SCIENTIFIC PAPER

EXAMINING CAREER ORIENTATIONS AT THE UNIVERSITY OF DEBRECEN

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Abstract: *The paper endeavours to give a narrower definition of the orientation of 'career'. The survey to be discussed examines a sample of 116 full time students of economics and has career anchor analysis as its focus. The study details the result of a questionnaire-based survey, which was carried out with respect to the carrier of university students and was supplemented by surveying motivation, value and work value as well. The analysis finds that "security, stability and organisational identification" are judged to be the primary career anchors among the members of the majority sample. This means that the respondents feel ready to identify themselves with the company and are looking for security to be provided by long term employment, regular earnings and by steady career advancement. The cluster analysis of the questionnaire differentiates four groups: Leaders, Specialists, Entrepreneurs and Employees. The results showed that the Leaders have high capacities of leadership, creativity and autonomy. The Specialists show highly developed functional capabilities in general and they seem to like challenges. The Entrepreneurs have outstandingly high scores concerning autonomy and entrepreneurial creativity. The members of the cluster of the Employees are characterised by a high expectation of security and stability and by low levels of managerial capability and entrepreneurial creativity. Discriminant analysis was applied to select the distinguishing features that can set the clusters apart from each other. The motivations, values preferences and work values inventory will consolidate the differences between the clusters of the career anchors. Using the method in high education within special trainings could be the practical utilization of the study. On the basis of the results a questionnaire can be compiled, which could help uncertain students relating to their carriers and future orientation containing information in connection with their carrier orientation, motivation, value preferences and work value.*

INTRODUCTION

It is important to investigate the norms and value preferences of students of the tertiary education in Hungary, to see the ways they conceptualise careers.

The content of the career meaning construct is complex, which makes it difficult to define. What is meaningful for persons in terms of their career can be different from person to person. The central point here is that persons today have several careers that function in interconnection with each other (Svennungsen, 2011). The word career stems from the Latin word carraria, which means a carriage road. Transforming this Latin meaning into persons' career context will then imply that career has to do with persons' course or path through life, or a distinct portion of life (Cochran, 1997). Researchers and practices in career counselling started to develop perspectives where work was understood only as a part of persons' life and they included, for example, family, leisure and so on in developing a broader concept of career (Super, 1957). One of the latest definitions of the concept of career comes from Hansen (1997) where persons' career is defined as the sum of

every experience in one's life. The term "career" can therefore be defined as the sequence of interaction of individuals with society, education and organisations throughout their lifespan. It is necessary, however, to emphasise that the majority of the responsibility now rests on the individual for their own career progression, which requires sustained employability (Beukes, 2009; Herr et al., 2004). Daily career adaptability positively predicted daily task and career performance, as well as job and career satisfaction (Zacher, 2015). Fiori et al. (2015) carried out a research in which they employed a 3-wave cross-lagged longitudinal design with a Swiss representative sample of the active population (N > 1600). They found that employees with higher career adaptability experienced higher job satisfaction and lower work stress 2 years later (Fiori et al., 2015).

The trajectory of a career is thought to be determined by three groups of factors. The first is what is called self-perceived talent and abilities, aptitude and family resources. The second is motives and needs represented by the social and economic environment with their potential possibilities and/or limitations. The third involves the intentions and aspirations of the individual toward the achievement of set goals and desires

that rule their everyday activities (Bodnár *et. al,* 2011). This one is the strongest of the factors examined. The individual would never give this up, not even in the face of a very hard and complicated decision. The chance of an individual to achieve success is very heavily influenced by the career self-concept and career orientation of that individual and of the vision by which they organise their career plan. This is what generally is called a career model (Schein, 1978; Schein, 1986, cited by Custodio, 2004). The analysis of the elements of the third group of factors could lead us closer to the understanding of the career concepts and career goals young people may have. Career anchors are important for the influence they have on career choices, on decisions concerning changing jobs; career anchors shape the expectations of life young people may have, they determine their future outlooks, they influence their decisions on selecting a job or a working environment and they influence the responses young people would give to their job experiences.

It is easy to recognise that peoples' career aims may be related to the standards of their values and work values and motivations. Tertiary level students have a variety of preferences of values. The differences may originate from many sources; one of those could be the difference of their career socialisation which begins even before they enter higher education and whose importance will heavily grow during the years of their study for the simple reason that they enter the job market right from the lecture halls (Sőrés, 2012). The decisive importance of the study period in the creation of the career images makes it necessary for teachers to try to prepare the students for their future careers. To be able to do so, the institutions have to develop proactive and comprehensive strategies and methods.

