

The Data Set on the Multiple Abilities¹

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Abstract

This paper presents a data set on multiple abilities. The abilities cover the Literacy and Math Ability, the Creative and Innovative Ability, the Learning Ability, the Communication Ability, the Social Competency, the Self-Management Ability, the Environmental Awareness, the Civic Competency, the Intercultural Awareness, and the Health Awareness. The data stems from a unique cross-sectional survey carried out for the adult population in Denmark. Several dimensions and many questions pinpoint and measure every ability. The dimensions cover areas such as the individual behavior at work, the individual behavior in leisure, the motivation for using an ability, the working conditions for using an ability, and the educational conditions for using an ability. The paper defines every ability and describes the dimensions and the questions underlying the abilities. It reports the categories of answers, the respondents, and the frequency of answers for every question. The paper includes the questionnaire.

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1 The Introduction

Several abilities are considered to be key competencies for individuals for a successful life and a well-functioning society in a knowledge-based economy. The areas cover the Literacy and Math Ability, the Creative and Innovative Ability, the Learning Ability, the Communication Ability, the Social Competency, the Self-Management Ability, the Environmental Awareness, the Civic Competency, the Intercultural Awareness, and the Health Awareness, see Box 1

Box 1: The Multiple Abilities

1. Literacy and Math Ability covers *reading comprehension and math*
2. Creative and Innovative Ability is the *ability to create new products or services*
3. Learning Ability is the *ability to acquire new knowledge*
4. Communication Ability is the *ability to argue one's own opinion and to understand others*
5. Social Competency is *the ability to interact with others*
6. Self-Management Ability is the *ability to carry out tasks independently*
7. Environmental Awareness is the *ability to contribute to environmental responsibility*
8. Civic Competency is the *ability to participate in democratic decisions*
9. Intercultural Awareness is the *ability to comply with complexity of foreign cultures*
10. Health Awareness is the *ability to assume responsibility for body and health*

The successful life involves gainful employment and income, personal health, political participation, and social networks. The well-functioning society includes economic productivity, democratic processes, social cohesion, and ecological sustainability.

Every competency is expected to be used simultaneously and be important not just for specialists but for all individuals. Furthermore, each competency is anticipated to contribute to valued outcomes for individuals and societies and to help individuals face the complex challenges and demands of the world today and in future.

The competencies are defined and selected theoretically in the project, the “Definition and Selection of Key Competencies: Theoretical and Conceptual Foundations” (DeSeCo) undertaken by the OECD from 1997 to 2003. The project, linked to PISA, was meant to assist member states with the further development of measures and to provide them with a reference point for obtaining more

complete measures. The project involved country perspectives as well as experts from a wide range of disciplines and institutions, see Rychen and Salganik (2003) and the OECD (2005).

The competencies are measured and pinpointed empirically in the Danish project, the “National Competence Account” (NCA). The Danish project developed the questions and the dimensions by involving a wide range of researchers. Several ministries undertook the project as a joint work from 2001 to 2005. Statistics Denmark carried out the survey for a representative sample of the adult population in 2004, see Department of Education (2005).

This paper presents the data set on the multiple individual abilities. The paper defines the ten abilities and presents the dimensions and the questions which measure and pinpoint the abilities. Additionally, it reports the categories of answers, the respondents, and the frequency of answers among the respondents for every question. Furthermore, the data collection and the sample selection are described. The paper provides the questionnaire.

Every ability is measured and pinpointed in terms of several dimensions and with several questions. The dimensions cover areas such as the individual behavior at work and in leisure, the motivation for using an ability, the working conditions for using an ability, and the educational conditions for using an ability. The dimensions and number of questions vary across the abilities. Additionally, the respondents and the categories of answers vary across the questions.

To illustrate, the “Creative and Innovative Ability” is based on three dimensions: the individual behavior, the working conditions, and the educational conditions. The first and second dimension include four questions each and the third dimension contains two questions.

The extent to which the individual “has developed or helped to develop new products or services within the last three months” is one question underlying the individual behavior. The respondents are everybody in work within the last year.

The extent to which the individual “has participated in the testing of new methods of working within the last three months” is another question underlying the individual behavior. The respondents are those who have been employees within the last year.

The categories of answers to the two questions are: “not at all”, “to a lesser degree”, “to some degree”, “to a large degree” and “to a very large degree” to the two questions. The respondents can also answer “don’t know” or “refuse to answer”, but are not told up front about the possibility.

The key assumption is that the more the individual develops new products or services, the stronger is his or her “Creative and Innovative Ability”.

The abilities and the data set presented build upon the NCA, but some differences do exist. The definition of every ability is shortened to make the definitions simple and clear. Some dimensions are renamed and some variables are reallocated for a given ability to improve the comparability across the ten abilities.

Some variables are omitted from the NCA to obtain a data set which is easily applicable in empirical analysis. For example, the priority is given to variables for which it is clear that “more is better” (or “less is better”). This leaves out unordered variables for which it is unclear whether “the higher is (or the lower) the score, the stronger is the ability”.

Furthermore, priority is given to the variables measuring the individual action rather than being a self-assessment of the quality and the level of the ability to minimize potential measurement error. Variables are also left out if the intended respondents vary from the actual respondents because a mistake happened during the data collection.

The rest of this paper is organized as follows. Section two describes why the paper uses the word “ability” rather than the words “competency”, “skills, or “job characteristics”. Section three briefly presents the DeSeCo and the NCA and section four describes the data collection. Section five defines the ten abilities and presents the dimensions and the questions which measure and pinpoint every ability. The section also reports the categories of answers, the respondents, and the frequency of answers. The Appendix provides the questionnaire underlying the Danish survey.

2 About the Vocabulary

The paper uses the word “ability” rather than the words “competence”, “skill”, or “job characteristics” to keep the vocabulary simple and clear.

The paper uses the word “ability” although the NCA focuses on the competencies. Several definitions exist of the word “competence” and in common is the word “ability”. For example, the NCA defines a competence as the “ability to meet requirements and challenges through actions within a given setting”, see Department of Education (2005). The OECD defines a competence as “the ability to successfully meet complex demands in a particular context”, see Rychen and Salganik (2003). The Wikipedia defines a competence as “the state or quality of being adequately or well qualified”, see Wikipedia.com. The Danish dictionary defines a competence as “being able to do something well”, see Politikens Forlag (1995).

The paper abstains from using the word “skill” although economic research often addresses skills. There is a tendency towards understanding that a competence is more than a skill. For example, the OECD says: "A competency is more than just knowledge and skills. It involves the ability to meet complex demands, by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competence that may draw on an individual's knowledge of language, practical IT skills and attitudes towards those with whom he or she is communicating", see OECD (2005).

The Wikipedia supports the OECD by saying: “it [the competence] encompasses a combination of knowledge, skills, and behavior utilized to improve performance”. Still, the OECD says that there is “lack of rigor and consistency in the use of terms such as competence and skills”, see Rychen and Salganik (2003). Additionally, the Danish dictionary defines a skill as “the ability to do something well” which is similar to its definition of a competence, see Politikens Forlag (1995).

Some variables point towards the possibility of “use of a given ability” at work. The use of an ability at work can also be understood as “job characteristics” which the economic literature often refers to. The two words are interrelated and represent two sides of the same coin to some extent. The extent to which a job is described by given characteristics depends on the level and the quality of the individual’s competencies and capacities. At the same time, the extent to which the individual uses a given ability at work depends on the task requirements and the job content. The paper refers to the “individual use of a given ability at work” rather than the “job characteristics” to retain to the same vocabulary throughout and because the data focuses on the individual in general.

3 About the DeSeCo and the NCA

The “Definition and Selection of Key Competencies: Theoretical and Conceptual Foundations” (DeSeCo), was undertaken by the OECD from 1997 to 2003. The aim was to define and identify a small set of key competencies which the individual needs to acquire to face the challenges of today’s world. As such, it was meant to assist member states with the further development of measures and to provide them with a reference point for obtaining more complete measures.

The project involved contributions of the perspectives from the OECD-countries. Additionally, it involved experts from institutions such as UNESCO, the World Bank, the International Labour Organisation (ILO), and the United Nations Development Program (UNDP). Sociologists, economists, philosophers, psychologist, education researchers, policy-makers, policy analysts, employers, and employers contributed to the project, see Rychen and Salganik (2003) and the OECD (2005).

The Danish ministries undertook the development project, the “National Competency Account” (NCA) from 2001 to 2005. The project was meant to measure competencies beyond education and to be a policy instrument to inspire and guide policy-makers.

The Ministry of Education, the Ministry of Employment, the Ministry of Economic and Business Affairs, and the Ministry of Science, Technology, and Innovation carried out the project. The Ministry of Education was responsible for the project.

A wide range of researchers were involved to develop the questions and dimensions for every ability. Every researcher described a given competency in terms of its potential dimensions and questions and considered its connection to the other competencies, see Department of Education (2002) and (2005).

Statistics Denmark carried out a pilot study through telephone interviews involving about 2,000 individuals at the age from 20 to 69 in the spring of 2003. The knowledge and the insights from the pilot study lead to the development of the main study. The data presented here stems from the main study.

4 The Data Collection

Statistics Denmark carried out the main study for a representative sample of the adult population in the winter of 2003 and 2004. The survey was based on telephone interviews in two rounds and every round lasted about 30 minutes. Statistics Denmark contacted every person at the minimum level of six times through telephone, including cell-phones if available.

The first round covered (listed in succession to the order of the survey): the Intercultural Awareness, the Civic Competency, the Environmental Awareness, and the Health Awareness. The first round also included questions on background information such as the employment status and the education completed. The second round covered the Social Competency, the Literacy and Math Ability, the Communication Ability, the Learning Ability, the Self-Management Ability, and the Creative and Innovative Ability.

The potential respondents were based on a representative sample of about 10,000 individuals at the age from 20 to 64 drawn from the Danish central national register (CPR) on November 1st 2003. The sample was randomly split into two samples: i) a main one with 7,953 persons and ii) an additional one with the remaining persons. The main sample was used for the first and second round. The additional sample was a supplement to the second round.

From the 7,953 individuals in the main sample, 5,170 persons responded to the questions in the first and second round (corresponding to a response rate of 65). Table 4.1 shows that the sample is almost equally distributed in terms of participating and the reasons for not participating across gender and age.

Table 4.1: The Sample and Respondents for the First and Second Round

| | Sample | | Respond in round 1 and 2 | | Respond in round 1 | | Telephone number not found | | Not met | | Moved | | Disappeared | | Refuse | |
|---------------|--------|-------|--------------------------|------|--------------------|-----|----------------------------|------|---------|-----|--------|-----|-------------|-----|--------|------|
| | Number | Pct | Number | Pct | Number | Pct | Number | Pct | Number | Pct | Number | Pct | Number | Pct | Number | Pct |
| Male | 3.936 | 100,0 | 2.538 | 64,5 | 167 | 4,2 | 419 | 10,6 | 202 | 5,1 | 156 | 4,0 | 77 | 2,0 | 377 | 9,6 |
| Female | 4.017 | 100,0 | 2.632 | 65,5 | 167 | 4,2 | 393 | 9,8 | 204 | 5,1 | 117 | 2,9 | 82 | 2,0 | 422 | 10,5 |
| Total | 7.953 | 100,0 | 5.170 | 65,0 | 334 | 4,2 | 812 | 10,2 | 406 | 5,1 | 273 | 3,4 | 159 | 2,0 | 799 | 10,0 |
| 20 - 29 years | 1.363 | 100,0 | 801 | 58,8 | 64 | 4,7 | 215 | 15,8 | 99 | 7,3 | 87 | 6,4 | 38 | 2,8 | 59 | 4,3 |
| 30 - 39 years | 1.935 | 100,0 | 1.286 | 66,5 | 83 | 4,3 | 205 | 10,6 | 88 | 4,5 | 77 | 4,0 | 33 | 1,7 | 163 | 8,4 |
| 40 - 49 years | 1.887 | 100,0 | 1.271 | 67,4 | 67 | 3,6 | 173 | 9,2 | 94 | 5,0 | 57 | 3,0 | 36 | 1,9 | 189 | 10,0 |
| 50 - 59 years | 1.875 | 100,0 | 1.221 | 65,1 | 77 | 4,1 | 161 | 8,6 | 86 | 4,6 | 45 | 2,4 | 37 | 2,0 | 248 | 13,2 |
| 60 - 65 years | 893 | 100,0 | 591 | 66,2 | 43 | 4,8 | 58 | 6,5 | 39 | 4,4 | 7 | 0,8 | 15 | 1,7 | 140 | 15,7 |
| Total | 7.953 | 100,0 | 5.170 | 65,0 | 334 | 4,2 | 812 | 10,2 | 406 | 5,1 | 273 | 3,4 | 159 | 2,0 | 799 | 10,0 |

The reasons for not participating cover a broad range of aspects. 334 individuals responded only “in round 1” because they refused to participate in the second round, they were not met in the second round, or they were unable to participate in the second round. 812 individuals did not participate in the first round because their “telephone numbers were not found” with respect to an ordinary phone or a cell phone; for example, their number could be unlisted.

406 individuals did not participate in the first round because they were “not met”, i.e. they did not answer the phone, their phone was busy, or it was agreed to call another day and they did not answer the phone that day. 275 persons did not respond in the first round because they had “moved” and there was no possibility for contacting them on the phone at their new place of living. 159 individuals had “disappeared”, i.e. they were unable to participate in the survey or they undertook the survey only partly due to illness, a handicap, difficulties with the language, or having to leave the home during the survey. 798 persons “refused” to participate in the first round.

From the additional sample for the second round, 359 persons out of the 516 in the sample participated (thereby corresponding to a response rate of 70). Table 4.2 illustrates the distribution across gender and age for the additional sample in terms of the participation and the reasons for not participating.

Table 4.2: The Additional Sample and Respondents for the Second Round

| | Sample | | Respond in round 2 | | Telephone number not found | | Not met | | Moved | | Disappeared | | Refuse | |
|---------------|--------|-------|--------------------|------|----------------------------|------|---------|-----|--------|------|-------------|-----|--------|------|
| | Number | Pct | Number | Pct | Number | Pct | Number | Pct | Number | Pct | Number | Pct | Number | Pct |
| Male | 259 | 100,0 | 172 | 66,4 | 21 | 8,1 | 19 | 7,3 | 15 | 5,8 | 10 | 3,9 | 22 | 8,5 |
| Female | 257 | 100,0 | 187 | 72,8 | 15 | 5,8 | 13 | 5,1 | 12 | 4,7 | 6 | 2,3 | 24 | 9,3 |
| Total | 516 | 100,0 | 359 | 69,6 | 36 | 7,0 | 32 | 6,2 | 27 | 5,2 | 16 | 3,1 | 46 | 8,9 |
| 20 - 29 years | 93 | 100,0 | 54 | 58,1 | 12 | 12,9 | 7 | 7,5 | 12 | 12,9 | 3 | 3,2 | 5 | 5,4 |
| 30 - 39 years | 135 | 100,0 | 94 | 69,6 | 12 | 8,9 | 10 | 7,4 | 7 | 5,2 | 3 | 2,2 | 9 | 6,7 |
| 40 - 49 years | 126 | 100,0 | 99 | 78,6 | 4 | 3,2 | 6 | 4,8 | 2 | 1,6 | 5 | 4,0 | 10 | 7,9 |
| 50 - 59 years | 110 | 100,0 | 72 | 65,5 | 6 | 5,5 | 8 | 7,3 | 4 | 3,6 | 4 | 3,6 | 16 | 14,5 |
| 60 - 64 years | 52 | 100,0 | 40 | 76,9 | 2 | 3,8 | 1 | 1,9 | 2 | 3,8 | 1 | 1,9 | 6 | 11,5 |
| Total | 516 | 100,0 | 359 | 69,6 | 36 | 7,0 | 32 | 6,2 | 27 | 5,2 | 16 | 3,1 | 46 | 8,9 |

5 The Multiple Abilities

This section presents the data set with the multiple abilities. The section defines every ability and presents the dimensions and the questions underlying every ability. Additionally, it reports the categories of answers, the respondents, and the frequency of answers. The section uses the sample of 5,170 individuals who respond to the first and second round of the NCA.

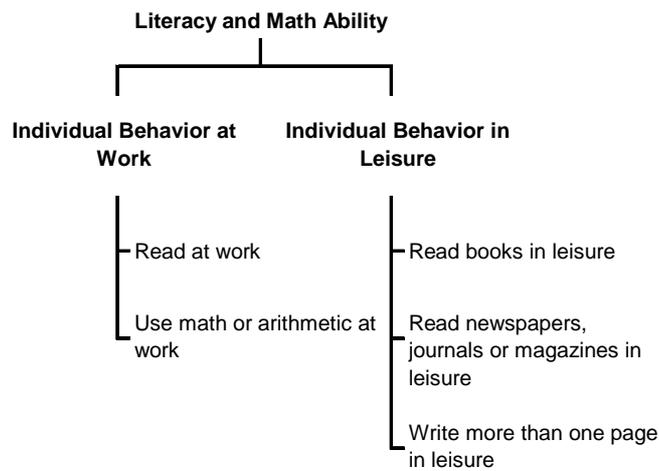
5.1 The Literacy and Math Ability

The “Literacy and Math Ability” covers *reading comprehension and math*. Reading comprehension is about retrieving information from a text, gaining a broad understanding, developing an interpretation, and reflecting on the content and on the form. Math comprehension is about the capacity to identify, understand, and engage in mathematics, and to make well-founded judgments about the role that mathematics play.

The ability is measured with two dimensions: “Individual Behavior at Work” and “Individual Behavior in Leisure”. Figure 5.1 presents the dimensions and variables for the “Literacy and Math Ability”.

The “Individual Behavior in Leisure” addresses the reading comprehension used in leisure time. The reading is pinpointed in terms of reading books, newspapers, journals, or magazines. It is also reflected by writing something of a significant length; for example, something that takes up more than one page. The use of math in leisure is not covered because the NCA does not cover the aspect as the situations where math is used in leisure are considered to be unclear. The individual may use math in many situations, for example, in terms of planning ahead, but he or she may be unable to assess it.

Figure 5.1: The Dimensions and variables for the “Literacy and Math Ability”



The ability is inspired by studies such as the International Adult Literacy Surveys (IALS) and the Program for International Student Assessment (PISA); see the OECD (2000) and (2001). The IALS measures the “Literacy” for the adult population in the OECD-countries and the PISA addresses the “Literacy” among children in the OECD-countries. The two studies measure the “Literacy” through test scores rather than a survey.

Table 5.1 presents the details for the variables and the dimensions in terms of the specific questions asked, the respondents, the available answers, and the frequency of answers in the sample selected. Everybody who has held a job within the last year answers the questions on the “Individual Behavior at Work” whereas everybody is asked about the “Individual Behavior in Leisure”. To illustrate, the question on “how often do you have to read as part of your job” is asked to everybody with a job within the last year. The respondents are given the possibilities of answering “not at all”, “less than once a week”, “every week”, and “every day”. They can also answer “don’t know” or “refuse to answer” but they are not told up front about this opportunity. “Not asked” covers everybody not in work within the last year.

Most respondents read and use math to a high extent at work. The distributions of answers tend towards a hurdle model followed by a distribution skewed to the left. The hurdle is whether the respondents have to read or to use math at work. For example, 11 percent do not have to read as part of their job. Given they do, almost 70 percent have to read “every day”.

Table 5.1: The Details for the “Literacy and Math Ability”

| Indicator | Question | Respondents | Answers | Frq. | % | |
|--------------------------------|---|--|-----------------------|------------|-------|--|
| Individual Behavior at Work | How often do you have to read as part of your job? | Everybody in work within the last year | Not at all | 438 | 10.57 | |
| | | | Less than once a week | 348 | 8.40 | |
| | | | Every week | 548 | 13.22 | |
| | | | Every day | 2,811 | 67.82 | |
| | | | Don't know | 1 | | |
| | | | Refuse to answer | 1 | | |
| | How often do you have to use math or arithmetic in your work? | Everybody in work within the last year | Not at all | 826 | 19.93 | |
| | | | Less than once a week | 541 | 13.06 | |
| | | | Every week | 581 | 14.02 | |
| | | | Every day | 2,196 | 52.99 | |
| | | | Don't know | 2 | | |
| | | | Refuse to answer | 1 | | |
| Individual Behavior in Leisure | Have you read on or more books within the last six months? | Everybody | No | 1,372 | 26.54 | |
| | | | Yes | 3,798 | 73.46 | |
| | How often do you read newspapers, journals, or magazines? | Everybody | Never | 78 | 1.51 | |
| | | | Every month | 154 | 2.98 | |
| | | | Every week | 1,367 | 26.44 | |
| | | | Every day | 3,571 | 69.07 | |
| | In your leisure, how often do you write something that takes up more than one page? | Everybody | Never | 2,324 | 45.01 | |
| | | | Every month | 1,470 | 28.47 | |
| | | | Every week | 1,057 | 20.47 | |
| | | | Every day | 312 | 6.04 | |
| | | | | Don't know | 7 | |

In leisure, most respondents read much and write little. The distribution of answers is skewed to the left for reading and to the right for writing. About 70 percent have read one or more books within the last six months. The share is about the same when it comes to reading newspapers, journals, or magazines “every day”. Less than 2 percent never read newspapers, journals, or magazines. As for writing, 45 percent never write anything which takes up more than one page while 6 percent write anything this length daily.

