrial pressure. There were 3 response options: 'I am extremely interested', 'I am interested to some extent' and 'I am not interested'. (Mean 5.56; SD = 1.51).

Sustainable behavior towards nature – responses to the following questions have been summarized: if the family tries to dispose of harmful waste together with the rest of the waste, if they buy environment-friendly products, if they buy products produced in Estonia, if they use electricity sparingly, if they use washing detergents harmless to nature, if they avoid wasting water. There were 4 response options, ranging from 'yes, we always try to do it' to 'certainly not, it is out of the question'. (Mean 10.16; SD = 3.39).

Support – responses to the following questions have been summarized: 'how often have you received support from your neighbors for solving your problems' and 'how often have you helped neighbors to solve their problems'. There were 5 response options ranging from 'often' to 'never'. (Mean 5.16; SD = 2.13).

Possibility – responses to the following questions have been summarized: 'can your family do anything to improve the status of the environment at home, in your home village/town, in Hiiumaa, in Estonia, in the world'. The response options varied from 'we can do a lot -1' to 'we can do nothing -5'. (Mean 14.44; SD = 4.91).

Being a Hiiumaa inhabitant – the categorizing feature has been summarized, weather a person considers himself a typical Hiiumaa inhabitant (yes – no) and if he can say 'us' about Hiiumaa inhabitants (certainly can; can, but with difficulty; can not). (Mean 2.67; SD = 0.83).

Neighborhood – with how many neighboring families do the respondents have friendly relations. (Mean 3.98; SD = 1.48).

Positive attitudes toward the forest. The original scale was compiled (in cooperation with G. Tamm) to study the assessment given to forest. There were 10 questions on the scale. The reliability measure alpha was 0.63. Altogether three factors were distinguished: the first one described positive attitude towards the forest (31.9 per cent), the second the feelings connected with the forest (14.1 per cent) and the third on the forest as a source of income (13.3 per cent). Only the first one was used in the subsequent analysis (positive attitudes towards the forest). (Mean 10.95; SD = 4.05).

Aims and hypotheses of the study

The main aim of the study was to find out the relations between values and social identity, their influence on assessing natural environment and one's options to do something to improve the state of environment. Theoretically, the question was to which extent social identity and values as relatively abstract factors regulate social behavior toward natural environment. The hypotheses of the study were the following:

- I. Social identification is accompanied by collectivist values.
- II Social identity influences the perception of group norms and concern about local environmental problems. Social identity does not influence the concern about global environmental problems.
- III. Social identity influences the preserving of natural environment as a resource the respondents who identify themselves more act in a more sustainable way and assess more highly their options to do something to improve the natural environment.

Results of the study

I. Social identification is accompanied by collectivist values.

The Collective Self-Esteem Scale (CSES) allows us to measure the extent of social identification. In addition, categorizing characteristics as well as the fact of being connected with a certain group reflect social identity. Correlations between those characteristics and values have been given in Table 1.

Those respondents who categorize themselves as typical Hiiumaa inhabitants and consider the Hiiumaa inhabitants in a group as 'us', display stronger identification as measured on the CSES scale. In addition to the categorizing characteristics, identification is influenced by assessment of the support received from and given to the neighbors. Those respondents who feel stronger support from the neighbors, identify themselves more. At the same time the CSES scales and categorizing of the self are tightly connected (r = 0.35, p < 0.01). Those characteristics are relatively loosely connected with the neighborhood relations.