In addition to the career analysis of tertiary level students in higher education, the paper presents the research results of the investigations of motivation, values and work values. This involves the analysis of the career aims and concepts in the sample. The analysis of the career anchors was put in the centre of the research presuming that career anchors influence career choices and that they shape the future perspectives of the students. Furthermore, since motivation and value preferences influence the fine-tuning of the individual career attitudes, their analysis is also very important.

The interpretations of the concept of career are associated with many fields of science and practice like psychology, sociology, education and career advice. The concept of career is flexible, elastic, complex and interdisciplinary (Barsiné Pálmai and Ponácz, 2004). It is often associated with the need of improvement and development (Dienesné and Berde, 2003).

This research paper is an integral part of the research programme *The Functional Analysis of Management* of the University of Debrecen, Institution of Leadership and Organization Sciences. This present research details the results relating to carrier orientation of students in high education. Questionnaire-based survey was utilized, the number of the elements was 116.

This present research program is dealing with the population of 18-21 and 21-24 age groups of the Super (1973) career model. These are the ages when young people formulate the visions of their career and finalise their expectations of jobs. In the view of the author, these age groups do need the help and guidance that the tertiary institutions could offer to them. To be really effective, though, the institutions have to clarify and specify the areas and modes of where and how the actions are needed to effectively promote the students' careers. It is not enough to turn out students with high professional qualification, it is also important to prepare them to recognise and formulate their own career aims.

In the research the career anchor theory by Schein is relied on. The chance of an individual to achieve success is very heavily influenced by the career self-concept and career orientation of that individual and of the vision by which they organise their career plan. This is called a career model (Schein, 1978; Schein, 1986, cited by Custodio, 2004). Schein (1974) differentiates individuals according to the component of their self-image that dominates and rules their goals and decisions. A career anchor is the inner self image of the individual regarding careers. It is called an anchor because it holds the individual in position against biases alien to their inner self images. Schein (1974) differentiates five anchors: technical/functional capability, general managerial capability, autonomy/independence, security/stability and entrepreneurial creativity. The validity and reliability of Schein's Career Anchor Inventory (COI) has been established by several researchers (Custodio, 2004; Danziger *et al.,* 2008; DeLong, 1982a, 1982b; Wood *et al.,* 1985, cited by Coetzee *et al.,* 2007). They were later completed by DeLong (1982b) by three further anchors: service or dedication to a cause, pure challenge and life style.

The career anchors make it easier for people to select those of their needs that are of top priority for their work. Individuals with career anchors technical/functional value knowledge and outstanding achievement in a special area very high. If a person has general managerial capabilities, they will take every opportunity to climb to a level high enough to ensure them long term possibility of money-making and wealth accumulation. Individuals having career anchors autonomy/independence want to define their work in their own way, they need jobs that allow them flexibility regarding when and how to work and they like to do their work with a high degree of independence irrespective of others. Individuals with the career anchors of security and stability are characterised by a strong sense of loyalty to the company, they value the security provided by long term employment and regular earnings, but they are ready to change their jobs if this serves the interest of the company. Also, such individuals are strongly tied to the geographical location they live in; they would rather give up some of their life standards than move place. Individuals having entrepreneurial creativity will take every opportunity to create an organisation or enterprise of their own; they are motivated to take risk and overcome obstacles. People having career anchors service/dedication to a cause pursue jobs that serve the benefit of others even by scarifying their own interests. If an individual has career anchors of pure challenge, they would value nothing but big challenges. Individuals valuing lifestyle/harmony do not prioritise jobs that require self-assertion; they would rather work to achieve a balance between different

values like family, friends, hobbies, relaxation, leisure or off-job learning etc. (Iványiné, 2011; Schein, 1974).

A research study was carried out by using carrier anchors. They started from the assumption that personal objectives and values that led to a career choice significantly different from students with talent in the technical domain compared with those of students without outstanding performance. A number of 437 students on Technical University of Iasi participated in the investigation, among them a number of 66 students were identified as talented in technical domain. The results of the investigation revealed that the axis values who determine students' with technical talent career aspirations was shaped by four anchors: pure challenge, service/dedication for the cause, life style, creativity. The results were just starting point for investigations relating to specific professional development of young people with technical talent (Ona, 2015).