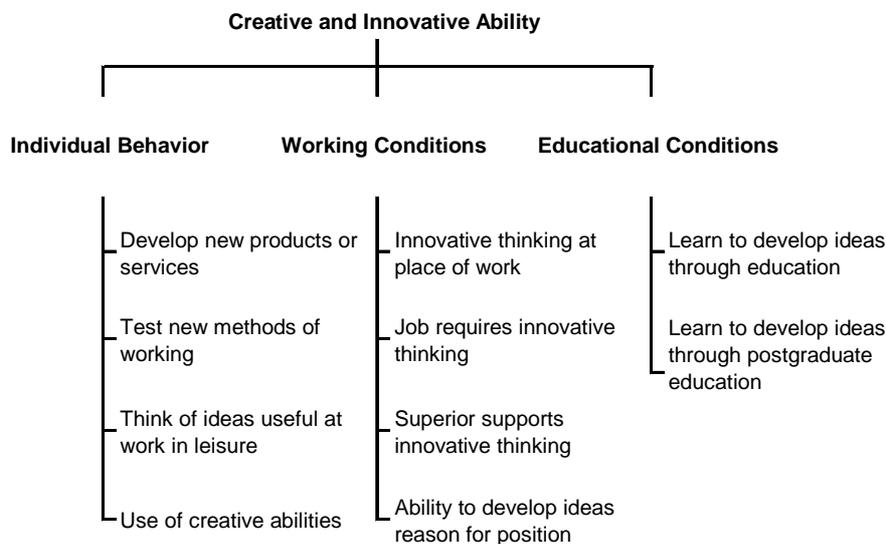
The NCA covers a broader range of variables than presented here. Two omitted variables focus on how easy or difficult it is for the individual to read or to do the math required at work. The comparison of answers across individuals for every variable is unclear because the anchoring is unclear: one person may answer “easy” and another person may answer “difficult”, although it objectively speaking is “easy” for both of them. Other omitted variables are those for which a mistake happened during the data collection. This covers questions on whether the reading skills are good in relation to the respondent’s needs and whether the individual improves his or her reading or math skills by education or course. The actual respondents are less than the intended ones.

5.2 The Creative and Innovative Ability

The “Creative and Innovative Ability” is the *ability to create new products or services*. The ability concerns the ability to create renewals, new concepts, new problem solutions, and new knowledge different from what already exists.

The ability covers three dimensions: “Individual Behavior”, “Working Conditions”, and “Educational Conditions”. Figure 5.2 presents the “Creative and Innovative Ability” in terms of the three dimensions and the underlying variables.

Figure 5.2: The Dimensions and Variables for the “Creative and Innovative Ability”



The “Individual Behavior” indicates to which extent the individual actually behaves creatively and innovatively at work and in leisure. One aspect measures the frequency by which the individual carries out renewals at work; either for external use in terms of developing new products or services or for internal use in terms of developing new methods of working. Individual behavior is also about the ability to transfer knowledge from one context to another. For example, to think about ways to solve a work-related problem in leisure time. Finally, it is about where the individual uses his or her creative ability the most: at work, at home, or equally at both places.

The “Working Conditions” measures to what level the occupation enables the individual to be creative and innovative. The dimension is about the extent to which the workplace in general is innovative and whether the job in specific allows the individual to be creative and innovative. The latter is measured by questions on the extent to which the job requires innovative thinking and the

extent to which the individual's ability to develop ideas is a significant reason for the current position.

The "Educational Conditions" addresses to what extent the individual's education has taught the individual to be creative and innovative. The education covers qualifying education in terms of primary, secondary, and tertiary education as well as postgraduate education.

The ability builds on the idea that creativity is an interaction between the individual (with his or her special abilities and preferences), the field (the individual's type of occupation and type of education) and the market (the people or institutions that value the individual's renewal). Neither the individual, nor the field, nor the market is creative or non-creative in it-self. Rather, the possibility for being creative only exists if the individual carries out a renewal in a given field and the market values this renewal.

The ability mainly focuses on situations related to working life rather than to leisure as innovations in leisure are considered to be difficult to delimit. The ability is important in leisure, for example, the individuals can take initiatives leading to environmental innovations in leisure.

Table 5.2 presents the details for the "Creative and Innovative Ability". Some questions in the "Individual Behavior" and the "Working Conditions" are raised to everybody in work within the last year, others are asked to employees within the last year, and one question is raised only to respondents currently in work. The questions on "Educational Conditions" are asked to those with a qualifying primary, secondary, or tertiary education.

In terms of the "Individual Behavior", most variables seem to follow a distribution of a hurdle model. The hurdle is whether to carry out a creative and innovative behavior. Given the hurdle is passed, the frequency of answers tends towards a symmetric distribution. For example, about half of the respondents never develop or help to develop new products or services. Among those who do, most respondents develop new products or services "to some degree" or "to a large degree".

In "Working Conditions", the answers for the workplace tend towards a symmetric distribution. Most respondents find that their place of work can be characterized by innovative thinking "to some degree" or "to a large degree". The answers for the job in specific follow the hurdle model. The hurdle is that the job never requires innovative thinking for about one fifth of the respondents. Among those who meet the requirement, most respondents find that their jobs require innovative thinking "to some degree". The hurdle is higher when it comes to reason for position. About two fifths say the ability to develop new ideas is "not at all" a significant reason for their current positions. Given it is, most respondents answer "to some degree" and "to a large degree".

Table 5.2: The Details for the “Creative and Innovative Ability”

| Indicator | Question | Respondents | Answers | Frq. | % |
|--|--|--|------------------------|-------|-------|
| Individual Behavior | Have you developed or helped to develop new products or services within the last three months? | Everybody in work within the last year | Not at all | 2,309 | 55.88 |
| | | | To a lesser degree | 288 | 6.97 |
| | | | To some degree | 671 | 16.24 |
| | | | To a large degree | 579 | 14.01 |
| | | | To a very large degree | 285 | 6.90 |
| | | | Don't know | 8 | |
| | | | Refuse to answer | 7 | |
| | Not asked | 1,023 | | | |
| | Have you participated in the testing of new methods of working within the last three months? | Employees within the last year | Not at all | 1,493 | 39.95 |
| | | | To a lesser degree | 347 | 9.29 |
| | | | To some degree | 932 | 24.94 |
| | | | To a large degree | 722 | 19.32 |
| | | | To a very large degree | 243 | 6.50 |
| | | | Don't know | 7 | |
| | | | Refuse to answer | 7 | |
| | Not asked | 1,419 | | | |
| Do you think of ideas which could be used at work in your leisure? | Everybody in work within the last year | Not at all | 640 | 15.45 | |
| | | To a lesser degree | 406 | 9.80 | |
| | | To some degree | 1,430 | 34.52 | |
| | | To a large degree | 1,087 | 26.24 | |
| | | To a very large degree | 579 | 13.98 | |
| | | Don't know | 5 | | |
| | | Not asked | 1,023 | | |
| When do you think you use your creative abilities the most? | Everybody in work within the last year | I do not think that I use/have creative abilities | 28 | 0.68 | |
| | | Outside of work | 981 | 23.75 | |
| | | Equally at work and outside of work | 1,889 | 45.74 | |
| | | At work | 1,232 | 29.83 | |
| | | Don't know | 17 | | |
| | | Not asked | 1,023 | | |
| | | Not at all | 157 | 4.22 | |
| Working Conditions | To what extent is your place of work characterised by innovative thinking? | Employees within the last year | To a lesser degree | 710 | 19.10 |
| | | | To some degree | 1,106 | 29.75 |
| | | | To a large degree | 1,077 | 28.97 |
| | | | To a very large degree | 668 | 17.97 |
| | | | Don't know | 33 | |
| | | | Not asked | 1,419 | |
| | | | Not at all | 786 | 21.02 |
| | Does your job require you to contribute with innovative thinking? | Employees within the last year | To a lesser degree | 475 | 12.70 |
| | | | To some degree | 1,187 | 31.75 |
| | | | To a large degree | 955 | 25.54 |
| | | | To a very large degree | 336 | 8.99 |
| | | | Don't know | 12 | |
| | | | Not asked | 1,419 | |
| | | | Not at all | 116 | 4.71 |
| | Does your immediate superior support your innovative thinking? | Everybody who answers "to some degree" or more to the question on whether the job requires innovative thinking | To a lesser degree | 119 | 4.83 |
| | | | To some degree | 789 | 32.02 |
| To a large degree | | | 1,030 | 41.80 | |
| To a very large degree | | | 410 | 16.64 | |
| Don't know | | | 14 | | |
| Not asked | | | 2,692 | | |
| Not at all | | | 1,510 | 40.08 | |
| Is your ability to develop new ideas a significant reason that you have your current position? | Everybody currently in work. A few missing. | To a lesser degree | 552 | 14.65 | |
| | | To some degree | 682 | 18.10 | |
| | | To a large degree | 689 | 18.29 | |
| | | To a very large degree | 334 | 8.87 | |
| | | Don't know | 68 | | |
| | | Not asked | 1,335 | | |
| | | Not at all | 1,335 | | |

| Indicator | Question | Respondents | Answers | Frq. | % |
|------------------------|--|---------------------------------------|---|-------|-------|
| Educational Conditions | Did you learn to develop new ideas as part of your education? | Everybody with a qualifying education | Not at all | 1,214 | 31.93 |
| | | | To a lesser degree | 476 | 12.52 |
| | | | To some degree | 965 | 25.38 |
| | | | To a large degree | 822 | 21.62 |
| | | | To a very large degree | 325 | 8.55 |
| | | | Don't know | 44 | |
| | | | Refuse to answer | 1 | |
| | Have you learnt to develop new ideas as part of your postgraduate education? | Everybody with a qualifying education | Have never taken postgraduate education | 402 | 10.50 |
| | | | Not at all | 1,280 | 33.45 |
| | | | To a lesser degree | 345 | 9.01 |
| | | | To some degree | 919 | 24.01 |
| | | | To a large degree | 666 | 17.40 |
| | | | To a very large degree | 215 | 5.62 |
| | | | Don't know | 19 | |
| Refuse to answer | 1 | | | | |
| | | | Not asked | 1,323 | |

For the “Educational Conditions”, the distributions of answers have a single or a double hurdle. About one third did not learn to develop new ideas as part of their qualifying primary, secondary, or tertiary education. The answers tend towards a symmetric distribution for those who did. One tenth has never taken postgraduate education. Among those who have, about one third has not learned to develop new ideas as part of this education. For those who did, the distribution of answers tends towards a symmetric distribution.

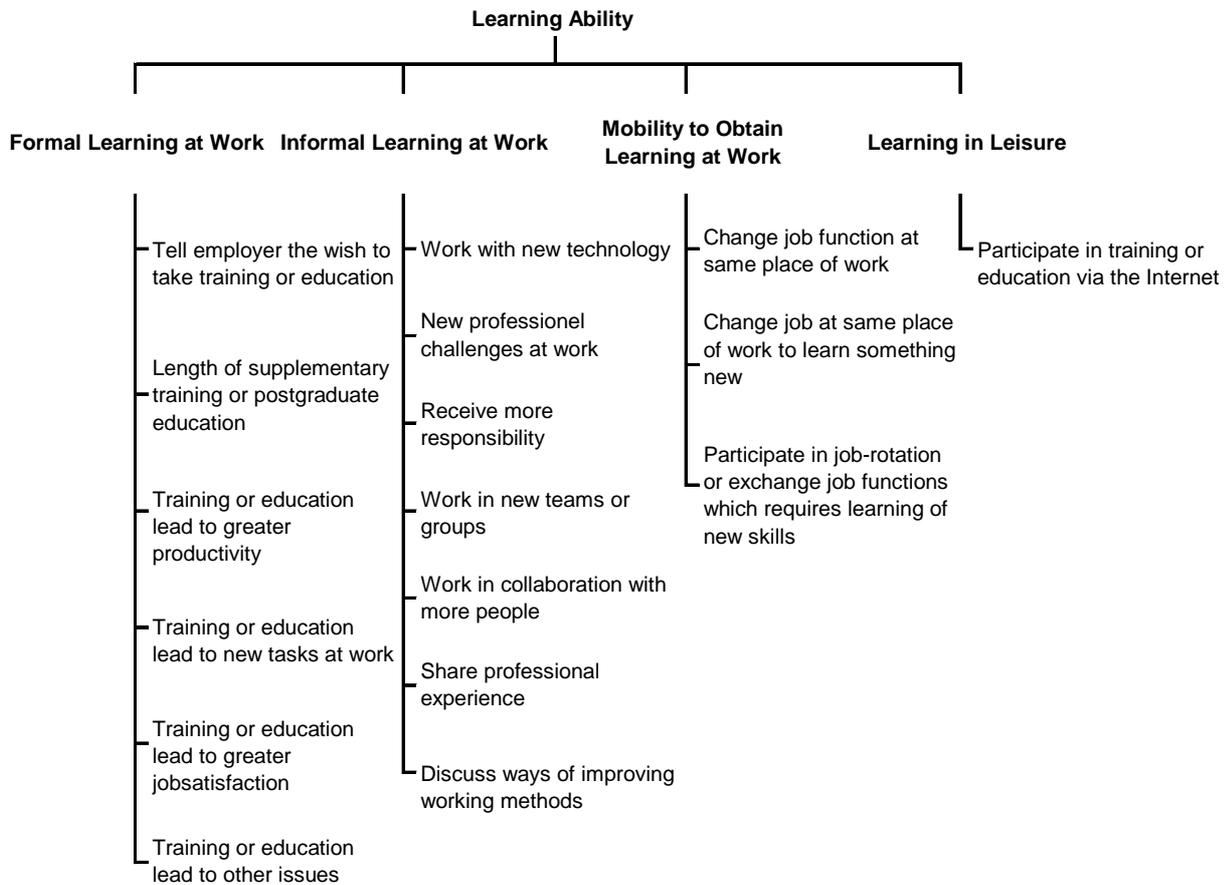
One variable from the NCA is left out here. The variable is about whether the respondent has had contact with research institutions due to development work, given the respondent develops new products or services. It is unclear whether a positive (or negative) answer increases the “Creative and Innovative Ability”.

5.3 The Learning Ability

The “Learning Ability” is the *ability to acquire new knowledge*. The ability is about to what extent the individual is open for learning, is aware of his or her own learning process, searches for situations which may lead to learning, and transfers the new knowledge into valuable action.

The ability is formed by four dimensions: “Formal Learning at Work”, “Informal Learning at Work”, “Mobility to Obtain Learning at Work”, and “Learning in Leisure”. Figure 5.3 shows the dimensions and variables for the “Learning Ability”.

Figure 5.3: The Dimensions and Variables for the “Learning Ability”



The “Formal Learning at Work” indicates the extent of the individual’s learning through supplementary education and postgraduate education. One aspect is about whether the individual is open for and searches for formal education. For example, whether the respondent participates in supplementary training and postgraduate education or tell his or her employer about the wish to do so. Another aspect is about whether the acquired knowledge is valuable to the respondent. For example, whether the training or the education lead to greater productivity, to new tasks at work, or to greater job satisfaction.

The “Informal Learning at Work” addresses to what level the individual is exposed to learning through his or her job. The job function may expand vertically or horizontally and this requires the individual to learn something new. An indication of the expansion is that the individual works with new technology, has new professional challenges, or receives more responsibility. Changes in the organization of the work may expose the individual to new professional challenges. For example, the individual may work in new teams or groups or work in collaboration with more people.

Finally, informal learning may stem from knowledge sharing, meaning that the individual shares professional experience and discusses ways of improving working methods with colleagues.

The “Mobility to Obtain Learning at Work” implies a visible break in the working life which may bring new professional challenges. The mobility can be internal or external so that the individual changes job within a firm or switches job to another firm. Internal mobility is covered through questions on whether the individual changes job functions or jobs to learn something new. Furthermore, whether the individual participates in job-rotation or exchanges job functions which require the learning of new skills. The variables do not cover external mobility.

The “Learning in Leisure” is captured by one single variable on whether the individual participates in training or education via the Internet. Other aspects might be relevant as well. For example, formal learning in leisure may be used when joining courses in leisure (so-called evening courses). Informal learning in leisure might take place as well through information from newspapers and television, participation in social events or committees, or the like. The data does not cover these aspects.

Table 5.3 presents the details for the “Learning Ability”. The work-related questions are brought up to those in work within the last year and in some cases, to those whose place of work has at least two employees. Those with some supplementary training and postgraduate education are asked about what this leads to. Everybody answers the question on the learning in leisure.

In terms of the “Formal Learning at Work”, about half of the respondents tell their employer the wish to take supplementary training or postgraduate education. Almost the same share participates in training or education and the general tendency is to take supplementary training or postgraduate education from 3 to 10 days. The formal learning leads to greater job satisfaction in particular. About 70 percent find that the training or education leads to greater job satisfaction, around 50 percents think it leads to greater productivity, and 36 percent get new tasks at work due to the learning.