Intercorrelations among social identity indicators and values

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|-------------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 1. CSES | _ | | | | | | | | | | | | | |
| 2. Support | .15** | _ | | | | | | | | | | | | |
| 3. Being a Hiiumaa | .35** | .13** | _ | | | | | | | | | | | |
| inhabitant | | | | | | | | | | | | | | |
| 4. Neighborhood | 17** | 33** | 11* | _ | | | | | | | | | | |
| 5. Universalism | 12* | 13** | 13* | .07 | _ | | | | | | | | | |
| 6. Power | 09 | 03 | 12* | .02 | .21** | _ | | | | | | | | |
| 7. Self-direction | 02 | 01 | .04 | .06 | .54** | .42** | _ | | | | | | | |
| 8. Tradition | 18** | 10* | 21** | .21** | .55** | .22** | .32** | _ | | | | | | |
| Benevolence | 23** | 20** | 17** | .17** | .63** | .20** | .35** | .51** | _ | | | | | |
| 10.Achievement | 09 | 03 | 03 | .09 | .27** | .53** | .51** | .20** | .28** | _ | | | | |
| 11. Stimulation | 02 | .01 | .02 | 03 | .15** | .55** | .44** | .08 | .13** | .52** | _ | | | |
| 12. Hedonism | 02 | .14** | .01 | 11* | .05 | .43** | .24** | 03 | .09 | .37** | .57** | _ | | |
| 13. Conformity | 24** | 09 | 25** | .23** | .56** | .19** | .23** | .57** | .66** | .20** | .02 | .04 | _ | |
| 14. Security | 10* | 09 | 13** | .07 | .64** | .26** | .41** | .44** | .62** | .31** | .11* | .13** | .57** | _ |

Pearson bivariate correlations**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed)

One reason may be the fact that neighborhood relations are related to hedonistic values. Schwartz (1992) has defined 10 types of values of which he has considered achievement, hedonism, stimulation and self-direction as individualistic; whereas benevolence, tradition and conformity have been defined as collectivistic values. Between those two groups such values as universalism and security remain, which do not represent either of the mentioned orientations (Schwartz 1992). Thus the determiners of neighborhood relations are not only the characteristics proceeding from the theory of social identity but also individualistic values. CSES and categorizing of the self are clearly related to such collectivistic values as tradition, benevolence, conformity and security. Therefore the hypothesis that social identification is accompanied by the acceptance of certain values and following them, is confirmed.

II. Social identity influences the perception of group norms and the concern about local environmental problems. Social identity does not influence the concern about global environmental problems.

In order to study the influence of different aspects of social identity and values to environmental attitudes and behavior, we applied regression models. The ENTER method was used. In the results only statistically significant correlation has been given.

 $Table\ 2$ Multiple regression analysis predicting perception of environmental norms and concern about local and global environmental problems. Standardized regression coefficients (beta).

| Variables | Perception of environmental norms Beta | Global environmental problems Beta | Local environmental problems Beta |
|-------------------|--|--|-----------------------------------|
| Universalism | .04 | 30** | 38** |
| Power | 09 | .14* | .06 |
| Self-direction | 02 | 21** | 07 |
| Tradition | .09 | .01 | .05 |
| Benevolence | .03 | .09 | .13 |
| Achievement | .11 | 00 | .01 |
| Stimulation | 13 | 03 | 08 |
| Hedonism | 04 | .10 | .15* |
| Conformity | .00 | .05 | .06 |
| Security | .02 | 06 | 10 |
| Neighborhood | .19** | 06 | 16** |
| Being a Hiiumaa | 14** | 07 | .00 |
| inhabitant | | | |
| CSES | 07 | .07 | .16** |
| Support | 08 | .07 | .08 |
| Multiple R | .42 | .43 | .48 |
| R Square | .17 | .19 | .23 |
| Adjusted R Square | .14 | .16 | .20 |

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Based on the theory of social categorization it is logical to presume, that categorizing oneself as a group member, one perceives that group members follow rules. At the same time the given model shows that the perception of group norms was mostly influenced by neighborhood relations and categorizing characteristics, but not by the Collective Self-Esteem Scale. Thus perception of norms is only moderately influenced (17 per cent) by self-identification and values.

Social identification also influences the concern about local environmental problems. Therefore the data confirm the relations between the perception of environmental problems and social identification discovered by earlier studies (Bonaiuto, Breakwell, Cano 1996). In addition to the factors of social identification the concern about local environment is also related to individualistic values and universalism. Concern about global environmental problems is first and foremost influenced by individualistic values and universalism. Factors of identification with a group do not influence the concern about global environmental problems. Thus the hypothesis that values accompanying social identity involve only the environment connected with a certain group not the whole environment, is confirmed.

III. Social identity influences preserving natural environment as a resource – the respondents who identify themselves more, act in a more sustainable way and assess more highly their options to do something to improve the natural environment.