In another research the sample was composed of eighty-four pupils in the 12th grade, forty boys and forty-four girls. The results showed that there were no gender differences regarding vocational interests or career orientation, neither at global level or on either of the dimensions described by the authors of the theories which form the basis of the study (Mustata, 2014).

The present investigations were complemented by the analysis of values and work values. Values are important for their impact on goal orientation and goals achievement. A survey of work values preferences conducted by the University of Debrecen involving a sample of 3158 university students used Super's work values inventory. It was a cross-sectional study. The results showed that the students involved in the survey firmly refused or underscored the importance of the quality requirements of hierarchy, material provision, aesthetics and management. There were two groups of values, though, that underwent relevant changes over the years between 2002 and 2008: work related security and altruism. Work related security fell back on the list of perceived importance from place 5 to place 12, whereas altruism moved up the rank from place 9 to place 4. The survey looked into the differences between the faculties, too. Of the results, only those related to the students of the Economics Faculty are cited here. These students demonsrated to value creativity the least, whereas they ranked material provision the highest of the items listed (Márton, 2012).

In another research a survey was carried out in 2010 among BA/BSc, MA/MSc and PhD students participating in full time training at the University of Debrecen. 4193 students filled in the questionnaire. The social background, group interests and value preferences of students were investigated along different dimensions. The researchers found that the students in general have high value preferences related to successful and efficient work performance and production (Márkus, 2012). In my opinion, these results draw the attention relating to the fact that carrier planning, carrier orientation must be dealt with in high education within organized frames, as success in work may be significantly influenced by the decisions of students relating to the carrier.

METHODOLOGY

This paper analyses the career orientation, motivation, value preferences and work values of tertiary students. It aims to show whether the related major clusters of the survey can be divided into smaller subgroups and whether the analysis and understanding of the motivations, values preferences and work values of the students will help to set up the determinants between the groups. The following hypotheses were formulated:

H1: The results of the career anchor inventory show that the students in the sample have managerial capability and functional capability as their primary anchors. The fact that the sample incorporates students of management primarily, justifies the assumption concerning the managerial capabilities. Also, the fact that students undergoing tertiary education involving masters and undergraduate students in general are presumed to be highly motivated to acquire comprehensive knowledge and competences of the science area they study justifies the assumption concerning the functional capabilities.

H2: The students can be differentiated and grouped based on their career anchors;

H3: The motivations, values preferences and work values inventory will consolidate the differences between the clusters of the career anchors.

The formulae of the questions used in the survey were compiled from the synthesis of the literature (Karcsics, 2006; Márton, 1992; Münnich, 2002). They were supplemented by the brief versions of Super's work value (Dienes and Simon, 1987; Super, 1970) and of the motivation and career anchor inventories (Iványiné, 2011; Schein, 1974). Figure 1 illustrates the structure of the questionnaire.
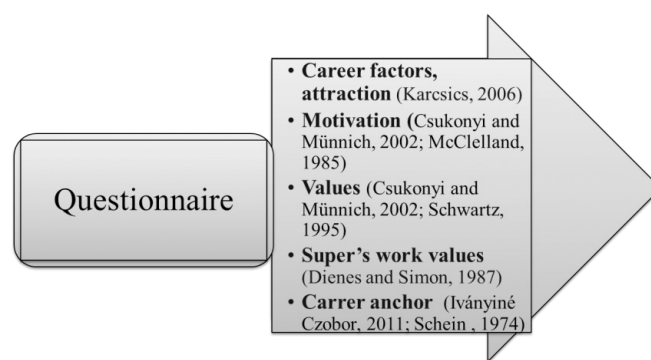

Figure 1: The Structure of the Utilized Questionnaire
Source: own research

One of the question blocks was meant to map the career factors by asking the students which of the factors on the list they consider important in acquiring an ideal job, on the one hand and how important they think these factors are in their future career progress, on the other hand. The same logic was followed when asking them about the factors motivating them in choosing a career. In this section they were asked to assess the attractive power of a series of factors by putting themselves in the shoes of a student, on the one hand and in the shoes of a person having a job, on the other hand.