Table 5.3: The Details for the “Learning Ability”

| Indicator | Question | Respondents | Answers | Frq. | % |
|--|---|--|-------------------|-------|-------|
| Formal Learning at Work | Have you told your employer that you wish to take supplementary training or a postgraduate education within the last 12 months? | Employees within the last year | No | 1,820 | 48.53 |
| | | | Yes | 1,930 | 51.47 |
| | | | Don't know | 1 | |
| | | | Not asked | 1,419 | |
| | How many days have you participated in supplementary training or postgraduate education within the last 12 months? | Everybody in work within the last year | None | 2,077 | 50.14 |
| | | | 1 - 2 days | 231 | 5.58 |
| | | | 3 - 5 days | 576 | 13.91 |
| | | | 6 - 10 days | 511 | 12.34 |
| | | | 11 - 20 days | 381 | 9.20 |
| | | | More than 20 days | 366 | 8.84 |
| | | | Don't know | 5 | |
| | Has the supplementary training or postgraduate education led to: Greater productivity? | Everybody that has participated in supplementary training or postgraduate education within the last year | No | 1,006 | 49.29 |
| | | | Yes | 1,035 | 50.71 |
| | | | Don't know | 29 | |
| | | | Not asked | 3,100 | |
| | Has the supplementary training or postgraduate education led to: New tasks at work? | Everybody that has participated in supplementary training or postgraduate education within the last year | No | 1,311 | 63.52 |
| | | | Yes | 753 | 36.48 |
| | | | Don't know | 6 | |
| Not asked | | | 3,100 | | |
| Has the supplementary training or postgraduate education led to: Greater job satisfaction? | Everybody that has participated in supplementary training or postgraduate education within the last year | No | 607 | 29.54 | |
| | | Yes | 1,448 | 70.46 | |
| | | Don't know | 15 | | |
| | | Not asked | 3,100 | | |
| Has the supplementary training or postgraduate education led to: Other? | Everybody that has participated in supplementary training or postgraduate education within the last year | No | 1,154 | 55.86 | |
| | | Yes | 912 | 44.14 | |
| | | Don't know | 4 | | |
| | | Not asked | 3,100 | | |
| Informal Learning at Work | Have you within the last 12 months: Worked with new technology? | Everybody in work within the last year | No | 2,465 | 59.56 |
| | | | Yes | 1,674 | 40.44 |
| | | | Don't know | 8 | |
| | | | Not asked | 1,023 | |
| | Have you within the last 12 months: Had new professional challenges in your work? | Everybody in work within the last year | No | 1,454 | 35.10 |
| | | | Yes | 2,689 | 64.90 |
| | | | Don't know | 4 | |
| | | | Not asked | 1,023 | |
| | Have you within the last 12 months: Been delegated more or less responsibility? | Everybody in work within the last year | Less | 122 | 2.94 |
| | | | No change | 2,297 | 55.44 |
| | | | More | 1,724 | 41.61 |
| | | | Don't know | 4 | |
| | Have you within the last 12 months: Worked in new teams or groups? | Everybody in work within the last year | No | 2,150 | 51.89 |
| | | | Yes | 1,993 | 48.11 |
| | | | Don't know | 3 | |
| | | | Refuse to answer | 1 | |
| | Have you within the last 12 months: Worked in collaboration with more or less people? | Everybody in work within the last year | Less | 310 | 7.48 |
| | | | No change | 2,072 | 50.02 |
| | | | More | 1,760 | 42.49 |
| | | | Don't know | 5 | |
| | How often do you and your colleagues share your professional experience with each other? | Everybody in work within the last year and whose place of work has at least two employees | Never | 168 | 4.32 |
| | | | Every month | 316 | 8.13 |
| | | | Every week | 1,014 | 26.09 |
| | | | Every day | 2,389 | 61.46 |
| Do you and your colleagues discuss ways of improving working methods? | Everybody in work within the last year and whose place of work has at least two employees | Don't know | 10 | | |
| | | Refuse to answer | 1 | | |
| | | Not asked | 1,272 | | |
| | | To a very small degree | 177 | 4.55 | |
| | | To a lesser degree | 255 | 6.55 | |
| | | To some degree | 1,243 | 31.92 | |
| To a large degree | 1,473 | 37.83 | | | |
| To a very large degree | 746 | 19.16 | | | |
| Don't know | 3 | | | | |
| Refuse to answer | 1 | | | | |
| Not asked | 1,272 | | | | |

| Indicator | Question | Respondents | Answers | Frq. | % |
|-------------------------------------|--|---|------------|-------|-------|
| Mobility to Obtain Learning at Work | Have you within the last 12 months: Changed your jobfunction at the same place of work? | Everybody in work within the last year | No | 3,264 | 78.75 |
| | | | Yes | 881 | 21.25 |
| | | | Don't know | 2 | |
| | Have you within the last 12 months: Changed job at the same place of work in order to learn something new? | Everybody in work within the last year and whose place of work has at least two employees | No | 3,561 | 91.38 |
| | | | Yes | 336 | 8.62 |
| | | | Don't know | 1 | |
| | | | Not asked | 1,272 | |
| | Have you within the last 12 months: Participated in job-rotation, or exchanged job functions with others | Everybody in work within the last year and whose place of work has at least two | No | 3,258 | 83.58 |
| | | | Yes | 640 | 16.42 |
| Not asked | | | 1,272 | | |
| Learning in Leisure | Have you participated in training or education via the Internet within the last 12 months? | Everybody | No | 4,879 | 94.41 |
| | | | Yes | 289 | 5.59 |

The “Informal Learning at Work” seems prevalent for many respondents. The job function expands for many, especially in terms of having new professional challenges. 65 percent meet new professional challenges, 42 percent are delegated more responsibility, and 40 percent work with new technology. Many experience changes in the organization of the work. Almost half of the respondents have worked in new teams or groups within the last year and 42 percent have worked in collaboration with more people. Finally, many frequently share knowledge with their colleagues. 62 percent share professional experience with their colleagues “every day” and 57 percent discuss ways of improving working methods with their colleagues “to a large degree” or “to a very large degree”.

The “Mobility to Obtain Learning at Work” is used only little. About one fifth has changed job function at work within the last year. Less than one fifth participates in job-rotation which requires the learning of new skills and one tenth changes job at the same place of work to learn something new.

The “Learning in Leisure” is used little when measured by the one single variable. About 6 percent have participated in training or education via the Internet within the last year.

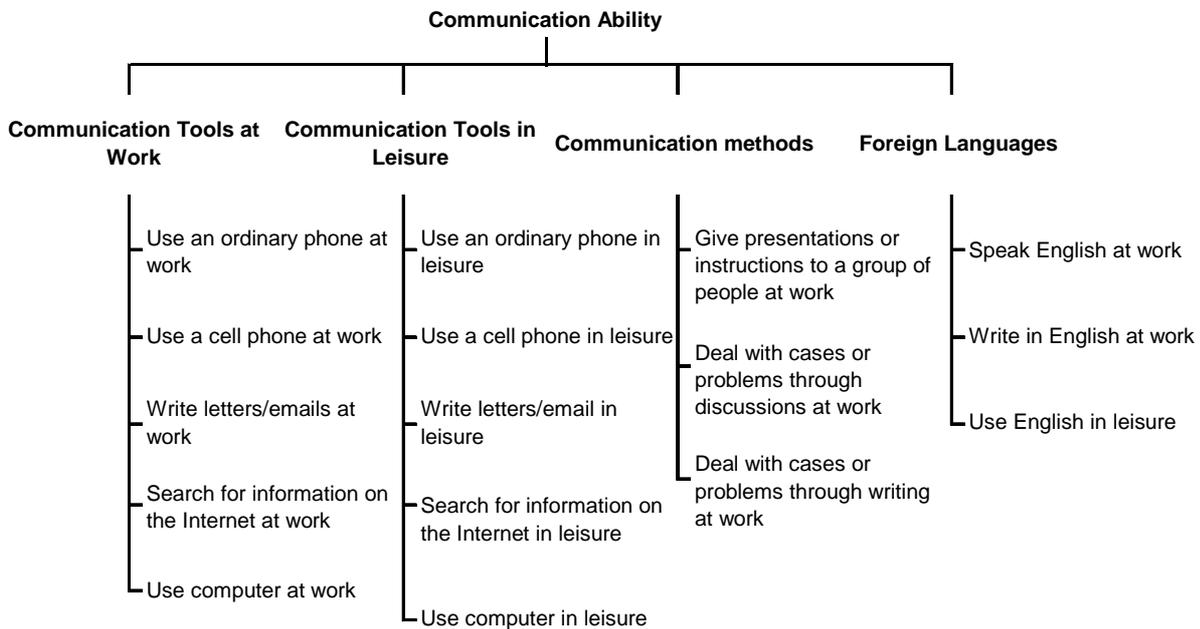
The variables are selected from a broader range of variables in the NCA. One unordered variable is left out. The variable is about the reason for participating in supplementary training or postgraduate education. Another omitted variable is about whether an institute of higher education organized part of the supplementary training or postgraduate education. It is unclear whether a positive answer to the question increases the “Learning Ability”. Finally, a variable on the external mobility to obtain learning is left out because a mistake happened during the data collection. The variable is about whether the individual changes place or work to learn something new.

5.4 The Communication Ability

The “Communication Ability” is the *ability to argue one’s own opinion and to understand others*. The ability is about being able to manage appropriate styles of communication for sharing information and knowledge with other people.

Figure 5.4 illustrates the “Communication Ability” in terms of its dimensions and variables. Four indicators: “Communication Tools at Work”, “Communication Tools in Leisure”, “Communication Methods”, and “Foreign Languages” form the ability.

Figure 5.4: The Dimensions and Variables for the “Communication Ability”



The “Communication Tools at Work” and the “Communication Tools in Leisure” indicate the extent to which a communicative contact between people can be established. Access to and use of relevant communication tools are necessary for transporting information and knowledge from one person to another. The communication tools involve the ordinary telephone, cell phone, e-mail, and the Internet. The ordinary telephone and the cell phone may substitute each other, but they may not be mutual exclusives.

The “Communication Methods” is about the fact that transported information and knowledge should influence the recipient and/or sender. The communicator must manage appropriate methods for communication for influencing the recipient and/or sender. The methods involves giving

presentations or instructions to a group of people, and dealing with cases or problems through discussions or writing. The variables focus on the situations related to work.

The knowledge of “Foreign Languages”, in particular English, is often required for communication in a small country like Denmark. The knowledge is measured by questions on the extent to which the individual speaks or writes English at work and the frequency by which he or she uses English in leisure.

Table 5.4 presents the details for the “Communication Ability”. Everybody in work within the last year answers the questions related to working life and everybody answers the questions related to leisure.

The situation is typically an either-or for the “Communication Tools at Work”. 33 percent “never” write letters or e-mails, while about 44 percent do this “every day”. Close to 15 “never” use an ordinary phone at work and almost 70 percent do this “every day”. About 35 percent “never” search for information on the Internet and 33 percent do this “every day”.

In leisure, the answers tend towards “never” or “every week” rather than “every day” for writing letters or e-mails and for searching for information on the Internet. 26 percent “never” write letters or e-mails and 36 percent write letters or e-mails “every week”. The distributions for the use of telephone and cell phone are skewed to the left. Most respondents use a telephone or cell phone “every week” or “every day”.

As for the “Communication Methods”, the distribution of answers is skewed to the right for making presentations or giving instructions. Most respondents “never” do this and few respondents do this “every day”. The distribution is skewed to the left for dealing with cases through discussions. The situation tends towards an either-or for dealing with cases or problems through writing.

In terms of “Foreign Languages”, most respondent never use English. More than half of the respondents “never” speak English as part of their job, almost three quarters of the respondents “never” write English at work, and close to one half “never” use English in leisure.

Table 5.4: The Details for the “Communication Ability”

| Indicator | Question | Respondents | Answers | Frg. | % |
|--|--|--|------------------|-------|-------|
| Communication Tools at Work | How often do you do the following as part of your job: Use an ordinary phone? | Everybody in work within the last year | Never | 611 | 14.75 |
| | | | Every month | 181 | 4.37 |
| | | | Every week | 534 | 12.89 |
| | | | Every day | 2,817 | 67.99 |
| | | | Don't know | 3 | |
| | | | Refuse to answer | 1 | |
| | | | Not asked | 1,023 | |
| | How often do you do the following as part of your job: Use a cell phone? | Everybody in work within the last year | Never | 1,975 | 47.66 |
| | | | Every month | 217 | 5.24 |
| | | | Every week | 382 | 9.22 |
| | | | Every day | 1,570 | 37.89 |
| | | | Don't know | 2 | |
| | | | Refuse to answer | 1 | |
| | | | Not asked | 1,023 | |
| | How often do you do the following as part of your job: Write letters/emails? | Everybody in work within the last year | Never | 1,357 | 32.74 |
| | | | Every month | 334 | 8.06 |
| | | | Every week | 640 | 15.44 |
| | | | Every day | 1,814 | 43.76 |
| | | | Don't know | 1 | |
| | | | Refuse to answer | 1 | |
| Not asked | | | 1,023 | | |
| How often do you do the following as part of your job: Search for information on the Internet? | Everybody in work within the last year | Never | 1,462 | 35.28 | |
| | | Every month | 419 | 10.11 | |
| | | Every week | 930 | 22.44 | |
| | | Every day | 1,333 | 32.17 | |
| | | Don't know | 2 | | |
| | | Refuse to answer | 1 | | |
| | | Not asked | 1,023 | | |
| How often do you use a computer at work? | Everybody in work within the last year | Do not use a computer in connection with my work | 845 | 20.39 | |
| | | Less than once a week | 173 | 4.17 | |
| | | Every week | 267 | 6.44 | |
| | | Every day | 2,860 | 69.00 | |
| | | Don't know | 1 | | |
| | | Refuse to answer | 1 | | |
| | | Not asked | 1,023 | | |
| Communication Tools in Leisure | How often do you do the following in your leisure: Use an ordinary phone? | Everybody | Never | 221 | 4.28 |
| | | | Every month | 117 | 2.26 |
| | | | Every week | 1,171 | 22.65 |
| | | | Every day | 3,660 | 70.81 |
| | | | Don't know | 1 | |
| | How often do you do the following in your leisure: Use a cell phone? | Everybody | Never | 929 | 17.97 |
| | | | Every month | 480 | 9.28 |
| | | | Every week | 1,168 | 22.59 |
| | | | Every day | 2,593 | 50.15 |
| | How often do you do the following in your leisure: Write letters/e-mails? | Everybody | Never | 1,347 | 26.05 |
| | | | Every month | 1,067 | 20.64 |
| | | | Every week | 1,845 | 35.69 |
| | | | Every day | 911 | 17.62 |
| | How often do you do the following in your leisure: Search for information on the Internet? | Everybody | Never | 1,401 | 27.11 |
| | | | Every month | 814 | 15.75 |
| | | | Every week | 1,839 | 35.58 |
| | | | Every day | 1,114 | 21.56 |
| | | | Don't know | 1 | |
| | How often do you use a computer in your leisure? | Everybody | Never | 1,017 | 19.68 |
| | | | Every month | 400 | 7.74 |
| Every week | | | 1,445 | 27.96 | |
| Every day | | | 2,306 | 44.62 | |
| Don't know | | | 2 | | |

| Indicator | Question | Respondents | Answers | Frq. | % |
|---|---|--|---------------------|-------|-------|
| Communication Methods | How frequently do you make presentations, give instructions, or similar to a group of people at work? | Everybody in work within the last year | Never | 1,911 | 46.16 |
| | | | Every month | 999 | 24.13 |
| | | | Every week | 773 | 18.67 |
| | | | Every day | 457 | 11.04 |
| | | | Don't know | 6 | |
| | | | Refuse to answer | 1 | |
| | How frequently do you deal with cases or problems at work which others discuss with you? | Everybody in work within the last year | Never | 546 | 13.24 |
| | | | Every month | 443 | 10.74 |
| | | | Every week | 1,056 | 25.61 |
| | | | Every day | 2,079 | 50.41 |
| | | | Don't know | 22 | |
| | | | Refuse to answer | 1 | |
| How frequently do you deal with cases or problems at work which others present to you in writing? | Everybody in work within the last year | Never | 1,282 | 31.12 | |
| | | Every month | 688 | 16.70 | |
| | | Every week | 934 | 22.67 | |
| | | Every day | 1,216 | 29.51 | |
| | | Don't know | 26 | | |
| | | Refuse to answer | 1 | | |
| Foreign Languages | How often do you speak English as part of your job? | Everybody in work within the last year | Never | 2,351 | 56.75 |
| | | | Every month | 703 | 16.97 |
| | | | Every week | 575 | 13.88 |
| | | | Every day | 514 | 12.41 |
| | | | Don't know | 3 | |
| | | | Refuse to answer | 1 | |
| | How often do you write in English as part of your job? | Everybody in work within the last year | Never | 3,078 | 74.28 |
| | | | Every month | 378 | 9.12 |
| | | | Every week | 296 | 7.14 |
| | | | Every day | 392 | 9.46 |
| | | | Don't know | 2 | |
| | | | Refuse to answer | 1 | |
| | How often do you use English in your leisure? | Everybody | Don't speak English | 341 | 6.60 |
| | | | Never | 2,334 | 45.16 |
| | | | Every month | 1,120 | 21.67 |
| Every week | | | 843 | 16.31 | |
| Every day | | | 530 | 10.26 | |
| | | Don't know | 2 | | |

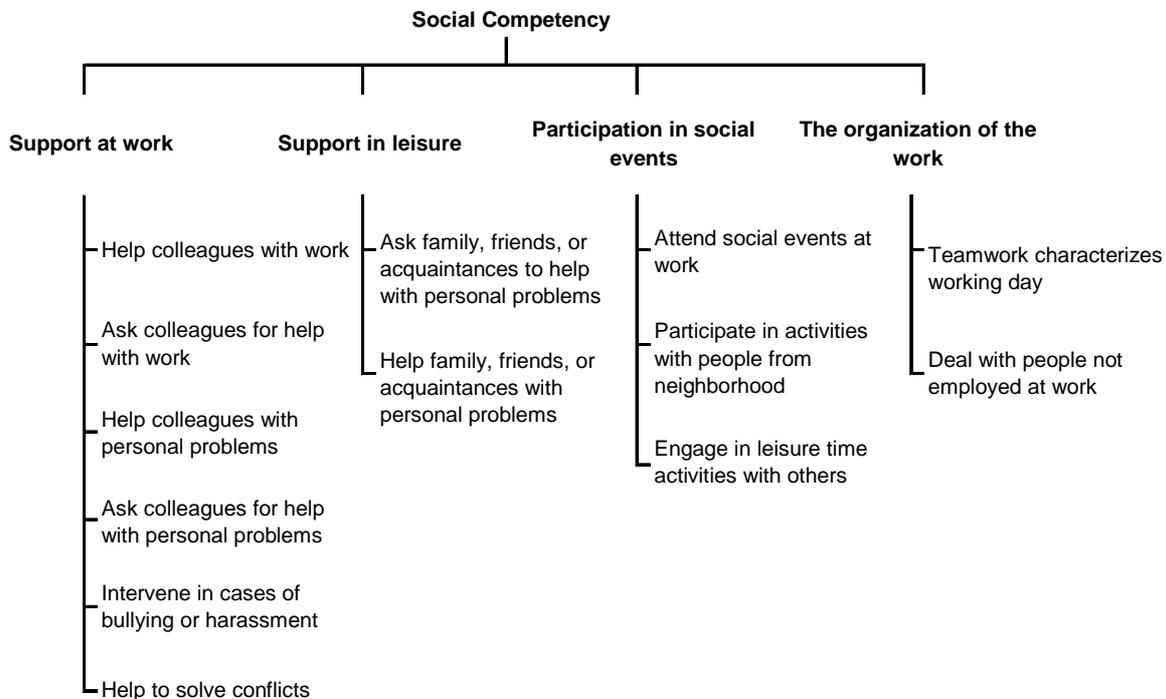
Five variables are omitted from the NCA: three variables are about IT and two variables are about foreign languages. The first IT variable is about whether IT skills are sufficient in relation to work. The variable is left out because it is based on a self-assessment. The second IT variable is about the most important way that new computer skills are learned. The variable is omitted because the variable is unordered. The third IT variable is about the extent to which the individual does anything to improve IT skills. The first variable on foreign languages is about whether English skills are good in relation to needs. The variable is a self-assessment of the ability. The second variable is the number of languages spoken, exclusive English, German, Swedish and Norwegian. It is unclear whether the more languages spoken, the stronger is the communication ability.

5.5 The Social Competency

The “Social Competency” is *the ability to interact with others*. That is, to meet social surroundings and to react to that, to form mutually rewarding and constructive relationships with other people, and to express ones own and read other people’s feelings. The ability involves social awareness and responsibility, including solidarity.

The “Social Competency” is measured on four dimensions: “Support at Work”, “Support in Leisure”, “Working Conditions”, and “Participation in Social Events”. Figure 5.5 presents the dimensions and variables for the ability.

Figure 5.5: The Dimensions and variables for the “Social Competency”



The “Support at Work” indicates to which level the individual supports colleagues or asks for support from colleagues. The support can be at the individual level in terms of professional or personal problems. The support can also be about teamwork problems, such as intervening in cases of bullying or harassment, and solving conflicts between people.

The “Support in Leisure” focuses on whether the individual supports or ask for support from family, friends, or acquaintances with personal problems. Intervening in cases of bullying or harassment and solving conflicts between people are not covered in leisure.

The “Participation in Social Events” may take place at work or in leisure. Social events at work are measured by a question on whether the individual attends social events at work. In leisure, the focus is the extent to which the individual participates in activities with people from the neighborhood or engages in leisure time activities with others.

The “Working Conditions” may be such that they require the use of the social competency. Having a working day characterized by teamwork or by dealing with many people implies a mutual dependency when carrying out a working task. The dependency exposes the individual to dealing with other people’s attitudes and opinions and this may involve cooperation, negotiation, and conflict-resolution.

Table 5.5 presents the details of the variables. The questions on working life are asked to everybody in work within the last year and whose place of work has at least two employees. The questions related to leisure are asked to everybody.

The “Support at Work” is more prevalent in terms of professional problems than in terms of personal problems. In addition, a higher share of respondents helps colleagues with work or personal problems than the other way around. For example, 66 percent help colleagues with their work while only 40 percent ask colleagues for help with their work. 24 percent help colleagues with personal problems “to a large degree” and “to a very large degree” whereas only 8 percent ask for help with personal problems “to a large degree” and “to a very large degree”.

Many variables follow a double hurdle distribution. The first hurdle is whether help is needed. If help is needed, the second hurdle is whether help is given. If help is given, the distribution of answers tends towards a symmetric distribution. For example, the first hurdle for helping colleagues with personal problems is that 30 percent have no knowledge of colleagues with personal problems. The second hurdle is that 11 percent do not help the colleague, though they know that the colleague has personal problems. If they help the colleague, 10 percent support “to a lesser degree”, 26 percent “to some degree”, 16 percent “to a large degree”, and 7 percent support “to a very large degree”.