 $Table \ 3$ Multiple regression analysis predicting sustainability, possibility to improve the state of the environment and positive attitudes towards the forest. Standardized regression coefficients (beta).

| Variables | Sustainability Beta | Possibility Beta | Positive attitudes towards the forest Beta |
|----------------------------|------------------------|---------------------|--|
| Universalism | 04 | 29** | 35** |
| Power | 08 | .10 | .09 |
| Self-direction | 03 | 17* | .07 |
| Tradition | 14* | .17* | 07 |
| Benevolence | 04 | .14 | 05 |
| Achievement | .22** | 00 | 01 |
| Stimulation | .00 | 02 | 03 |
| Hedonism | .13* | .05 | .04 |
| Conformity | .03 | 05 | 02 |
| Security | 13 | .02 | .06 |
| Neighborhood | .00 | .09 | 11* |
| Being a Hiiumaa inhabitant | 01 | 06 | 04 |
| CSES | .23** | .19** | .19** |
| Support | .06 | .05 | .05 |
| Multiple R | .44 | .35 | .49 |
| R Square | .19 | .12 | .24 |
| Adjusted R Square | .16 | .09 | .21 |

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

The respondents who identify more with a group and who have less dominating individualistic values behave more sparingly towards nature. Social identity, neighborhood relations and universalistic values also influence positive attitude towards the forest. The assessment of opportunities of one's own family to do something to improve the condition of the environment is influenced by the factors of social identification and in addition to universalism also by individualistic as well as collectivistic values. Thus our third hypothesis that social identity influences the assessment of natural environment and its preservation finds confirmation – the respondents who identify more behave in a more nature-preserving way and consider their own options to do something to improve natural environment higher.

Discussion

The study observed the relations between values and identity and their influence on assessing natural environment and one's options to do something to improve the state of environment. The hypotheses logically proceeded from the theory of social identity, and were confirmed. Thus identification with a group serves as a basis for behavior regulation, which is accompanied by collectivistic values and the following of group interests. It is essential to stress the fact that the theme of values first and foremost serves to emphasize the individualistic collectivistic trend. The article by Raudsepp (2001) published in the Collection of Articles gives a more detailed discussion on the topic. As a negative aspect of social identity, the fact should be stressed that the concern about environment involves only the environment related to one's own group. Therefore the concern about global environmental problems would presuppose identification with larger associations than a group. At the same time it is necessary to emphasize that social identity and values are relatively abstract factors regulating social behavior, and when certain hedonistic calculations get involved their proportion may decrease even more. It could be presupposed that environmental questions related to social identity get actualized mainly when a bigger number of problems connected with natural environment is involved. The natural environment of Hiiumaa is considered one of the purest environments in Estonia and therefore the concern about environment is not necessarily expressed so clearly. Consequent studies should thus more thoroughly handle the mutual relationship of the three aspects regulating social behavior while solving concrete dilemmas related with natural environment. In addition to that, the questions requiring theoretical solution proceed from the mutual relations of local identity, national identity and identities related to larger associations (European, etc.), and to the extent the larger associations play a role in behavior regulation.

Proceeding from the theory of social identity, the relations between Collectivistic Self Evaluation Scales and self-categorizing could be assumed, which were evident in the given study. Therefore the given scales appear a suitable tool of measurement in the studies proceeding from the theory of social

identification. In order to find out about the three components – categorizing, identification and comparison – comparison with other social groups should be stressed. In the present study the scales helped to bring out the moderate influence of social identity on evaluations of natural environment.

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APPENDIX

Abbreviated version of the Collective Self-Esteem Scale. Adapted from the scale by Luhtanen and Crocker (1992).

| | I fully agree 1; I do not agree 5 | | | | | | |
|---|-----------------------------------|---|---|---|---|--|--|
| Hiiumaa inhabitants generally respect me | X | X | X | X | X | | |
| I think that I can do a lot for the benefit of Hiiumaa | X | X | X | X | X | | |
| I am often proud of the fact that I come from Hiiumaa | X | X | X | X | X | | |
| I am often glad for the Hiiumaa inhabitants | X | X | X | X | X | | |
| It is generally thought that Hiiumaa inhabitants are doing well | X | X | X | X | X | | |
| Hiiumaa inhabitants are rather highly appreciated | X | X | X | X | X | | |
| Being a Hiiumaa inhabitant essentially influences my feelings | X | X | X | X | X | | |
| towards myself | | | | | | | |
| Being a Hiiumaa inhabitant is an essential part of me | X | X | X | X | X | | |