Table 1: A Few Example Items of the Used Questionnaire

field of the used questionnaire	question	the type of the used scales	a few example items
Career factors	How important are the following factors in order to find an ideal working place? (Present - future)	7 point scale	Connections, knowledge, diligence, aptitude, endurance, support of the family, support of the partners, purity, humility, political affiliation
Career attraction	To what rate the factors listed below inspire you? (Present – euture)	7 point scale	Finances, being independent, power, authority, interesting work, utilizing capabilities, the importance of work, respect for partners, public appearances, political commitment
Motivation	How exactly do the following statements fit you?	7 point scale	I like working hard. It is important to concentrate on my task. I am glad to undertake organizing and managing tasks. If I have the opportunity to choose, I will always choose company instead of being alone. It is very difficult for me to feel that I am conducted.
Values	How important are the following factors for you?	7 point scale	-the appreciation of others -future planning -liberty in opinions -revealing self-opportunities -continuous development of personality to positive direction
Super's work values	How important are the statements from your aspect relating to work?	5 point scale	I can make decisions freely in my own field. I can get authority with my work. I can ensure carefree life for myself. I am sure that others appreciate my work. I can carry out intellectually exciting work.
Carrer anchor	After answering the following questions, think it over, what you really want in your work.	10 point scale	I like tasks where difficult problems must be solved. I like inspecting, managing or influencing others. I need great liberty and independence in my work. I would be unhappy if I did not have a secure employment. I like carrying out work which needs up-to-date knowledge.

Source: own research

The survey was also dealing with the analysis of the motivation. The motivation questionnaire developed by Csukonyi and Münich (2002b) on the basis of McClelland's (1985) basic motivation theory was used. McClelland differentiates five dimensions: general achievement motivation, goal-oriented achievement motivation, avoidance achievement motivation, power motivation and affiliation motivation. Individuals with general achievement motivation are motivated to achieve better performance than others. Those with goal-oriented achievement motivation are driven by the desire to achieve in order to succeed. A person with avoidance achievement motivation is driven by the desire to avoid failures and negative outcomes. For individuals with power motivation it is very important that they have influence on others and that they have prestigious positions. Affiliation motivation involves a need for friendly relationships and interaction with other people (cited by Csukonyi and Münnich, 2002).

The questionnaire to assess the students' preferences of values relies on research by Csukonyi and Münnich (2002a). The series of questions are based on Schwartz's (1995) theory of values comprising 12 dimensions of values: recognition, dominance, self-direction, conformity, security, support, independence, achievement, hedonism, self-enhancement, liberalism, conservatism. According to the theory, values determine people's life by setting the overall goals for them.

The next larger block of questions comprises Super's work (1970) values inventory. Work values are measured against the following properties: spirituality, achievement, integrity, material reward, altruism, creativity, social relations, prestige, control, diversity, aesthetics, independence, hierarchy, security and physical environment (Dienes and Simon, 1987). The original questionnaire was composed in 1969 and comprises 45 items and 15 value groups. Super's work (1970) values inventory is suited to interpret individual value preferences and to identify the differences between the groups involved in the test. The items are incorporated in the questionnaire in a random order; one group of values involves three items. In this research the questionnaire published by Dienes and Simon (1987) was utilized.

The last section of the questionnaire is dealing with the career anchors. The short form of the questionnaire was used, which consisted of 32 items.

Table 1 summarizes the investigated field of the used questionnaire, the related question, the type of the used scales and a few example items.

An online survey was conducted among the students of the Faculty of Economics and Faculty of Humanities of the University of Debrecen in academic year 2014/2015. The questionnaire was circulated online; they were filled in by the students anonymously on a voluntary basis. The sample of 125 students was recruited from the Faculty of Economics and the Institute of Psychology of the Faculty of Humanities of

the University of Debrecen. They produced 116 questionnaires altogether with valid responses, 9 students did complete the questionnaire till the end. 87 per cent of the 116 questionnaires came from the Faculty of Economics, while the rest 13 per cent from the Institute of Psychology of the Faculty of Humanities. 63 per cent of the respondents were studying at BSc/BA level and 37 per cent attended courses at MSc/MA level; 69 per cent were women and 31 per cent were men. They belonged to the 19-24 age groups predominantly, there were only few from the age groups 25-30. The majority of the students (87 per cent) come from the Faculty of Economics, which means that the main conclusions of the research will be characteristic of this population.

The compiled data were evaluated by cluster analysis (Freedman *et al.,* 2005), aiming to use the results of the career anchors analyses to create homogenous clusters. By applying discriminant analysis, such variables and scales were generated that could be used to set the clusters apart from each other (Goodwin, 2005). As a first step, differences were looked for between the items of the groups of questions using the Wilcoxon test. Whenever any differences were spotted, their direction was identified by the median values. If a difference was significant, that item was included in the discriminant analysis. The aim is to predict the clusters identified by the career anchors with the help of the questionnaires; this would imply that the differences between the groups could be identified by other variables. The weights of the discriminant analysis are used to determine those of the variables that are best suited to separate the groups from each other. In the discriminant analysis the individual groups are compared against the rest of the groups. To avoid the confusion they may cause in setting the differences, the variables having very low weights were removed. In order to run statistical analysis, the 2.6.2. version of the "R" statistical program was used.