Table 5.5: The Details for the “Social Competency”

| Indicator | Question | Respondents | Answers | Frq. | % |
|--|---|--|---|-------|-------|
| Support at work | Have you within the last week helped one or more of your colleagues with their work? | Everybody currently in work and whose place of work has at least two employees. | No | 1,204 | 33.76 |
| | | | Yes | 2,362 | 66.24 |
| | | | Don't know | 8 | |
| | | | Refuse to answer | 1 | |
| | | | Not asked | 1,595 | |
| | Have you within the last week asked your colleagues for help with your work? | Everybody currently in work and whose place of work has at least two employees. | No | 2,130 | 59.58 |
| | | | Yes | 1,445 | 40.42 |
| | | | Work alone | 63 | |
| | | | Don't know | 4 | |
| | | | Refuse to answer | 0 | |
| | Have you helped colleagues with their personal problems within the last six months? | Everybody in work within the last year and whose place of work has at least two employees. | No knowledge of colleagues who have had personal problems | 1,110 | 29.82 |
| | | | Not at all | 392 | 10.53 |
| | | | To a lesser degree | 391 | 10.51 |
| | | | To some degree | 953 | 25.60 |
| | | | To a large degree | 612 | 16.44 |
| | | | To a very large degree | 264 | 7.09 |
| | | | Work alone | 100 | |
| | | | Don't know | 8 | |
| | Have you asked for help from your colleagues within the last six months in connection with your own personal problems? | Everybody in work within the last year and whose place of work has at least two employees. | Have not had personal problems | 2,012 | 54.07 |
| | | | Not at all | 815 | 21.90 |
| | | | To a lesser degree | 220 | 5.91 |
| | | | To some degree | 391 | 10.51 |
| | | | To a large degree | 215 | 5.78 |
| | | | To a very large degree | 68 | 1.83 |
| Don't know | | | 1 | | |
| Refuse to answer | | | 0 | | |
| Have you intervened in cases of bullying or harassment of others at your place of work within the last six months? | Everybody in work within the last year and whose place of work has at least two employees. | No knowledge of bullying or harassment | 2,507 | 67.39 | |
| | | Not at all | 451 | 12.12 | |
| | | To a lesser degree | 160 | 4.30 | |
| | | To some degree | 310 | 8.33 | |
| | | To a large degree | 190 | 5.11 | |
| | | To a very large degree | 102 | 2.74 | |
| | | Don't know | 2 | | |
| | | Refuse to answer | 0 | | |
| Have you helped to solve conflicts between people at your place of work within the last six months? | Everybody in work within the last year and whose place of work has at least two employees. | There have been no conflicts | 1,770 | 47.57 | |
| | | Not at all | 396 | 10.64 | |
| | | To a lesser degree | 297 | 7.98 | |
| | | To some degree | 704 | 18.92 | |
| | | To a large degree | 411 | 11.05 | |
| | | To a very large degree | 143 | 3.84 | |
| | | Don't know | 1 | | |
| | | Refuse to answer | 0 | | |
| Support in leisure | Have you asked for help from family members, friends, or acquaintances in connection with personal problems within the last three months? | Everybody | Have not had the need to do so | 2,849 | 55.12 |
| | | | Not at all | 597 | 11.55 |
| | | | To a lesser degree | 303 | 5.86 |
| | | | To some degree | 703 | 13.60 |
| | | | To a large degree | 509 | 9.85 |
| | | | To a very large degree | 208 | 4.02 |
| | | | Don't know | 1 | |
| | Refuse to answer | 0 | | | |
| | Have you helped family members, friends, or acquaintances in connection with their personal problems within the last three months? | Everybody | They have to your knowledge not needed help | 1,584 | 30.67 |
| | | | Not at all | 358 | 6.93 |
| | | | To a lesser degree | 429 | 8.31 |
| | | | To some degree | 1,296 | 25.10 |
| | | | To a large degree | 1,079 | 20.89 |
| | | | To a very large degree | 418 | 8.09 |
| Don't know | | | 6 | | |
| Refuse to answer | 0 | | | | |
| Not asked | 0 | | | | |

| | | | | | | |
|--------------------------------|---|--|--|-----------|-------|--|
| Participation in social events | Have you participated in social events in connection with your work within the last three months? | Everybody in work within the last year and whose place of work has at least two employees. | There have been no social events | 136 | 3.66 | |
| | | | No | 870 | 23.39 | |
| | | | Yes | 2,714 | 72.96 | |
| | | | Don't know | 0 | | |
| | | | Refuse to answer | 2 | | |
| | | | | Not asked | 1,448 | |
| | How often have you participated in activities, including private gatherings, with people in your neighborhood within the last three months? | Everybody | There have not been any activities or private gatherings | 585 | 11.33 | |
| | | | Never | 1,067 | 20.67 | |
| | | | Every month | 1,846 | 35.76 | |
| | | | Every week | 1,523 | 29.50 | |
| | | | Every day | 141 | 2.73 | |
| | | | Don't know | 8 | | |
| | | | Refuse to answer | 0 | | |
| | | | | Not asked | 0 | |
| | How often do you engage in leisure time activities with others? | Everybody | Never | 1,399 | 27.09 | |
| Every month | | | 842 | 16.30 | | |
| Every week | | | 2,681 | 51.91 | | |
| Every day | | | 243 | 4.70 | | |
| Don't know | | | 5 | | | |
| Refuse to answer | | | 0 | | | |
| Not asked | | | 0 | | | |
| The organization of the work | Has your working day during the last three months been characterised by teamwork? | Everybody in work within the last year and whose place of work has at least two employees. | Not at all | 930 | 25.03 | |
| | | | To a lesser degree | 275 | 7.40 | |
| | | | To some degree | 627 | 16.87 | |
| | | | To a large degree | 875 | 23.55 | |
| | | | To a very large degree | 1,009 | 27.15 | |
| | | | Don't know | 2 | | |
| | | | Refuse to answer | 4 | | |
| | | | | Not asked | 1,448 | |
| | In your job, how often do you deal with people who are not employed at your place of work? | Everybody in work within the last year | Have nothing to do with such people | 759 | 18.33 | |
| | | | Every month | 279 | 6.74 | |
| | | | Every week | 544 | 13.14 | |
| | | | Every day | 2,559 | 61.80 | |
| | | | Don't know | 5 | | |
| | | | Refuse to answer | 1 | | |
| | | | Not asked | 1,023 | | |

The variables for “Support in Leisure” are characterized by a pattern similar to the one observed in working life. A higher share of respondents helps family members, friends, or acquaintances with personal problems than the other way around. Furthermore, the answers tend towards a single hurdle distribution for helping others. That is, 31 percent has no knowledge of any family members, friends, or acquaintances who needs help with personal problems. Given they do, the answers follow a symmetric distribution. A double hurdle distribution seems present when it comes to asking for help. The first hurdle is that 55 percent has no need to do so and the second hurdle is that 12 percent does not ask for help. Given they ask for help, the answers tend to follow a symmetric distribution.

The “Participation in Social Events” demonstrates that many participate in social events frequently. About 73 percent participate in social events at work or engage in leisure time activities with others. The share is a bit lower, 68 percent, when it comes to participation in activities with people from the neighborhood.

Dealing with other people due to “Working Conditions” tends toward a single hurdle distribution. About one fourth does “not at all” have a working day characterized by teamwork. Given they do, the distribution tends to be skewed to the left so that most respondents have a

working day characterized by teamwork “to a large degree” or “to a very large degree”. The same pattern applies for dealing with people not employed at the respondent’s place of work.

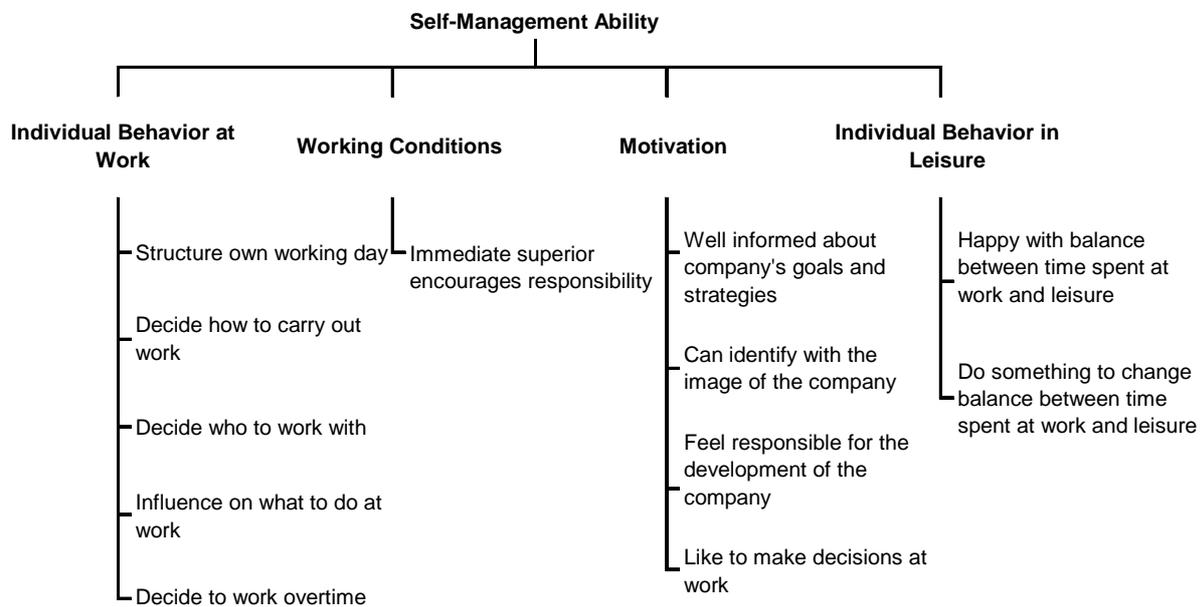
Two variables are left out from the original NCA dataset. One is whether the team consists of people with different education, given that teamwork characterizes working day. The other one is whether the individual improves relationships to people not employed at work, given that he or she deals with these people. It is not clear that a positive (or negative) answer to the two questions increases the “Social Competency”.

5.6 The Self-Management Ability

The “Self-Management Ability” is the *ability to carry out tasks independently*. Self-management – managing one-self – is about to make decisions, organize, and perform tasks independently and through own initiative so that traditional management in the sense of detailed instruction, monitoring, and control is rendered superfluous.

Figure 5.6 shows the indicators and variables for the “Self-Management Ability”. Four dimensions underlie the ability: “Individual Behavior at Work”, “Working Conditions”, “Motivation”, and “Individual Behavior in Leisure”.

Figure 5.6: The Dimensions and Variables for the “Self-Management Ability”



The “Individual Behavior at Work” indicates to which extent the individual actually manages himself or herself at work. For example, that the respondent makes decisions with respect to the way tasks are organized, decides how to carry out tasks, and has an influence on what to do at work. The dimension also focuses on to which extent the individual takes responsibility for achieving the tasks. For example, that the individual through own initiative decides to work overtime because he or she believes it to be necessary.

The “Working Conditions” is about the extent to which the job itself supports self-management. One aspect is to which level the superior encourages responsibility; for example, by delegating tasks to the worker. Other aspects could be about the superior’s ability to take on the position as a role model and the superior’s ability to communicate and establish engagement with respect to the company’s strategies and goals. The data does not cover the latter.

The “Motivation” expresses how motivated the individual is for self-management at work given the conditions and the goals of the company. One aspect is that the individual has access to the relevant information and knowledge for organizing and performing tasks in line with the company’s goals and strategies. Another one is to which extent the individual accepts the framework of the company and takes ownership in the development hereof. For example, that he or she can identify with the image of the company and that he or she believes to be responsible for the development of the company. A final aspect is to which level the individual likes to take decisions at work.

The “Individual Behavior in Leisure” is about the ability to live the life that the individual prefers. That is, that he or she is happy with the balance between time spent at work and time spent at leisure. If this is not the case, then the question is whether the individual does anything to change the balance.

Table 5.6 presents the details for the competence. Most questions are asked only to employees. The questions on leisure are raised to everybody in work within the last year.

As for the “Individual Behavior at Work”, the distributions of answers are skewed to left so that most respondents to a high extent organize tasks at work through own initiative. For example, 60 percent structure their own working day “to a large degree” and “to a very large degree” and 70 percent decide how to carry out their work “to a large degree” and “to a very large degree”. About half the respondents do not decide who to work with. Among those who do, the most frequent answers are “to a lesser degree” or “to some degree”. About one third “often” decides to work overtime while one fifth “rarely or never” does this.

Table 5.6: The Details for the “Self-Management Ability”

| Indicator | Question | Respondents | Answers | Frq. | % |
|---|---|--|------------------------|-------|-------|
| Individual Behavior at Work | Do you structure your own working day? | Employees within the last year | Not at all | 411 | 10.96 |
| | | | To a lesser degree | 252 | 6.72 |
| | | | To some degree | 788 | 21.01 |
| | | | To a large degree | 1,146 | 30.56 |
| | | | To a very large degree | 1,153 | 30.75 |
| | | | Don't know | 1 | |
| | Do you decide how you will carry out your work? | Employees within the last year | Not at all | 177 | 4.72 |
| | | | To a lesser degree | 145 | 3.87 |
| | | | To some degree | 848 | 22.63 |
| | | | To a large degree | 1,447 | 38.62 |
| | | | To a very large degree | 1,130 | 30.16 |
| | | | Don't know | 4 | |
| | Do you decide who you will work with? | Employees within the last year with colleagues | Work alone | 175 | 5.12 |
| | | | Not at all | 1,703 | 49.80 |
| | | | To a lesser degree | 445 | 13.01 |
| | | | To some degree | 614 | 17.95 |
| | | | To a large degree | 303 | 8.86 |
| | | | To a very large degree | 180 | 5.26 |
| | Do you have any influence on what you do at work? | Employees within the last year | Don't know | 4 | |
| | | | Not asked | 1,746 | |
| Not at all | | | 333 | 8.91 | |
| To a lesser degree | | | 339 | 9.07 | |
| To some degree | | | 972 | 26.00 | |
| To a large degree | | | 1,340 | 35.84 | |
| Have you decided to work overtime within the last three months because you felt it was necessary? | Employees within the last year | To a very large degree | 755 | 20.19 | |
| | | Don't know | 12 | | |
| | | Not asked | 1,419 | | |
| | | Not possible | 154 | 4.12 | |
| | | Rarely/never | 743 | 19.88 | |
| | | Once in a while | 506 | 13.54 | |
| | | Sometimes | 743 | 19.88 | |
| | | Often | 1,237 | 33.09 | |
| All the time | 355 | 9.50 | | | |
| Does your immediate superior encourage you to take responsibility? | Employees within the last year | Don't know | 5 | | |
| | | Refuse to answer | 8 | | |
| | | Not asked | 1,419 | | |
| | | Not at all | 209 | 5.61 | |
| | | To a lesser degree | 139 | 3.73 | |
| | | To some degree | 626 | 16.79 | |
| | | To a large degree | 1,742 | 46.73 | |
| | | To a very large degree | 1,012 | 27.15 | |
| Working Conditions | Employees within the last year | Don't know | 22 | | |
| | | Refuse to answer | 1 | | |
| | | Not asked | 1,419 | | |

| Indicator | Question | Respondents | Answers | Frg. | % |
|---|---|---|-----------------------------|-------|-------|
| Motivation | Do you feel that you are well informed about the company's/ organisation's goals and strategies? | Employees within the last year | Not at all | 231 | 6.17 |
| | | | To a lesser degree | 289 | 7.71 |
| | | | To some degree | 807 | 21.54 |
| | | | To a large degree | 1,532 | 40.90 |
| | | | To a very large degree | 887 | 23.68 |
| | | | Don't know | 5 | |
| | Not asked | 1,419 | | | |
| | Can you identify with the image which the company wishes to project? | Employees within the last year | Do not know which image the | 93 | 2.50 |
| | | | Not at all | 179 | 4.81 |
| | | | To a lesser degree | 204 | 5.48 |
| | | | To some degree | 960 | 25.79 |
| | | | To a large degree | 1,520 | 40.84 |
| | | | To a very large degree | 766 | 20.58 |
| | Don't know | 29 | | | |
| | Not asked | 1,419 | | | |
| | Do you feel responsible for the development of the company? | Employees within the last year | Not at all | 303 | 8.09 |
| To a lesser degree | | | 242 | 6.46 | |
| To some degree | | | 786 | 20.99 | |
| To a large degree | | | 1,548 | 41.34 | |
| To a very large degree | | | 866 | 23.12 | |
| Don't know | | | 6 | | |
| Not asked | 1,419 | | | | |
| Would you like to make decisions at work? | Employees within the last year | Not at all | 144 | 3.84 | |
| | | To a lesser degree | 124 | 3.31 | |
| | | To some degree | 699 | 18.65 | |
| | | To a large degree | 1,667 | 44.49 | |
| | | To a very large degree | 1,113 | 29.70 | |
| | | Don't know | 4 | | |
| Not asked | 1,419 | | | | |
| Individual Behavior in Leisure | Are you happy with the balance between the time you spend working and your leisure time? | Everybody in work within the last year | Not at all | 277 | 6.68 |
| | | | To a lesser degree | 457 | 11.03 |
| | | | To some degree | 861 | 20.78 |
| | | | To a large degree | 1,707 | 41.19 |
| | | | To a very large degree | 842 | 20.32 |
| | | | Don't know | 3 | |
| | Not asked | 1,023 | | | |
| | Have you done anything to change the balance between your time spent at work and your leisure time within the last 12 months? | Everybody who answers "to some degree", "to a lesser degree" or "not at all" to the question above. | No | 878 | 55.12 |
| | | | Yes | 715 | 44.88 |
| | | | Don't know | 2 | |
| Not asked | | | 3,575 | | |

In terms of the “Working Conditions”, most respondents find that their immediate superior encourages them to take responsibility. The distribution is skewed to the left so that almost 75 percent get support from their superior “to a large degree” and “to a very large degree”. 6 percent receive no support at all from their superior.

The distributions for the variables in the “Motivation” are skewed to the left as well. The most frequent answer is “to a large degree” while the less frequent answers are “not at all” and “to a lesser degree”. For example, about 41 percent believe that they “to a large degree” are well informed about the company’s or organization’s goals and strategies and only 7 percent think so “to a lesser degree” or “not at all”.

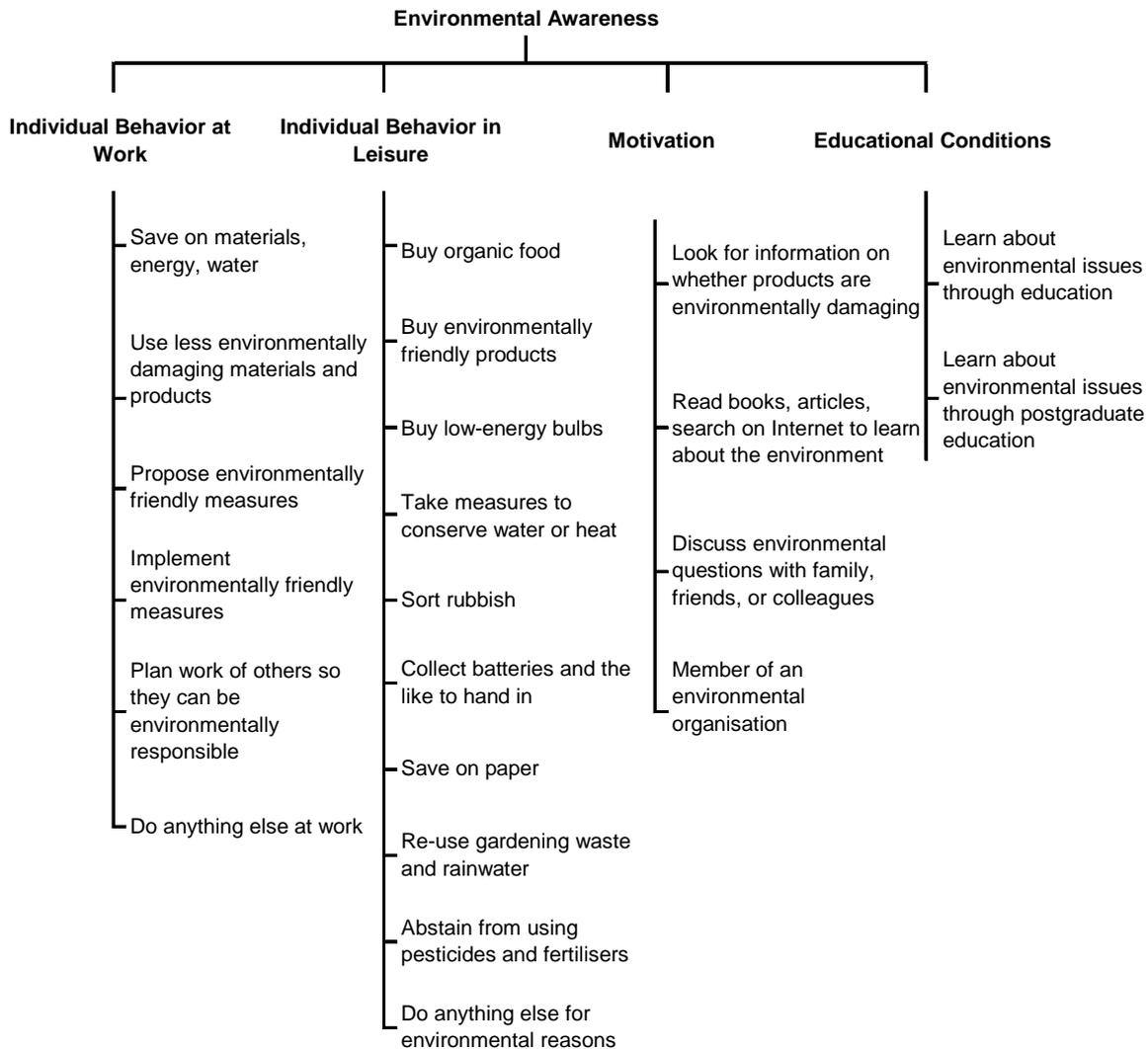
The “Individual Behavior in Leisure” shows that about 60 percent are happy with the balance between time spent at work and time spent at leisure time “to a large degree” or “to a very large degree”. For the latter 40 percent, less than half have done anything to change the balance.

5.7 The Environmental Awareness

The “Environmental Awareness” is the *ability to contribute to environmental responsibility*. It requires knowledge on reducing environmental strain and an ability to integrate this knowledge into attitudes and actions. The individual needs to acquire new knowledge continually as new knowledge on environment is developed continuously.

The “Environmental Awareness” builds on four dimensions: “Individual Behavior at Work”, “Individual Behavior in Leisure”, “Motivation”, and “Educational Conditions”. Figure 5.7 presents the ability in terms of the dimensions and variables.

Figure 5.7: The Dimensions and Variables for the “Environmental Awareness”



The “Individual Behavior at Work” addresses the active contribution to the environmental responsibility related to work. The action can be directed towards the contribution of the individual or towards the contribution of the firm. At the individual level, the respondent can save on materials, energy, or water, or use less environmentally damaging materials and products. At the firm level, the individual can propose environmentally friendly measures or be a party to the implementation of such measures. He or she can also plan work of others so that they can be environmentally responsible.

In leisure, the individual's demand for goods can be such that it leads towards reducing the environmental strain. For example, he or she may buy organic food, environmental friendly products, or low-energy bulbs. The individual may also take initiatives to reduce the environmental damage at home. For example, take measures to conserve water or heat, sort rubbish, or collect batteries and hand them in.

The “Motivation” measures the extent to which the individual searches for knowledge on environmental strain. The individual may search for information on the environmental impact of a given product or on environmental issues in general. The knowledge may also stem from discussions on environmental issues with family, friends, or colleagues. Finally, the individual may be a member of an environmental organization.

The “Educational Conditions” is about how much education has contributed to the individual's environmental knowledge. That is, whether the individual has learned about environmental issues through formal education (primary, secondary or tertiary) and/or postgraduate education.

Table 5.7 shows the details for the “Environmental Awareness”. Everybody in work within the last year answers the questions related to working life, the question on the educational condition is asked to those with a qualifying education, and everybody answers the questions related to leisure.

A large variation exists in the way individuals contribute to environmental responsibility at work and in leisure. Some measures are used over others. For example, many respondents collect batteries and hand them in, whereas few respondents buy environmentally friendly products in general. Discussing environmental issues is more prevalent than searching for written information on environmental issues.

Table 5.7: The Details for the “Environmental Awareness”

| Indicator | Question | Respondents | Answers | Frg. | % |
|--|--|--|------------------|-------|-------|
| Individual Behavior at Work | Have you done the following at work within the last 12 months? Saved on materials, energy, water, etc.? | Everybody in work within the last year | No | 1,201 | 29.02 |
| | | | Yes | 2,938 | 70.98 |
| | | | Don't know | 18 | |
| | | | Not asked | 1,013 | |
| | Have you done the following at work within the last 12 months? Used less environmentally damaging materials and products? | Everybody in work within the last year | No | 1,609 | 39.63 |
| | | | Yes | 2,451 | 60.37 |
| | | | Don't know | 97 | |
| | | | Not asked | 1,013 | |
| | Have you done the following at work within the last 12 months? Been a party to the proposal of environmentally friendly measures? | Everybody in work within the last year | No | 2,305 | 55.72 |
| | | | Yes | 1,832 | 44.28 |
| | | | Don't know | 19 | |
| | | | Refuse to answer | 1 | |
| | Have you done the following at work within the last 12 months? Been a party to the implementation of environmentally friendly measures? | Everybody in work within the last year | No | 2,144 | 51.84 |
| | | | Yes | 1,992 | 48.16 |
| | | | Don't know | 20 | |
| | | | Refuse to answer | 1 | |
| | Have you done the following at work within the last 12 months? Planned the work of others so that they can be environmentally responsible? | Everybody in work within the last year | No | 2,750 | 66.65 |
| | | | Yes | 1,376 | 33.35 |
| Don't know | | | 27 | | |
| Refuse to answer | | | 4 | | |
| Have you done the following at work within the last 12 months? Have you done anything else? | Everybody in work within the last year | No | 3,519 | 84.98 | |
| | | Yes | 622 | 15.02 | |
| | | Don't know | 16 | | |
| | | Not asked | 1,013 | | |
| Individual Behavior in Leisure | Do you buy organic food? | Everybody | Never | 1,486 | 28.83 |
| | | | Sometimes | 1,989 | 38.58 |
| | | | Often | 1,212 | 23.51 |
| | | | Always | 468 | 9.08 |
| | | | Don't know | 14 | |
| | | | Refuse to answer | 1 | |
| | Do you generally buy environmentally friendly products, e.g. with the Nordic Eco-label "Svanemærket" or the EU flower? | Everybody | Never | 1,830 | 35.74 |
| | | | Sometimes | 1,522 | 29.72 |
| | | | Often | 1,229 | 24.00 |
| | | | Always | 540 | 10.54 |
| | | | Don't know | 47 | |
| | | | Not asked | 2 | |
| | Do you buy low-energy bulbs? | Everybody | Never | 1,195 | 23.14 |
| | | | Sometimes | 1,187 | 22.99 |
| | | | Often | 1,231 | 23.84 |
| | | | Always | 1,551 | 30.03 |
| | | | Don't know | 5 | |
| | | | Not asked | 1 | |
| Do you take measures to conserve water or heat in your home? | Everybody | Never | 1,859 | 36.25 | |
| | | Sometimes | 546 | 10.65 | |
| | | Often | 687 | 13.40 | |
| | | Always | 2,036 | 39.70 | |
| | | Don't know | 42 | | |
| | | Not asked | 1 | | |
| How many groups have you sorted your rubbish into during the last month? | Everybody | Do not sort | 1,334 | 25.90 | |
| | | Two groups | 1,229 | 23.86 | |
| | | Three groups | 1,370 | 26.60 | |
| | | More than three groups | 1,218 | 23.65 | |
| | | Don't know | 19 | | |
| | | Not asked | 1 | | |
| In addition to the above, do you do any of the following for environmental reasons: Collect batteries and other | Everybody | No | 428 | 8.28 | |
| | | Yes | 4,740 | 91.72 | |
| | | Don't know | 2 | | |
| In addition to the above, do you do any of the following for environmental reasons: Save on paper? | Everybody | No | 2,070 | 40.25 | |
| | | Yes | 3,073 | 59.75 | |
| | | Don't know | 26 | | |
| | | Refuse to answer | 1 | | |
| In addition to the above, do you do any of the following for environmental reasons: Re-use gardening waste and rainwater? | Everybody | No | 2,290 | 44.88 | |
| | | Yes | 2,813 | 55.12 | |
| | | Don't know | 48 | | |
| | | Refuse to answer | 19 | | |
| In addition to the above, do you do any of the following for environmental reasons: Abstain from using pesticides and fertilisers? | Everybody | No | 1,567 | 30.78 | |
| | | Yes | 3,524 | 69.22 | |
| | | Don't know | 57 | | |
| | | Refuse to answer | 22 | | |
| In addition to the above, do you do any of the following for environmental reasons: Do you do anything else? | Everybody | No | 3,973 | 77.37 | |
| | | Yes | 1,162 | 22.63 | |
| | | Don't know | 35 | | |

| Indicator | Question | Respondents | Answers | Frg. | % |
|------------------------|---|---------------------------------------|------------------|-------|-------|
| Motivation | Have you done the following within the last 12 months: Investigated which products are environmentally | Everybody | No | 4,056 | 78.56 |
| | | | Yes | 1,107 | 21.44 |
| | | | Don't know | 7 | |
| | Have you done the following within the last 12 months: Read books, articles or leaflets, or searched on the Internet in | Everybody | No | 2,502 | 48.47 |
| | | | Yes | 2,660 | 51.53 |
| | | | Don't know | 8 | |
| | Discussed environmental questions with family, friends or colleagues? | Everybody | No | 1,327 | 25.73 |
| | | | Yes | 3,831 | 74.27 |
| | | | Don't know | 12 | |
| | Are you a member of an environmental organisation? | Everybody | No | 4,734 | 91.60 |
| | | | Yes | 434 | 8.40 |
| | | | Don't know | 2 | |
| Educational Conditions | Did you learn about environmental issues as part of your education? | Everybody with a qualifying education | No | 1,772 | 46.30 |
| | | | Yes | 2,055 | 53.70 |
| | | | Don't know | 1 | |
| | | | Refuse to answer | 10 | |
| | | | Not asked | 1,332 | |
| | Did you learn about environmental issues as part of your postgraduate education? | Everybody | No | 3,406 | 66.08 |
| | | | Yes | 1,748 | 33.92 |
| | | | Don't know | 5 | |
| | | | Refuse to answer | 11 | |
| | | | | | |

The “Individual Behavior at Work” shows that more respondents take actions towards their personal contribution to environmental responsibility than to the contribution of the firm. About 70 percent save on materials, energy, or water and about 60 percent use less environmentally damaging materials and products. Close to 55 percent are not a party to the proposal of environmentally friendly measures and 52 percent are not a party to the implementation of environmentally friendly measures. Two thirds of the respondents do not plan work of others so that they can be environmentally responsible.

A large variation exists in the contribution to environmental responsibility across the measures in leisure. The distribution is somewhat skewed to the right for buying organic food or environmentally friendly produces. For example, about one third “never” or “sometimes” buys organic food while less than one tenth “always” does so. The distribution is more spread out for buying low-energy bulbs so that 30 percent “always” buy low-energy bulbs and about 23 percent “never”, “sometimes”, or “often” buy low-energy bulbs. It seems to be an either-or situation when it comes to taking measures to conserve water or heat. 36 percent “never” take measures to conserve water or heat and 40 percent “always” do this. Almost everybody, 92 percent, collects batteries and hands them in to the local authority.

The variables for the “Motivation” demonstrate that most respondents do not search for knowledge on the environmental strain. Close to 80 percent do not investigate which products are environmentally damaging. About half of the respondents do not read books, articles, or leaflets or searches on the Internet in order to learn about the environment in general. 8 percent are a member

of an environmental organization. Yet, about 75 percent discuss environmental issues with family, friends or colleagues.

In terms of the “Educational Conditions”, more than half of the respondents think they have learned about environmental issues as part of their qualifying education. About two thirds have not learned about environmental issues as part of their postgraduate education.

Six variables from the original NCA data set are left out due to being unordered variables. Five of these are about the main reason for buying organic food, buying environmentally friendly products, buying low-energy bulbs, conserving water or heat, and for sorting rubbish. The individual can answer “for environmental reasons”, “for health reasons”, “to save money”, and the like. One variable focuses on where the individual has gained the knowledge that forms the basis of his or her daily environmental conduct.

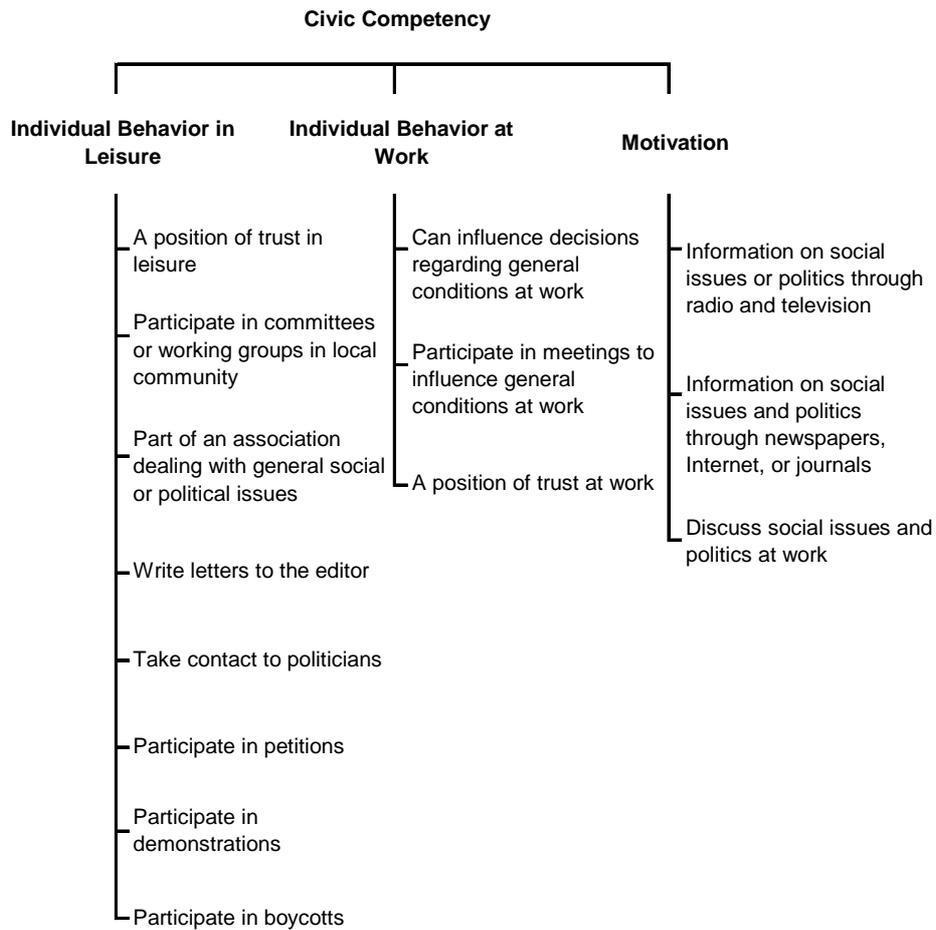
5.8 The Civic Competency

The “Civic Competency” is *the ability to participate in democratic decisions*. The word democracy is about a representative government influencing or taking decisions. This involves decisions taken at the general, political level but also decisions taken in the local community and in the working life. As such, the “Civic Competency” is concerned with the individual’s involvement and participation in the sustainability and development of democratic life at all levels of society.

Figure 5.8 illustrates the dimensions and variables for the “Civic Competency”. Three dimensions form the ability: “Individual Behavior in Leisure”, “Individual Behavior at Work”, and “Motivation”.

The “Individual Behavior in Leisure” is about the individual’s participation in democratic decisions in the local community and at the more general level. One aspect is whether the individual takes active positions so that he or she holds a position of trust or participates in committees or working groups. In addition, whether the individual is part of an association or participates in meetings that deal with more general social or political issues. Another aspect is the extent to which the individual seeks to influence democratic decisions at a more general level. For example, that the individual writes letters to the editor, contacts politicians or participates in petitions, demonstrations, or boycotts.

Figure 5.8: The Dimensions and Variables for the “Civic Competency”



The “Individual Behavior at Work” addresses how much the individual can influence decisions on organizational changes, safety matters, or smoking policy. Furthermore, whether the individual actually takes the opportunity and participates in meetings or activities to influence these decisions. Another and more formal way to influence decisions is to be elected for a position of trust at work.

The “Motivation” indicates to what level the individual follows democratic debates. The individual may look for information on social issues and politics in the media (radio, television, newspapers) or on the Internet. The individual may also achieve information on democratic issues through discussions. The dimension focuses on discussions in working life rather than in leisure.

Table 5.8 shows the details for the “Civic Competency”. Everybody answers the questions related to leisure while mostly employees answer the questions related to working life.

Table 5.8: The Details for the “Civic Competency”

| Indicator | Question | Respondents | Answers | Frq. | % |
|---|---|---|---|-------|-------|
| Individual Behavior in Leisure | Have you been elected to a position of trust in your leisure within the last three years? (e.g. the committee of a political party or housing association or the board of governors for a school) | Everybody | No | 3,751 | 72.57 |
| | | | Yes | 1,418 | 27.43 |
| | | | Don't know | 1 | |
| | Have you participated in committees or working groups in your local community within the last 12 months? (Could be in connection with an annual party in a nursery school or problem regarding parking in the neighborhood) | Everybody | As far as I know, there is no such thing in my neighborhood | 222 | 4.30 |
| | | | No, have not participated | 3,460 | 66.95 |
| | | | Yes, have participated once or twice | 574 | 11.11 |
| | | | Yes, have participated more than twice | 912 | 17.65 |
| | | | Don't know | 2 | |
| | Have you been part of an association, participated in meetings or demonstrations, or other such activities dealing with more general social or political issues, within the last 12 | Everybody | No, have not participated | 4,083 | 79.04 |
| | | | Yes, have participated once or twice | 484 | 9.37 |
| | | | Yes, have participated more than twice | 599 | 11.60 |
| | | | Don't know | 4 | |
| | Have you carried out or participated in the following within the last 12 months, without it being part of your work: | | | | |
| -- Written a letter to the editor? | Everybody | No | 4,859 | 93.98 | |
| | | Yes | 311 | 6.02 | |
| -- Taken direct contact to politicians? | Everybody | No | 4,282 | 82.82 | |
| | | Yes | 888 | 17.18 | |
| -- Petition? | Everybody | No | 3,690 | 71.44 | |
| | | Yes | 1,475 | 28.56 | |
| | | Don't know | 5 | | |
| -- Demonstrations? | Everybody | No | 4,841 | 93.64 | |
| | | Yes | 329 | 6.36 | |
| -- Boycotts? | Everybody | No | 4,949 | 95.73 | |
| | | Yes | 221 | 4.27 | |
| Individual Behavior at Work | Can (could) you influence decisions regarding general conditions at your workplace, such as organisational changes, safety matters or smoking policy? | Employees within the last year (13 missing) | No | 659 | 17.51 |
| | | | Yes | 3,105 | 82.10 |
| | | | Don't know | 16 | |
| | | | Refuse to answer | 2 | |
| | | | Not asked | 1,388 | |
| | Have you participated in meetings or other such activities at your place of work within the last three months with the purpose of influencing general conditions? | Everybody who answers "yes" to the question on "Can you influence decisions regarding general conditions.." | There were no activities of this kind | 221 | 7.15 |
| | | | No, have not participated | 648 | 20.96 |
| | | | Yes, have participated once or twice | 829 | 26.81 |
| | | | Yes, have participated more than twice | 1,394 | 45.08 |
| | | | Don't know | 13 | |
| Have you been elected to a position of trust at work within the last three years? | Employees within the last year (13 missing) | No | 2,988 | 79.11 | |
| | | Yes | 789 | 20.89 | |
| | | Don't know | 2 | | |
| | | Refuse to answer | 3 | | |
| | | Not asked | 1,388 | | |
| Motivation | How much time have you spent keeping yourself informed, via radio and television, about social issues or politics during the last week? | Everybody | Less than one hour | 909 | 17.66 |
| | | | 1 - 5 hours | 2,704 | 52.55 |
| | | | 6 - 10 hours | 1,183 | 22.99 |
| | | | More than 10 hours | 350 | 6.80 |
| | | | Don't know | 23 | |
| | How much time have you spent keeping yourself informed, via newspapers, Internet or journals, about social issues or politics during the last week? | Everybody | Less than one hour | 1,568 | 30.46 |
| | | | 1 - 5 hours | 2,695 | 52.35 |
| | | | 6 - 10 hours | 707 | 13.73 |
| | | | More than 10 hours | 178 | 3.46 |
| | | | Don't know | 20 | |
| How often do you discuss social issues and politics at work? | Everybody in work within the last year and whose place of work has at least two employees | Never | 747 | 19.29 | |
| | | Every year | 187 | 4.83 | |
| | | Every month | 573 | 14.79 | |
| | | Every week | 1,251 | 32.30 | |
| | | Every day | 1,115 | 28.79 | |
| | | Don't know | 32 | | |
| Not asked | 1,265 | | | | |

In terms of the “Individual Behavior in Leisure”, a low share of respondents influences democratic decisions directly or indirectly. Less than one third is elected to a position of trust or participates in committees or working groups in the local community. The share is even lower and about one fifth when it comes to being part of an association dealing with more general social or political issues. The most prevalent way to influence democratic decisions at the general level is to sign a petition and the least used way is to participate in boycotts. 29 percent signs petitions and 4 percents participates in boycotts.