RESULTS
Evaluation of career anchors

Before introducing the results of the research, some information is necessary regarding the career anchors concerned. The reliability of the scales used to explore the anchors showed reliability for the most part. The Cronbach's alpha values of the scales ranged from 0.7 to 0.9, except for the "lifestyle/ harmony" anchor, which Cronbach's alpha value was 0.59.

Reliability was enhanced by excluding the scale "lifestyle/ harmony" and some items on some of the scales.

Figure 2 shows the average values of the career anchors. Originally four items belonged to each carrier anchors, which the students ranked by a scale ranging from 1 to 10.

The anchor "security, stability, loyalty" produced the highest average scores, thus we can consider it to be the primary anchor. The respondents value loyalty to the company very high and they prioritise the security provided by long term employment, regular earnings and a modest career advancement. Success for the individuals with the security anchors involves long term affiliation to the company irrespective the level of their employment. The anchors

"Technical/Functional" and "Autonomy/Independence" turn out to be the secondary anchors. Individuals with career anchors technical/functional are motivated to bring their knowledge to perfection and to produce outstanding achievement in a special area. Their self-concept is highly influenced by their achievement of success and recognition in their special fields. Technical/functional capability may yield managerial positions, but the individual will only be satisfied if they take this position in their special field of knowledge. Individuals having career anchors autonomy/ independence want to define their work in their own way; they need a high degree of flexibility. Quite often, such people earn high qualifications in order to secure their autonomy and independence.

The respondents scored "managerial capabilities" the lowest of the anchors. Individuals with general managerial capability will take every opportunity to climb to a level of high responsibility so they can contribute to the achievements of the company and ensure long term potentials of money-making and wealth accumulation for themselves.

The Hypothesis 1 could not be accepted as a feasible one since neither managerial capability nor functional capabilities were top-prioritised by the responding students. Unlike the heavily down-marked managerial capability, though, functional capability was scored second on the list of importance. This result is worth of consideration, since the majority of the sample study in courses that will give them qualifications to fulfill managerial positions in their future careers.
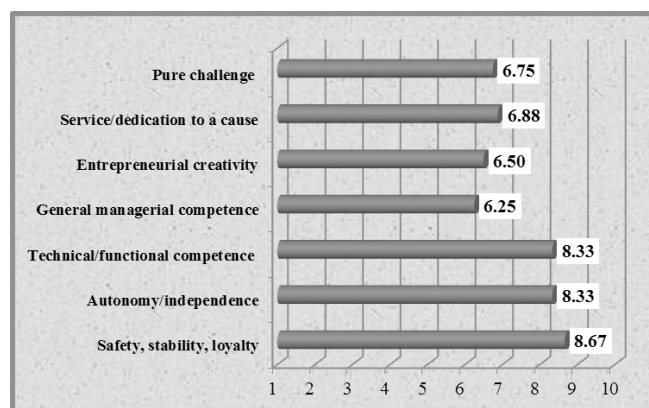

Figure 2: Average values of the career anchor items
Source: own research

Clusters on the basis of career anchors

An aim of the research was to arrange the data in homogenous clusters for which the method of cluster analysis was applied. The data within each cluster are similar to each other according to some dimension. They were arranged in the following four groups:

General managerial capability, entrepreneurial creativity, service/ dedication to a cause, pure challenge → MANAGER (23 per cent)

Pure challenge, service/ dedication to a cause, technical/ functional capability → SPECIALIST (25 per cent)

Entrepreneur creativity, pure challenge → ENTREPRENEUR (31 per cent)

Safety, stability, loyalty; service/ dedication to a cause → EMPLOYEE (21 per cent)

This is in support of Hypothesis 2: the members of the sample can be arranged in well-defined clusters on the basis of their career anchors.

Table 2 shows the relationship between the clusters and the career anchors as represented by the average values of the clusters.