In working life, a high share has the possibility to influence decisions and they also use this possibility. About 80 percent can influence decisions regarding general conditions at their workplace, such as organizational changes, safety matters, or smoking policy. Among those who can, more than 70 percent participate in meetings or other such activities with the purpose of influencing general conditions. About 20 percent have been elected to a position of trust at work within the last three years.

As for the “Motivation”, respondents spend a moderate amount of time on following democratic debates. More than half of the respondents spend from “1 to 5 hours” per week on keeping themselves informed about social issues or politics via radio and television or via newspapers, the Internet or journals. At work, 20 percent “never” discuss social issues and politics and 60 percent discuss this “every week” and “every day”.

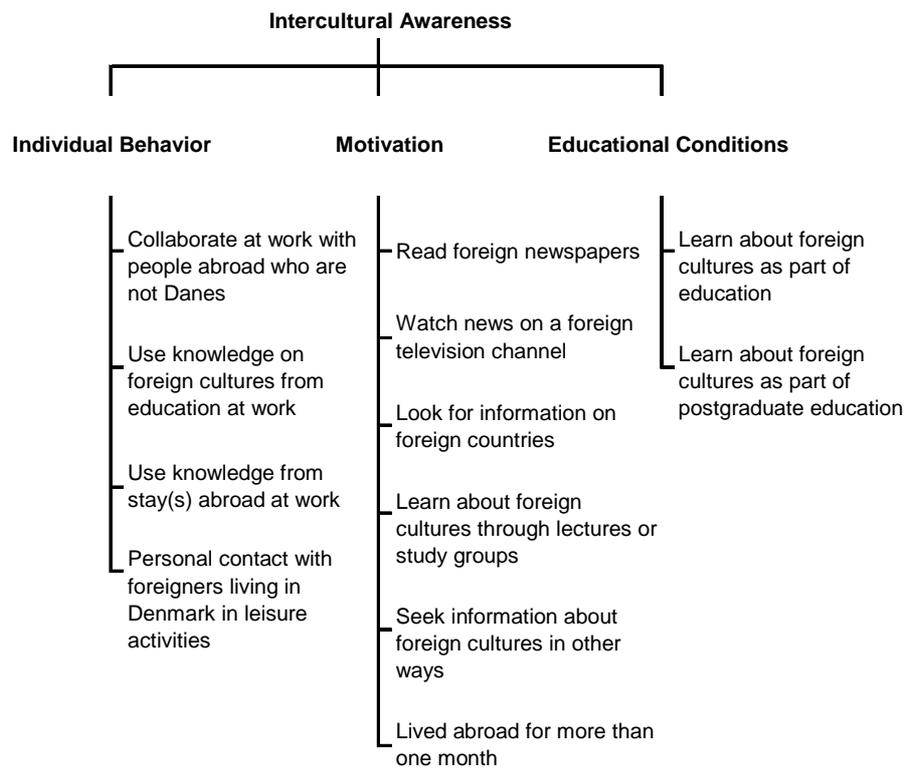
One variable is left out from the NCA. The variable is about the extent to which the individual looks for further information after discussions about social issues and politics. The intended respondents differ from the actual ones because a mistake happened during the data collection.

5.9 The Intercultural Awareness

The “Intercultural Awareness” is the *ability to comply with complexity of foreign cultures*. The ability is about the individual being able to decode, understand, and act upon the differences that he or she experiences when meeting people, values, and norms from another country. It does not imply the individual to accept all the differences, rather the individual must recognize and respect people from other countries.

Figure 5.9 shows the “Intercultural Awareness” in terms of its dimensions and variables. Three dimension form the ability: “Individual Behavior”, “Motivation”, and “Educational Conditions”.

Figure 5.9: The Dimensions and Variables for the “Intercultural Awareness”



The “Individual Behavior” addresses to which extent the individual uses his or her intercultural awareness at work or in leisure. The individual may collaborate with people from foreign cultures or countries at work or for other reasons use his or her knowledge of foreign cultures at work. The individual may also be in contact with foreigners living in Denmark through activities in leisure.

The “Motivation” indicates to what level the individual searches for knowledge on and experience with foreign cultures. The knowledge may stem from reading newspapers from foreign countries or from watching news on a foreign television channel. The knowledge can may also stem from learning about foreign cultures through lectures or study groups. Finally, experience with foreign cultures can be achieved by living in another country for some time.

The “Educational Conditions” measures the extent to what level the education develops the individual's intercultural knowledge. As such, it is concerned with whether the individual learns about foreign cultures through formal education (primary, secondary or tertiary) and/or postgraduate education.

Table 5.9 presents the details for the “Intercultural Awareness”. The questions related to work are asked to everybody in work within the last year who is not an immigrant and the questions on leisure are asked to everybody who is not an immigrant.

Table 5.9: The Details for the “Intercultural Awareness”

| Indicator | Question | Respondents | Answers | Frq. | % |
|--|--|---|------------------|-------|-------|
| Individual Behavior | At work, do (did) you collaborate with people abroad who are not Danes? | Everybody in work within the last year who is not an immigrant | No | 2,909 | 72.60 |
| | | | Yes | 1,098 | 27.40 |
| | | | Don't know | 2 | |
| | | | Not asked | 1,161 | |
| | Have you used this knowledge in your present or former job? | Everybody who has learned about cultural issues in other countries as part of education | No | 433 | 29.38 |
| | | | Yes | 1,041 | 70.62 |
| | | | Don't know | 5 | |
| | | | Not asked | 3,691 | |
| | Is what you learned during your stay(s) abroad useful to you in your work? | Everybody who has lived in foreign countries for more than a month | No | 705 | 47.41 |
| | | | Yes | 782 | 52.59 |
| | | | Don't know | 4 | |
| | | | Not asked | 3,679 | |
| Do you have personal contact with foreigners living in Denmark in your leisure activities? | Everybody who is not an immigrant | No | 3,265 | 66.20 | |
| | | Yes | 1,667 | 33.80 | |
| | | Don't know | 2 | | |
| | | Not asked | 236 | | |
| Motivation | Have you read a foreign newspaper within the last week | Everybody who is not an immigrant | No | 4,461 | 90.41 |
| | | | Yes | 473 | 9.59 |
| | | | Not asked | 236 | |
| | Have you watched the news on a foreign television channel within the last week? | Everybody who is not an immigrant | No | 3,391 | 68.74 |
| | | | Yes | 1,542 | 31.26 |
| | | | Don't know | 1 | |
| | Have you looked for information about foreign countries or cultures within the last week, on the Internet, in books or journals? | Everybody who is not an immigrant | No | 3,434 | 69.60 |
| | | | Yes | 1,500 | 30.40 |
| | | | Not asked | 236 | |
| | Have you learnt about foreign cultures through a lecture, study group or adult education class within the last week? | Everybody who is not an immigrant | No | 4,520 | 91.65 |
| | | | Yes | 412 | 8.35 |
| | | | Don't know | 2 | |
| | Have you sought information about foreign cultures in other ways within the last week? | Everybody who is not an immigrant | No | 3,911 | 79.33 |
| | | | Yes | 1,019 | 20.67 |
| | | | Don't know | 4 | |
| | Have you lived abroad for more than one month since you turned 18? (Based on two questions) | Everybody who is not an immigrant | No | 3,086 | 62.55 |
| | | | months | 554 | 11.23 |
| | | | and six months | 376 | 7.62 |
| months | | | 597 | 12.10 | |
| six months | | | 321 | 6.51 | |
| Not asked | 236 | | | | |
| Educational Conditions | Did you learn about cultural issues in other countries as part of your education? | Everybody with a qualifying education | No | 1,953 | 53.11 |
| | | | Yes | 1,724 | 46.89 |
| | | | Don't know | 8 | |
| | | | Not asked | 1,485 | |
| | Did you learn about cultural issues in other countries as part of a postgraduate education? | Everybody who is not an immigrant | No | 3,813 | 77.50 |
| | | | Yes | 1,107 | 22.50 |
| | | | Don't know | 3 | |
| | | | Refuse to answer | 11 | |
| Not asked | 236 | | | | |

The “Individual Behavior” demonstrates that about one third is in contact with foreigners and that knowledge on foreign cultures often is used at work. At work, about 27 percent collaborate with people living abroad who are not Danes. In leisure, close to 34 percent have personal contact with foreigners living in Denmark through their leisure activities. 70 percent use knowledge on foreign cultures in their working life if they have learned about cultural issues in other countries as part of education. About one half finds that what they learned during stay(s) abroad is useful at work, given they have stayed abroad.

In terms of the “Motivation”, the television and Internet are the most used tools for searching knowledge on foreign cultures. About one third watches the news on a foreign television channel or looks for information on foreign countries or cultures on the Internet or in books. Less than one tenth reads foreign newspapers or learns about foreign cultures through a lecture or study groups. Close to one third has lived abroad for more than one month since they turned 18.

The “Educational Conditions” presents the fact that less than half of the respondents believe they have learned about cultural issues in other countries as part of their education. In addition, less than one fourth finds that postgraduate education has taught them about foreign cultures.

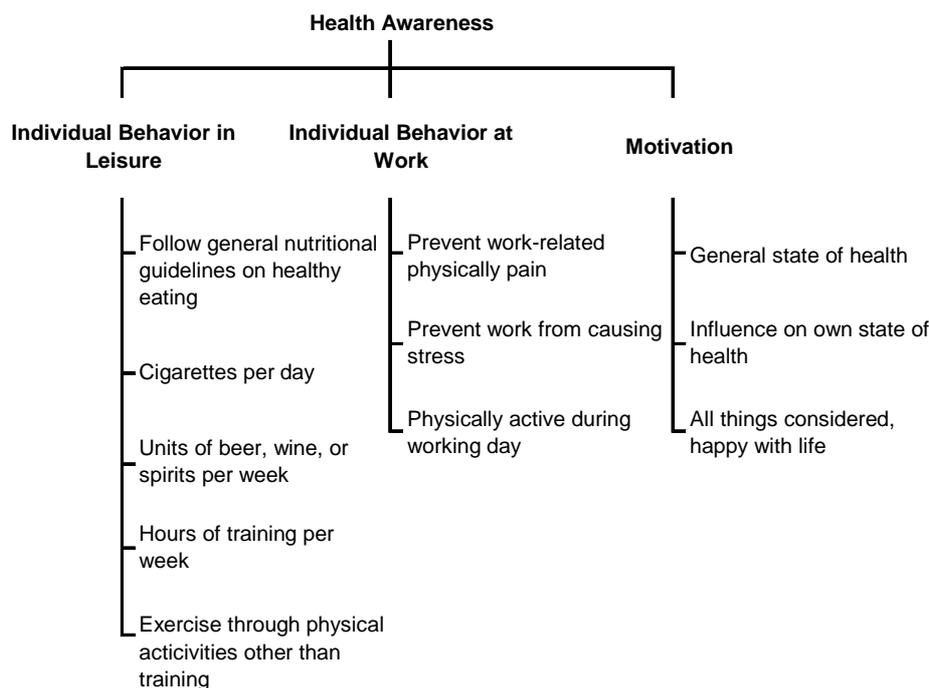
Four variables are omitted from the NCA. One of them is about whether the individual uses the knowledge on foreign cultures at work which he or she has learned as part of postgraduate education. The other one is about whether the individual works with foreigners living in Denmark. The intended respondents do not match the actual respondents for the two variables because a mistake happened during the data collection. Two variables are unordered. The first one is about which countries the individual has lived in. The second one is about the reasons for having lived abroad.

5.10 The Health Awareness

The “Health Awareness” is the *ability to assume responsibility for body and health*. The ability is about obtaining, maintaining, and improving physical and mental health. As such it covers a broad range of aspects: diet, smoking, alcohol, exercise, stress, physical attrition, and well-being.

Three dimensions form the “Health Awareness”: “Individual Behavior in Leisure”, “Individual Behavior at Work”, and “Motivation”. Figure 5.10 presents the dimensions and variables for the ability.

Figure 5.10: The Dimensions and Variables for the “Health Awareness”



The “Individual Behavior in Leisure” covers aspects related to diet, smoking, alcohol, and exercise. Diet is about the extent to which the individual follows general nutritional guidelines on healthy eating. Smoking is about the number of cigarettes smoked per day and alcohol is the number of units (beer, wine or spirits) drunk per week. Exercise concerns hours of training per week and psychical activities other than training.

The “Individual Behavior at Work” addresses the well-being and exercise at work. The well-being is about the extent to which the individual prevents work-related pain in back, shoulders, wrists, eyes, arms, or neck. In addition, the extent to which the individual prevents work from causing him or her to be stressed, upset, or aggressive. The exercise at work is about to which level of the working day the individual is physically active.

The “Motivation” concerns the well-being in general. The individual ranks his or her general state of health and assesses the influence he or she has on own state of health. In addition, the individual evaluates to which extent he or she is happy with the life lived.

Two unordered variables are omitted from the NCA data. The variables are about the “main reason” and “second main reason” for hours of training per week. The individual can answer “for health reasons”, “to stay fit”, “because of the social element”, “because of my weight”, and the like.

Table 5.10 presents the details for the “Health Awareness”. Everybody in work within the last year answers the questions related to the working life. Everybody answers questions related to leisure.

In leisure, the distributions are skewed to the left for following general nutritional guidelines on eating healthy. More than 75 percent follow general nutritional guidelines “to a large degree” or “to a very large degree”. Close to 70 percent do not smoke. Among those who do smoke, most respondents smoke from 10 to 29 cigarettes per day. Close to 20 percent do not drink alcohol. Among those who do, most respondents drink less than 14 units per week. More than half of the respondents have not had any exercise during the last week and among those who have, most respondents have had less than four of exercise. The distribution is more spread out for exercise through physical activities other than training.

At work, about one third does not have problems in terms of damaging physical or mental situations. Among those who do, the distribution is skewed to the left so that most respondents “to a large degree” do something to prevent the damaging situations. Being physical active during working day tends to be an either-or situation. 25 percent are not physically active at work and 31 percent are active the full time.

The distribution of answers are skewed to the left for the “Motivation”. Almost 75 percent find their general state of health to be “good” or “very good”. 84 percent think they have “a quiet large influence” or “very great influence” on own state of health. 91 percent say that all things considered, they are “to a large degree” or “to a very large degree” happy with the life they live.

Table 5.10: The Details for the "Health Awareness"

| Indicator | Question | Respondents | Answers | Frq. | % |
|--|---|--|--|-------|-------|
| Individual Behavior in Leisure | Do you follow the general nutritional guidelines on healthy eating? | Everybody | To a very small degree | 284 | 5.50 |
| | | | To a lesser degree | 359 | 6.95 |
| | | | To some degree | 2,092 | 40.50 |
| | | | To a large degree | 1,807 | 34.99 |
| | | | To a very large degree | 623 | 12.06 |
| | Do you smoke and how many cigarettes do you normally smoke per day? (Based on two questions) | Everybody | Don't know | 5 | |
| | | | No, I have never smoked | 2,338 | 45.35 |
| | | | No, but I used to smoke | 1,219 | 23.64 |
| | | | 1-9 cigarettes | 277 | 5.37 |
| | | | 10-20 cigarettes | 680 | 13.19 |
| | | | 20-29 cigarettes | 530 | 10.28 |
| | | | More than 30 cigarettes | 112 | 2.17 |
| | | | Don't know | 2 | |
| | | | Refuse to answer | 4 | |
| | | | Say "smoke" but not asked about number of cigarettes | 8 | |
| | How many units (beer, wine or spirits) have you drunk on average per week within the last year? | Everybody | 0 units | 959 | 18.87 |
| | | | 1-4 units | 1,996 | 39.28 |
| | | | 5-14 units | 1,492 | 29.36 |
| | | | 15-21 units | 453 | 8.91 |
| | | | 22-29 units | 74 | 1.46 |
| More than 30 units | | | 108 | 2.13 | |
| Don't know | | | 83 | | |
| Refuse to answer | 5 | | | | |
| How many hours have you trained during the last week, e.g. sport, fitness training or running? | Everybody | Have not had any exercise | 2,747 | 53.16 | |
| | | 1-2 hours | 1,079 | 20.88 | |
| | | 3-4 hours | 686 | 13.28 | |
| | | 5-6 hours | 328 | 6.35 | |
| | | 7 hours or more | 327 | 6.33 | |
| | | Don't know | 3 | | |
| How many hours of exercise have you had within the last week, through physical activities other than training? | Everybody | Have not had any exercise | 604 | 11.73 | |
| | | 1-2 hours | 1,078 | 20.94 | |
| | | 3-4 hours | 924 | 17.95 | |
| | | 5-6 hours | 645 | 12.53 | |
| | | 7 hours or more | 1,897 | 36.85 | |
| | | Don't know | 22 | | |
| Individual Behavior at Work | Have you done anything within the last three months to prevent work-related pain in your back, shoulders, wrists, eyes, arms or neck? | Everybody in work within the last year | Have none of these problems | 1,394 | 33.69 |
| | | | To a very small degree | 355 | 8.58 |
| | | | To a lesser degree | 143 | 3.46 |
| | | | To some degree | 607 | 14.67 |
| | | | To a large degree | 960 | 23.20 |
| | | | To a very large degree | 679 | 16.41 |
| | | | Don't know | 18 | |
| | | | Refuse to answer | 1 | |
| | Have you done anything within the last three months to prevent your work from causing you to be stressed, upset or aggressive? | Everybody in work within the last year | Not asked | 1,013 | |
| | | | Have none of these problems | 1,409 | 34.13 |
| | | | To a very small degree | 355 | 8.60 |
| | | | To a lesser degree | 258 | 6.25 |
| | | | To some degree | 699 | 16.93 |
| | | | To a large degree | 870 | 21.08 |
| | | | To a very large degree | 537 | 13.01 |
| Don't know | 28 | | | | |
| Refuse to answer | 1 | | | | |
| How much of your working day are you physically active? | Everybody in work within the last year | Not asked | 1,013 | | |
| | | Not physically active at work | 1,053 | 25.38 | |
| | | 25% of working hours | 684 | 16.49 | |
| | | 50% of working hours | 554 | 13.35 | |
| | | 75% of working hours | 584 | 14.08 | |
| | | 100% of working hours | 1,274 | 30.71 | |
| | | Don't know | 7 | | |
| Refuse to answer | 1 | | | | |
| Not asked | 1,013 | | | | |

| Indicator | Question | Respondents | Answers | Frq. | % |
|------------|---|-------------|-------------------------|-------|-------|
| Motivation | What is your general state of health? | Everybody | Bad | 91 | 1.76 |
| | | | Not so good | 294 | 5.69 |
| | | | Good | 2,166 | 41.91 |
| | | | Very good | 1,701 | 32.91 |
| | | | Excellent | 916 | 17.72 |
| | | | Don't know | 2 | |
| | How great an influence do you have on your own state of health? | Everybody | No influence | 66 | 1.29 |
| | | | Quite a small influence | 147 | 2.88 |
| | | | Some influence | 578 | 11.34 |
| | | | Quite large influence | 1,831 | 35.91 |
| | | | Very great influence | 2,477 | 48.58 |
| | | | Don't know | 70 | |
| | All things considered, are you happy with the life you live? | Everybody | To a very small degree | 15 | 0.29 |
| | | | To a lesser degree | 43 | 0.83 |
| | | | To some degree | 386 | 7.48 |
| | | | To a large degree | 2,388 | 46.25 |
| | | | To a very large degree | 2,331 | 45.15 |
| | | | Don't know | 6 | |
| | Refuse to answer | 1 | | | |

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Appendix: The Survey

The Danish National Competence Account

The Main Survey

Questionnaire

2003 - 2004

Questions on Background Information

Everybody

AT FIRST I WILL ASK YOU A FEW QUESTIONSS ABOUT YOUR WORKING HISTORY

N1_BS What is your main occupation?

| | | |
|---|----|-------------|
| Self-employed | 1 | go to N4_BS |
| Assisting spouse | 2 | go to N4_BS |
| Managing white-collar worker or managing public servant | 3 | go to N4_BS |
| White-collar worker or public servant otherwise | 4 | go to N4_BS |
| Blue-collar worker | 5 | go to N4_BS |
| Unskilled worker | 6 | go to N4_BS |
| Other work | 7 | go to N4_BS |
| In education (student, apprentice) | 8 | go to N2_BS |
| Unemployed/on welfare | 9 | go to N2_BS |
| Retired, early retirement | 10 | go to N2_BS |
| Not in occupation otherwise (incl. rehabilitation/ liable for military service) | 11 | go to N2_BS |

N2_BS Have you within the last 12 months had work as main occupation?

| | | |
|-----|---|--------------|
| Yes | 1 | |
| No | 2 | go to N14_BS |

N3_BS What was you main occupation?

| | |
|---|---|
| Self-employed | 1 |
| Assisting spouse | 2 |
| Managing white-collar worker or managing public servant | 3 |
| White-collar worker or public servant otherwise | 4 |
| Blue-collar worker | 5 |
| Unskilled worker | 6 |
| Other work | 7 |

N4_BS What kind of firm do (did) you work in?

N4_BS What does (did) the firm do?

N6_BS Do (did) you have any subordinate staff? (That is, are (were) you responsible for any staff)

| | |
|-----------|---|
| Yes, 1-2 | 1 |
| Yes, 3-4 | 2 |
| Yes, 5-10 | 3 |

| | | |
|-----------------|---|-------------|
| Yes, 11-19 | 4 | |
| Yes, 20-49 | 5 | |
| Yes, 50 or more | 6 | |
| No | 7 | go to N8_BS |

N7_BS Are (were) you managing other managers?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N8_BS Do (did) you work in the private or public sector?

| | |
|---|---|
| Private | 1 |
| Government | 2 |
| County | 3 |
| Municipality | 4 |
| Public otherwise (including public companies) | 5 |

N9_BS Is (was) your local place of work part of a larger company, group or organization?

| | | |
|-----|---|--------------|
| Yes | 1 | |
| No | 2 | go to N11_BS |

N10_BS About how many employees does the company, group or organization have?

| | |
|---------------|---|
| less than 100 | 1 |
| 100-199 | 2 |
| 200-499 | 3 |
| 500-999 | 4 |
| 1000-1999 | 5 |
| 2000-4999 | 6 |
| 5000 and more | 7 |

N11_BS How many employees does (did) your local place of work have (including yourself and potential assisting spouse)?

| | |
|--------------|---|
| 1 | 1 |
| 2-4 | 2 |
| 5-10 | 3 |
| 11-19 | 4 |
| 20-49 | 5 |
| 50-99 | 6 |
| 100-199 | 7 |
| 200-499 | 8 |
| 500 and more | 9 |

N12_BS How many hours a week do (did) you work in your main occupation?

number of hours: _____

Ask question N13_BS only to respondents currently employed (code 1-7 in question N1_BS) or if yes to question N2_BS. Otherwise go to question N14_BS

N13_BS How long time have you had your current (previous) work?

| | |
|-------------------|---|
| less than 1 year | 1 |
| 1-2 years | 2 |
| 3-4 years | 3 |
| 5-9 years | 4 |
| 10-19 years | 5 |
| 20 years and more | 6 |

N14_BS What is your highest education level completed?

| | | |
|---|---|-----------------|
| Elementary school, including 10 th grade or the like | 1 | go to N15_BS |
| Gymnasium (HF,HH , HTX,HHX) | 2 | go to N15_BS |
| Basic Vocational Training | 3 | go to N1_IK_HC1 |
| Short Tertiary Education (less than 3 years) | 4 | go to N1_IK_HC1 |
| Medium Tertiary Education (3-4 years) | 5 | go to N1_IK_HC1 |
| Long Tertiary Education (more than 4 years) | 6 | go to N1_IK_HC1 |

N15_BS What is (was) your job function?

(guide.: type a short and precise occupational code)

N15_BS More description of the job:

(guide: type what the respondents does, e.g. working function)

Intercultural Competence

Should not be asked if the respondent is an immigrant

Everybody

FIRST I WILL ASK YOU QUESTIONS ABOUT YOUR CONTACT TO AND KNOWLEDGE ON FOREIGN CULTURES

N1_IK_HC1 Have you lived abroad for more than six months since you turned 18?

- Yes, once 1
- Yes, several times 2
- No 3 go to N3_IK_HC2

N1a_IK – =N1c_IK In which country/countries?

.....
..... *If several stays abroad: register the three most recent*
.....

N2_IK_MC1a – N2_IK_MC1c Did you live abroad in order to study, work or for other reasons?

- To study 1 go to N4_IK_HA1
- To work 2 go to N4_IK_HA1 *More than one answer is possible*
- Other reasons 3 go to N4_IK_HA1

N3_IK_HC2 Have you lived abroad between one and six months since you turned 18?

- Yes, once 1
- Yes, several times 2
- No 3 go to N5_IK_HC3

Ask question N4_IK_HA1 only to respondents in work

N4_IK_HA1 Is what you learned during your stay(s) abroad useful to you in your current (previous) work?

- Yes 1
- No 2

N5_IK_HC3 Have you watched the news on a foreign television channel within the last week?

- Yes 1
- No 2

N6_IK_HC4 Have you read a foreign newspaper within the last week?

- Yes 1

No 2

N7_IK_HC5 Have you looked for information about foreign countries or cultures within the last week, on the Internet, in books or journals?

Yes 1
No 2

N8_IK_HC6 Have you learnt about foreign cultures through a lecture, study group or adult education class within the last week?

Yes 1
No 2

N9_IK_HC7 Have you sought information about foreign cultures in other ways within the last week?

Yes 1
No 2

N10_IK_HC8 Do you have personal contact with foreigners living in Denmark in your leisure activities?

[Guide: People who were not born in Denmark but who have immigrated or who live here for a shorter duration. Adopted children born abroad are considered to be Danes]

Yes 1
No 2 go to N11_IK_HU1

N10a_IK – N10c_IK From which country/countries?

.....
..... *If several, register the three most important*
.....

Ask question N11_IK_HU1 – N12_IK_HA2 only to respondents with a qualifying education, question N14_BS code 3-6

N11_IK_HU1 Did you learn about cultural issues in other countries as part of your education?
[Guide: Could be part of one or more subjects in the education]

Yes 1
No 2 go to N13_IK_HU2

N12_IK_HA2 Have you used this knowledge in your present or former job?

Yes 1
No 2

Ask question N13_IK_HU2 to everybody

N13_IK_HU2 Did you learn about cultural issues in other countries as part of a postgraduate education?

- Yes 1
No 2 go to N15_IK_HA4

Ask question N14_IK_HA3 to everybody in work or in work within the last 12 months

N14_IK_HA3 Have you used this knowledge in your present or former job?

- Yes 1
No 2

Ask question N15_IK_HA4 – N15a_IK to everybody in work or in work within the last 12 months (code 1-7 in question N1_BS or if they have said yes to question N2_BS).

AND NOW SOME QUESTIONS ABOUT YOUR CONTACT WITH FOREIGN CULTURES IN YOUR CURRENT (PREVIOUS) JOB

N15_15_HA4 Do (did) you work on a daily basis with foreigners living in Denmark?

["Foreigners" means people who were not born in Denmark, but who have immigrated or who are here for a shorter period. Adopted children born abroad are considered to be Danes.

"Work with" could be with colleagues, superiors, customers, suppliers, clients, etc. The collaboration should be in respect of the respondent's work tasks. It is not enough that the cleaner comes from another country, unless the respondent is also a cleaner.]

- Yes 1
No 2 go to N16_IK_HA5

N15a_IK – N15c_IK

From which country/countries?

..... *If several, register the three most important*

.....

N16_IK_HA5 At work, do you collaborate with people abroad who are not Danes?

[*Colleagues, customers, suppliers, clients, etc. abroad*]

- Yes 1
No 2 go to N17_DE_RA1

N16a_IK – N16c_IK From which country/countries?

..... *If several, register the three most important*

.....

Civic Competence

Ask questions N17_DE_RA1 – N19_DE_HA2 to employees (code 3-7 in question N1_BS or if they have said yes to question N2_BS)

AND NOW SOME QUESTIONS ON YOUR INFLUENCE ON VARIOUS CONDITIONS AT YOUR CURRENT (PREVIOUS) JOB

N17_DE_RA1 Can (could) you influence decisions regarding general conditions at your workplace, such as organizational changes, safety matters or smoking policy?

Yes 1
No 2 go to N19_DE_HA2

N18_DE_HA1 Have you participated in meetings or other such activities at your place of work within the last three months (of your employment period) with the purpose of influencing general conditions?

There were no activities of this kind 1
No, have not participated 2
Yes, have participated once or twice 3
Yes, have participated more than twice 4

N19_HA2 Have you been elected to a position of trust at work within the last three years?

Yes 1
No 2

Everybody

NOW SOME QUESTIONS ABOUT YOUR INTEREST IN SOCIAL ISSUES AND POLITICS

N20_DE_HC1 How much time have you spent keeping yourself informed, via radio and television, about social issues or politics during the last week?

Less than one hour 1
1 – 5 hours 2
6 – 10 hours 3
More than 10 hours 4

N21_DE_HC2 How much time have you spent keeping yourself informed, via newspapers, Internet or journals, about social issues or politics during the last week?

Less than one hour 1
1 – 5 hours 2
6 – 10 hours 3
More than 10 hours 4

(Guide: Only if in work and with at least two people at the place of work)

N22_DE_HA3 How often do you discuss social issues and politics at work?

| | | |
|-------------|---|------------------|
| Never | 1 | go to N24_DE_HC4 |
| Every year | 2 | |
| Every month | 3 | |
| Every week | 4 | |
| Every day | 5 | |

(Ask question N23_DE_HC3 only if code 2-5 in question N22_DE_HA3)

N23_DE_HC3 Following a discussion with others, do you look for additional information about social issues and politics, e.g. on the Internet or at the library?

| | |
|-------------------|---|
| No, never | 1 |
| Yes, occasionally | 2 |
| Yes, usually | 3 |
| Yes, always | 4 |

N24_DE_HC4 Have you been elected to a position of trust in your leisure time within the last three years? (e.g. the committee of a political party or housing association or the board of governors for a school)

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

[Guide: The question below N25_DE_HC5 deals with participation in the democratic processes in the local community. It does not include work or leisure activities. Participation due to election into committees etc. are covered by the previous question N24_DE_HC4.]

N25_DE_HC5 Have you participated in committees or working groups in your local community within the last 12 months? (Could be in connection with an annual party in a nursery school or problems regarding parking in the neighborhood)

| | |
|---|---|
| As far as I know, there is no such thing in my neighborhood | 1 |
| No, have not participated | 2 |
| Yes, have participated once or twice | 3 |
| Yes, have participated more than twice | 4 |

N26_DE_HC6 Have you been part of an association, participated in meetings or demonstrations, or other such activities dealing with more general social or political issues, within the last 12 months?

[The question deals with participation in democratic processes in connection with problems or issues of a more general socio-political nature]

| | |
|--------------------------------------|---|
| No, have not participated | 1 |
| Yes, have participated once or twice | 2 |

Yes, have participated more than twice 3

I WILL NOW READ ALOUD SEVERAL ACTIONS AND ASK YOU TO ANSWER WHETHER YOU WITHIN THE LAST 12 MONTHS HAVE PARTICIPATED IN THOSE ACTIONS AS A PRIVATE CITIZEN

Have you carried out or participated in the following within the last 12 months, without it being part of your work:

N27_DE_HC7a Written a letter to the editor?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N28_DE_HC7b Petition?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N29_DE_HC7c Taken direct contact to politicians?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N30_DE_HC7d Demonstrations?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N31_DE_HC7e Boycotts?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

Environmental Competence

Everybody

I WILL NOW CHANGE SUBJECT AND ASK YOU QUESTIONS RELATED TO YOUR WORKING HABITS

Have you done the following in your current (previous) work within the last 12 months?

N32_MI_HA1a Saved on materials, energy, water, etc.?

Yes 1
No 2

N33_MI_HA1b Used less environmentally damaging materials and products?

Yes 1
No 2

N34_MI_HA1c Been a party to the proposal of environmentally friendly measures?

Yes 1
No 2

N35_MI_HA1d Been a party to the implementation of environmentally friendly measures?

Yes 1
No 2

N36_MI_HA1e Planned the work of others so that they can be environmentally responsible?

Yes 1
No 2

N37_MI_HA1f Have you done anything else?

Yes 1
No 2

Ask everybody with a qualifying education

N38_MI_HU1 Did you learn about environmental issues as part of your education?

Yes 1
No 2

Everybody

N39_MI_HU2 Did you learn about environmental issues as part of a postgraduate education?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N40_MI_HC1 Do you buy organic food?

| | | |
|-----------|---|------------------|
| Never | 1 | go to N42_MI_HC2 |
| Sometimes | 2 | |
| Often | 3 | |
| Always | 4 | |

N41_MI_MC1a – N41_MI_MC1b What are the two main reasons that you buy organic food?

| | |
|----------------------------|---|
| For health reasons | 1 |
| For environmental reasons | 2 |
| For animal welfare reasons | 3 |
| Because of the taste | 4 |
| For other reasons | 5 |

N42_MI_HC2 Do you generally buy environmentally friendly products, e.g. with the Nordic Ecological label “Svanemærket” or the EU flower?

| | | |
|-----------|---|------------------|
| Never | 1 | go to N44_MI_HC3 |
| Sometimes | 2 | |
| Often | 3 | |
| Always | 4 | |

N43_MI_MC2 What is the main reason that you buy environmentally friendly products?

| | |
|---------------------------|---|
| For health reasons | 1 |
| For environmental reasons | 2 |
| For other reasons | 3 |

N44_MI_HC3 Do you buy low-energy bulbs?

| | | |
|-----------|---|------------------|
| Never | 1 | go to N46_MI_HC4 |
| Sometimes | 2 | |
| Often | 3 | |
| Always | 4 | |

N45_MI_MC3 What is the main reason that you buy low-energy bulbs?

| | |
|---------------------------|---------------|
| To save money | 1 (2 in data) |
| For environmental reasons | 2 (3 in data) |
| Other reasons | 3 (1 in data) |

N46_MI_HC4 Do you take measures to conserve water or heat in your home?

| | | |
|-----------|---|------------------|
| Never | 1 | go to N48_MI_HC5 |
| Sometimes | 2 | |
| Often | 3 | |
| Always | 4 | |

N47_MI_MC4 What is the main reason that you conserve water or heat?

| | |
|---------------------------|---------------|
| To save money | 1 (2 in data) |
| For environmental reasons | 2 (3 in data) |
| Other reasons | 3 (1 in data) |

N48_MI_HC5 How many groups have you sorted your rubbish into during the last month?

| | | |
|------------------------|---|-------------------|
| Do not sort | 1 | go to N50_MI_HC6a |
| Two groups | 2 | |
| Three groups | 3 | |
| More than three groups | 4 | |

N49_MI_MC5 What was the main reason for you to sort your rubbish?

| | |
|--|---|
| Requirement of the local authority/other authorities | 1 |
| For environmental reasons | 2 |
| Other reasons | 3 |

N50_MI_HC6a In addition to the above, do you do any of the following for environmental reasons:

Collect batteries and other environmentally damaging substances and hand them in to the local authority

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N51_MI_HC6b Save on paper

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N52_MI_HC6c Re-use gardening waste and rainwater

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N53_MI_HC6d Abstain from using pesticides and fertilizers

Yes 1
No 2

N54_MI_HCe Do you do anything else?

Yes 1
No 2

Have you done the following within the last 12 months:

N55_MI_HC7a Investigated which products are environmentally damaging?

Yes 1
No 2

N56_MI_HC7b Read books, articles or leaflets, or searched on the Internet in order to learn about the environment?

Yes 1
No 2

N57_MI_HC7c Discussed environmental questions with family, friends or colleagues?

Yes 1
No 2

N58_MI_HC8 Are you a member of an environmental organization?

Yes 1
No 2

N59_MI_RC1a – 59_MI_RC1f Where have you gained the knowledge which forms the basis of your daily environmental conduct?

(The question refers to work, household, and leisure activities)

More than one answer is possible

Place of work 1
Books, articles, reports, etc. 2
Newspapers, television, radio, etc. 3
Leaflets from the authorities. 4
The Internet 5
Other (including courses) 6

Health, Sports and Physical Competence

Everybody

WE NOW TURN TO A COMPLETELY OTHER AREA. THESE QUESTIONS CONCERN YOUR DAILY WAY OF LIVING, YOUR HEALTH AND YOUR GENERAL WELL-BEING

N60_KH_HC1 Do you follow the general nutritional guidelines on healthy eating?
(*Eating varied, whole-grain, avoid fat, and eat plenty of fruit and vegetables*)

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- To a very small degree 5

N61_KH_HC2 Do you smoke cigarettes on a daily basis?

- Yes 1
- No, but I used to smoke 2 go to N62_KH_HC3
- No, I have never smoked 3 go to N62_KH_HC3

N61_KH_HC2a How many cigarettes do you normally smoke per day?

N62_KH_HC3 How many units (beer, wine or spirits) have you drunk on average per week within the last year?

AND NOW SOME QUESTIONS ON YOUR SPORTS HABITS

N63_KH_HC4 How many hours have you trained during the last week, e.g. sport, fitness training or running?

- Have not had any exercise 1 go to N66_KH_HC5
- 1-2 hours 2
- 3-4 hours 3
- 5-6 hours 4
- 7 hours or more 5

N64_KH_MC1a What is the main reason that you train?

- For health reasons 1
- To get better at sport 2
- Because of the social element 3
- To look good 4
- To counteract work-related disabilities 5

| | |
|----------------------|---|
| Because of my weight | 6 |
| To stay fit | 7 |
| No other reason | 8 |

N65_KH_MC1b What is the second main reason that you train?

| | |
|---|---|
| For health reasons | 1 |
| To get better at sport | 2 |
| Because of the social element | 3 |
| To look good | 4 |
| To counteract work-related disabilities | 5 |
| Because of my weight | 6 |
| To stay fit | 7 |
| No other reason | 8 |

N66_KH_HC5 How many hours of exercise have you had within the last week, through physical activities other than training?

[Guide: Other physical activities could be going for a walk, doing housework, gardening, walking up stairs, or being physically active at work]

| | |
|---------------------------|---|
| Have not had any exercise | 1 |
| 1-2 hours | 2 |
| 3-4 hours | 3 |
| 5-6 hours | 4 |
| 7 hours or more | 5 |

N67_KH_HA1 How much of your working day are you physically active?

| | |
|-------------------------------|---|
| Not physically active at work | 1 |
| 25% of working hours | 2 |
| 50% of working hours | 3 |
| 75% of working hours | 4 |
| 100% of working hours | 5 |

AND NOW SOME FEW QUESTIONS ABOUT YOUR HEALTH AND PHYSICAL AND PSYCICAL WELL-BEING

N68_KH_RC1 What is your general state of health?

| | |
|-------------|---|
| Excellent | 1 |
| Very good | 2 |
| Good | 3 |
| Not so good | 4 |
| Bad | 5 |

N69_KH_MC2 How great an influence do you have on your own state of health?

| | |
|-----------------------|---|
| Very great influence | 1 |
| Quite large influence | 2 |

| | |
|-------------------------|---|
| Some influence | 3 |
| Quite a small influence | 4 |
| No influence | 5 |

N70_KH_MC3 All things considered, are you happy with the life you live?

| | |
|------------------------|---|
| To a very large degree | 1 |
| To a large degree | 2 |
| To some degree | 3 |
| To a lesser degree | 4 |
| To a very small degree | 5 |

AT LAST SOME FEW QUESTIONS ABOUT WHAT INFLUENCE YOUR CURRENT (PREVIOUS) JOB HAS (HAD) ON YOUR PSYCHICAL AND PHYSICAL WELL-BEING

N71_KH_HA2 Have you done anything within the last three months (you were in work) to prevent work-related pain in your back, shoulders, wrists, eyes, arms or neck?

| | |
|-----------------------------|---|
| Have none of these problems | 1 |
| To a very large degree | 2 |
| To a large degree | 3 |
| To some degree | 4 |
| To a lesser degree | 5 |
| To a very small degree | 6 |

Ask question N72_KH_HA3 only to respondents in work

N72_KH_HA3 Have you done anything within the last three months (you were employed) to prevent your work from causing you to be stressed, upset or aggressive?

| | |
|-----------------------------|---|
| Have none of these problems | 1 |
| To a very large degree | 2 |
| To a large degree | 3 |
| To some degree | 4 |
| To a lesser degree | 5 |
| To a very small degree | 6 |

Social Competence

Ask questions N73_SO_HA1 – N74_SO_HA2 to respondents currently in work (N1_BS= 1-7)

Ask questions N75_SO_HA3 – B2_9to respondents in work (N1_BS = 1-7 or N2_BS = 1-7)

Ask question N84_SO_HC1-N84_SO_HC4 to everybody

Ask questions N73_SO_HA1 – N81_SO_HA7 if there are at least two people at the place of work, otherwise go to question N82_SO_RA3

I WILL START OUT BY ASKING QUESTIONS ABOUT YOUR SOCIAL CONTACTS AT WORK. FIRST SOME QUESTIONS ABOUT YOUR RELATIONSHIP TO YOUR COLLEAGUES. A “COLLEAGUE” IS DEFINED AS A PERSON THAT YOU WORK WITH SO IT MORE THAT JUST PEOPLE EMPLOYED AT YOUR PLACE OF WORK.

N73_SO_HA1 Have you within the last week asked your colleagues for help with your work?

| | | |
|------------|---|------------------|
| Work alone | 1 | go to N82_SO_RA3 |
| Yes | 2 | |
| No | 3 | |

N74_SO_HA2 Have you within the last week helped one or more of your colleagues with their work?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N75_SO_HA3 Have you helped colleagues with their personal problems within the last six months?

| | | |
|---|---|------------------|
| Work alone | 0 | go to N82_SO_RA3 |
| No knowledge of colleagues who have had personal problems | 1 | |
| To a very large degree | 2 | |
| To a large degree | 3 | |
| To some degree | 4 | |
| To a lesser degree | 5 | |
| Not at all | 6 | |

N76_SO_HA4 Have you asked for help from your colleagues within the last six months in connection with your own personal problems?

| | |
|--------------------------------|---|
| Have not had personal problems | 0 |
| To a very large degree | 1 |
| To a large degree | 2 |
| To some degree | 3 |
| To a lesser degree | 4 |
| Not at all | 5 |

N77_SO_HA5 Have you intervened in cases of bullying or harassment of others at your place of work within the last six months?

- No knowledge of bullying or harassment 0
- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N78_SO_HA6 Have you helped to solve conflicts between people at your place of work within the last six months?

- There have been no conflicts 0
- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N79_SO_RA1 Has your working day during the last three months been characterized by teamwork?

[Guide: Teamwork is defined as working groups or teams organized by the company/organization]

- To a very large degree 1
- To a large degree 2
- To some degree 3 go to N81_SO_HA7
- To a lesser degree 4 go to N81_SO_HA7
- Not at all 5 go to N81_SO_HA7

N80_SO_RA2 Did the team consist of people with different educations?

[Guide: The question refers to people with whom the respondent has contact, e.g. because he/she has a common professional background or common leisure activities with them]

- No knowledge of people's education 0
- Yes 1
- No 2

N81_SO_HA7 Have you participated in social events in connection with your work within the last three months?

[Guide: The events do not have to take place at place of work or within working hours]

- There have been no social events 0
- Yes 1
- No 2

N82_SO_RA3 In your job, how often do you deal with people who are not employed at your place of work?

[E.g. customers, clients, passengers or students]

| | | |
|-------------------------------------|---|------------------|
| Have nothing to do with such people | 0 | go to N84_SO_HC1 |
| Every month | 1 | |
| Every week | 2 | |
| Every day | 3 | |

N83_SO_RA4 Have you done anything to improve your relationship to these people within the last three months?

| | |
|--|---|
| Do not think there has been reason to improve the relationship | 0 |
| To a very large degree | 1 |
| To a large degree | 2 |
| To some degree | 3 |
| To a lesser degree | 4 |
| Not at all | 5 |

Everybody

AND NOW SOME QUESTIONS ON YOUR SOCIAL RELATIONSHIPS IN YOUR LEISURE TIME

N84_SO_HC1 Have you asked for help from family members, friends or acquaintances in connection with personal problems within the last three months?

| | |
|--------------------------------|---|
| Have not had the need to do so | 0 |
| To a very large degree | 1 |
| To a large degree | 2 |
| To some degree | 3 |
| To a lesser degree | 4 |
| Not at all | 5 |

N85_SO_HC2 Have you helped family members, friends or acquaintances in connection with their personal problems within the last three months?

| | |
|---|---|
| They have to your knowledge not needed help | 0 |
| To a very large degree | 1 |
| To a large degree | 2 |
| To some degree | 3 |
| To a lesser degree | 4 |
| Not at all | 5 |

N86_SO_HC3 How often have you participated in activities, including private gatherings, with people in your neighborhood within the last three months?

| | |
|--|---|
| There have not been any activities or private gatherings | 0 |
| Never | 1 |

| | |
|-------------|---|
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N87_SO_HC4 How often do you engage in leisure time activities with others?

| | |
|-------------|---|
| Never | 0 |
| Every month | 1 |
| Every week | 2 |
| Every day | 3 |

Literacy

Ask questions N88_LI_RA1 – N94_LI_HA1 to everybody in work

Ask questions N96_LI_HC1 – N101_LI_HU1 to everybody

NOW SOME QUESTIONS ON WHAT ACTIVITIES TAKE PLACE AT YOUR WORK

N88_LI_RA1 How often do you have to read as part of your job?

- Every day 1
- Every week 2
- Less than once a week 3
- Not at all 4 go to N90_LI_RA3

N89_LI_RA2 how easy or difficult is it for you to read what you need to in your work?

- Very difficult 1
- Difficult 2
- Neither nor 3
- Easy 4
- Very easy 5

N90_LI_RA3 How often do you have to use math or arithmetic in your work?

- Every day 1
- Every week 2
- Less than once a week 3
- Not at all 4 go to N92_LI_RA5

N91_LI_RA4 How easy or difficult is it for you to do the math required in your work?

- Very difficult 1
- Difficult 2
- Neither nor 3
- Easy 4
- Very easy 5

N92_LI_RA5 How often do you use a computer at work?

- Every day 1
- Every week 2
- Less than once a week 3
- Do not use a computer in connection with my work 4 go to N96_LI_HC1

N93_LI_MA1 How good or bad are your computer skills in relation to your needs at work?

- Very bad 1

| | |
|----------------------|---|
| Bad | 2 |
| Neither good nor bad | 3 |
| Good | 4 |
| Very good | 5 |

N94_LI_HA1 Have you done anything to improve your computer skills within the last 12 months?

[Guide: Could be either in leisure time or work]

| | |
|-----|--------------------|
| Yes | 1 |
| No | 2 go to N96_LI_HC1 |

N95_LI_HA2 What is the most important way in which you have learnt the new skills?

| | |
|----------------------------------|---|
| Through courses, etc. | 1 |
| Learnt from colleagues | 2 |
| Self-taught | 3 |
| Through friends or acquaintances | 4 |

Everybody

NOW SOME QUESTIONS ON WHAT YOU READ AND WRITE IN YOUR LEISURE TIME

N96_LI_HC1 Have you read one or more books within the last six months?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N97_LI_HC2 How often do you read newspapers, journals or magazines?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N98_LI_HC3 In your leisure time, how often do you write something that takes up more than one page?

[Guide: It is of no consequence what the topic is and which medium is used, i.e. paper or computer]

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N99_LI_HC4 How often do you use a computer in your leisure time?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |

Every day 4

N100_LI_RC1 How easy or difficult is it for you to read what you need to in your daily life?

| | |
|----------------------------|---|
| Very difficult | 1 |
| Difficult | 2 |
| Neither difficult nor easy | 3 |
| Easy | 4 |
| Very easy | 5 |

N101_LI_HU1 Have you within the last three years taken an education or a course with the purpose of improving your abilities to read or do math?

[Guide: Could be either in leisure time or work]

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

Communicative Competence

Ask questions N102_KO_HA1 – N116_KO_RC1 to everybody in work

Ask question N117_KO_RA3 to everybody

NOW SOME QUESTIONS ON COMMUNICATION WITH OTHERS AT WORK

How frequently do you make presentations, give instructions, or similar to a group of people at work?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N103_KO_RA1 How frequently do you deal with cases or problems at work, which others discuss with you?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N104_KO_RA2 How frequently do you deal with cases or problems at work, which others present to you in writing?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

How often do you do the following as part of your job:

N105_KO_HA2 Write letters/e-mails?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N106_KO_HA3 Use a mobile phone?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N107_KO_HA4 Use an ordinary phone?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N108_KO_HA5 Search for information on the Internet?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N109_KO_HA6 How often do you speak English as part of your job?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N110_KO_HA7 How often do you write in English as part of your job?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

Everybody

NOW SOME QUESTIONS ON COMMUNICATION WITH OTHERS IN LEISURE TIME

How often do you do the following in your leisure time:

N111_KO_HC1 Use a mobile phone?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N112_KO_HC2 Use an ordinary phone?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N113_KO_HC3 Write letters/e-mails?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N114_KO_HC4 Search for information on the Internet?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N115_KO_HC5 How often do use English in your leisure time?

[Guide: Both oral and written]

| | | |
|----------------------|---|-------------------|
| Do not speak English | 0 | go to N117_KO_RA3 |
| Never | 1 | go to N117_KO_RA3 |
| Every month | 2 | |
| Every week | 3 | |
| Every day | 4 | |

N116_KO_RC1 How good or bad is your English in relation to your needs?

[Guide: Could be in relation to leisure time or work]

| | |
|----------------------|---|
| Very bad | 1 |
| Bad | 2 |
| Neither good nor bad | 3 |
| Good | 4 |
| Very good | 5 |

N117_KO_RA3 How many languages can you make yourself understood in? Please do not include Danish, English, Norwegian or Swedish

| | |
|------------------------------------|---|
| None | 1 |
| In one foreign language | 2 |
| In two foreign languages | 3 |
| In three or more foreign languages | 4 |

Learning Competence

Ask question N118_LA_HA1 – N135_LA_HAa to everybody in work

N118_LA_HA1 Have you participated in supplementary training or postgraduate education within the last 12 months?

| | | |
|-----|---|-------------------|
| Yes | 1 | |
| No | 2 | go to N126_LA_HA2 |

N119_LA_RA1 How many days in total?

| | |
|-------------------|---|
| 1-2 days | 1 |
| 3-5 days | 2 |
| 6-10 days | 3 |
| 11-20 days | 4 |
| more than 20 days | 5 |

N120_LA_RA2 Was part of this training or education organized by an institute of higher education?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N121_LA_MA1 What was the primary reason for you taking supplementary training or a postgraduate education?

| | |
|--|---|
| In order to improve professional qualifications | 1 |
| In order to improve personal and social qualifications | 2 |
| In order to learn how to work in new ways | 3 |
| In order to improve managerial qualifications | 4 |
| In order to get a higher salary | 5 |
| In order to get more responsibility | 6 |
| In order to work in new ways | 7 |
| Obligatory/required by the employers | 8 |

Has the supplementary training or postgraduate education led to:

N122_LA_RA3a New tasks at work?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N123_LA_RA3b Greater productivity?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N124_LA_RA3c Greater job satisfaction?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N125_LA_RA3d Other?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

Ask question N126_LA_HA2 if respondent is an employee

N126_LA_HA2 Have you told your employer that you wish to take supplementary training or a postgraduate education within the last 12 months?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

AND NOW SOMETHING ON POTENTIAL CHANGES AT YOUR WORK WITHING THE LAST 12 MONTHS (THAT YOU WERE IN WORK)

Have you within the last 12 months:

N127_LA_RA4a Had new professional challenges in your work?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N128_LA_RA4b Worked in new teams or groups?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N129_LA_RA4c Been delegated more or less responsibility?

| | |
|-----------|---|
| More | 1 |
| Less | 2 |
| No change | 3 |

N130_LA_RA4d Worked in collaboration with more or less people?

| | |
|-----------|---|
| More | 1 |
| Less | 2 |
| No change | 3 |

N131_LA_RA4c Changed your job at the same place of work?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N132_LA_RA4f Worked with new technology?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

AND NOW SOMETHING ABOUT THE TEAMWORK WITH YOUR COLLEAGUES

Ask only if at least two people at the place of work

N133_LA_RMA How often do you and your colleagues share your professional experience with each other?

| | |
|-------------|---|
| Never | 1 |
| Every month | 2 |
| Every week | 3 |
| Every day | 4 |

N134_LA_HMA Do you and your colleagues discuss ways of improving working methods?

| | |
|------------------------|---|
| To a very large degree | 1 |
| To a large degree | 2 |
| To some degree | 3 |
| To a lesser degree | 4 |
| Not at all | 5 |

Have you within the last 12 months:

N135_LA_HAa Changed your place of work in order to learn something new?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N136_LA_Hab Changed job at the same place of work in order to learn something new?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

N137_LA_Hac Participated in job-rotation, or exchanged job functions with others, which has required the learning of new skills?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

Everybody

N138_LA_HCA Have you participated in training or education via the Internet within the last 12 months?

[E.g. e-learning and other distance teaching]

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

Self-management Competence

NOW SOME QUESTIONS ON HOW YOUR WORK IS ORGANIZED AND WHAT CONDITIONS YOU CAN INFLUENCE

Ask question N139_SL_HA1 – N147_SL_HA5 to employees

Ask question N148_SL_RA2 – N149_SL_RA3 to everybody in work

Ask question N150_SL_RA4 – N151_SL_MA4 to employees

N139_SL_HA1 Do you structure your own working day?

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N140_SL_HA2 Do you decide how you will carry out your work?

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N141_SL_HA3 Do you decide who you will work with?

(Ask only to respondents with a colleague)

- Work alone 1
- To a very large degree 2
- To a large degree 3
- To some degree 4
- To a lesser degree 5
- Not at all 6

N142_SL_RA1 Do you have any influence on what you do at work?

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N143_SL_MA1 Would you like to make decisions at work?

- To a very large degree 1
- To a large degree 2
- To some degree 3

To a lesser degree 4
Not at all 5

N144_SL_HA4 Do you feel that you are well informed about the company's/organization's goals and strategies?

[Regardless of whether they are written down or not – they might have been related verbally, they might appear in plans, etc.]

To a very large degree 1
To a large degree 2
To some degree 3
To a lesser degree 4
Not at all 5

N145_SL_MA2 Do you feel responsible for the development of the company?

To a very large degree 1
To a large degree 2
To some degree 3
To a lesser degree 4
Not at all 5

N146_SL_MA3 Can you identify with the image which the company wishes to project?

[Perhaps the company has expressed very clearly how it would like to be perceived by the outside world, perhaps it is expressed indirectly - and more or less clearly]

Do not know which image the company wants to project 0
To a very large degree 1
To a large degree 2
To some degree 3
To a lesser degree 4
Not at all 5

N147_SL_HA5 Have you decided to work overtime within the last three months because you felt it was necessary?

All the time 1
Often 2
Sometimes 3
Once in a while 4
Rarely/never 5
Not possible at the respondent's place of work 6

NOW I WILL ASK YOU A COUPLE OF QUESTIONS ON THE BALANCE BETWEEN YOUR WORKING LIFE AND YOUR LEISURE TIME

N148_SL_RA2 Are you happy with the balance between the time you spend working and your leisure time?

[If not working: the respondent should answer based on the past year]

- | | | |
|------------------------|---|----------------------------|
| To a very large degree | 1 | go to question N150_SL_RA4 |
| To a large degree | 2 | go to question N150_SL_RA4 |
| To some degree | 3 | |
| To a lesser degree | 4 | |
| Not at all | 5 | |

N149_SL_RA3 Have you done anything to change the balance between your time spent at work and your leisure time within the last 12 months?

- | | |
|-----|---|
| Yes | 1 |
| No | 2 |

N150_SL_RA4 Does your immediate superior encourage you to take responsibility?

- | | |
|------------------------|---|
| To a very large degree | 1 |
| To a large degree | 2 |
| To some degree | 3 |
| To a lesser degree | 4 |
| Not at all | 5 |

N150_SL_RA4 What is the main obstacle to you working more independently than at present?

- | | |
|--|---|
| The work itself | 1 |
| The company, colleagues | 2 |
| The management | 3 |
| The respondent does not want more independence | 4 |
| Other | 5 |

Creative and Innovative Competence

Structure of questionnaire:

Ask question N152_KI_HA1 – N156_KI_MA1 to everybody in work

Ask question N157_KI_RA1 – N161_KI_HA5 to employees

Ask questions N162_KI_HU1 – N164_KI_MA2 to everybody

NOW SOME QUESTIONS ABOUT NEW THINKING AND DEVELOPMENT AT YOUR PLACE OF WORK

N152_KI_HA1 Have you developed or helped to develop new products or services within the last three months?

[If previously in work: the last three months of your previous work]

- | | | |
|------------------------|---|----------------------------|
| To a very large degree | 1 | |
| To a large degree | 2 | |
| To some degree | 3 | |
| To a lesser degree | 4 | go to question N154_KI_HA3 |
| Not at all | 5 | go to question N154_KI_HA3 |

N153_KI_HA2 Have you had contact with research institutions as part of this development work?

- | | |
|---|---|
| Yes | 1 |
| No | 2 |
| I work (worked) in the research sector myself | 3 |

N154_KI_HA3 Do you think of ideas which could be used at work in your leisure time?

- | | |
|------------------------|---|
| To a very large degree | 1 |
| To a large degree | 2 |
| To some degree | 3 |
| To a lesser degree | 4 |
| Not at all | 5 |

N155_KI_HAC1 Where do you think you use your creative abilities the most?

[Creative abilities can be used in all contexts where new things are created. Thus, this is not limited to artistic expression]

- | | |
|---|---------------------|
| At work? | 1 |
| Outside of work? | 2 |
| Equally at work and outside of work? | 3 |
| I do not think that I use/ have creative abilities? | 4 go to N157_KI_RA1 |

N156_KI_MA1 Is your ability to develop new ideas a significant reason that you have your current position?

- | | |
|------------------------|---|
| To a very large degree | 1 |
|------------------------|---|

- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N157_KI_RA1 To what extent is your place of work characterized by innovative thinking?

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N158_KI_RA2 Does your job require you to contribute with innovative thinking?

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4 go to question N160_KI_HA4
- Not at all 5 go to question N160_KI_HA4

N159_KI_RA3 Does your immediate superior support your innovative thinking?

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N160_KI_HA4 Have you participated in the testing of new methods of working within the last three months?

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N161_KI_HA5 Are you part of a group – which was not established by your employer – where you meet with others and share ideas which can be used at work?

[Groups consisting of only two people, i.e. contact with other individuals, should also be included. Of primary interest are meetings outside of working hours, but if you plan your own working hours, the meetings could also be within working hours.]

- Yes 1
- No 2

Everybody

If in work: NOW SOME QUESTIONS ON CREATIVITY AND INNOVATIVE THINKING
OUTSIDE WORKING LIFE

If not in work: NOW A FEW QUESTIONS ON CREATIVITY AND INNOVATIVE THINKING

Ask to respondents with a qualifying education

N162_KI_HU1 Did you learn to develop new ideas as part of your education?

[If you have more than one qualifying education, please base your answer on the longest]

- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

N163_KI_HU2 Have you learnt to develop new ideas as part of your postgraduate education?

- Have never taken postgraduate education 0
- To a very large degree 1
- To a large degree 2
- To some degree 3
- To a lesser degree 4
- Not at all 5

Everybody but current self-employed

N164_KI_MA2 Do you have specific plans about starting your own company?

- Yes 1
- No 2