Table 2: The relationship between the clusters and the career anchors

	Safety, stability, loyalty	Autonomy/ independence	Techni-cal/ functional capability	General managerial capability	Entrepreneur-ial creativity	Service/ dedica-tion to a cause	Pure challenge
Manager	9.22	9.21	8.80	8.64	8.92	8.17	8.44
Specialist	8.91	8.40	9.30	6.04	5.29	7.75	7.60
Entrepreneur	8.24	8.36	7.69	5.83	7.12	5.48	6.22
Employee	7.42	6.08	6.56	3.31	3.90	5.44	4.86

Source: own research

We can conclude that the students included in the Managers cluster have outstanding capabilities in the dimensions of management, entrepreneurial creativity, autonomy and security. Specialists are characterised by a high level of functional capability and challenge. Entrepreneurs scored outstandingly high in terms of autonomy and entrepreneurial creativity. The members of the Employee cluster scored high in the dimensions of security and stability, but very low in the dimensions of managerial capability and entrepreneurial creativity.

The results of the career anchor analysis indicate that the BA students tend to motivate to become entrepreneurs and managers, whereas the MA students appear to be more willing to become specialists and less likely to undertake managerial careers in their future lives.

It is interesting to compare these results with the results of their responses concerning their desired jobs. As the denomination of the clusters was not clear at the time of compiling the questionnaire, it is not in full coverage with the denomination of the formulated desired categories. Here, 13 per cent imagine themselves as top managers, 48 per cent as medium level managers, 9 per cent as employees and 28 per cent as entrepreneurs, whereas 3 per cent of the responses fall in the category "Other" (Figure 3). In an ideal case, their responses should fall close to the dimensions they take in the career clusters.
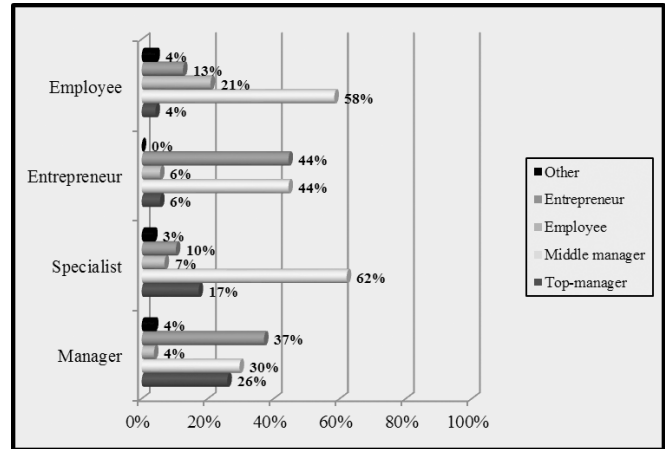

Figure 3: Comparison of the desired positions within the clusters
Source: Own research, 2015

Those students, who fall in the Employee cluster, would typically like to become medium level mangers or employees. Entrepreneurs would like to become entrepreneurs or medium level mangers; Specialists imagine themselves typically as medium level managers, 17 per cent would like to become top managers; 37 per cent of the Managers cluster want to become entrepreneurs, 30 per cent see themselves as medium level managers and only 26 per cent would undertake the positions of top managers.

Characteristics of clusters by investigating motivation and (work) values

Applying the discriminant analysis, those characteristics were identified that are suited to set the generated clusters apart from each other. Hereafter the characteristics of the clusters of Specialists, Managers, Entrepreneurs and Employees will be introduced. The 'Specialists' do not seem to attribute very high importance to the material benefits of a career. Instead, they have high achievement motivation; that is they strive to perform better than their colleagues. Also, they enjoy overcoming obstacles, they want to achieve excellence and they are goal-oriented. Dominance is not important for them; they do not want to influence their environment. They do not require support either, which also means that they do not need the advice of others in making decisions. Of the work values, they consider hierarchy important and they expect to have just appreciation and supervision of their work (Table 3). The correctness of the classification of the Specialists is 80 per cent.

Table 3: Characteristics of the specialists.

Scales	Discriminant coefficient
Materials (career attraction Present)	-0.66
General achievement motivation (motivation)	0.25
Dominance (value)	-0.16

Scales	Discriminant coefficient
Goal-orientation (value)	0.2
Support (value)	-0.15
Hierarchy (work value)	0.22

Source: own research

The 'Managers' tend to attribute much importance to material benefits even while being students (Table 4). Their judgments of power and influence are rather double-faced: as students, they do not think that exercising power over others is important for them. When talking about the future, though, power turns out to be a highly motivating factor of their careers. In the present they find public life attractive. They have a lower motivation of achievement compared to the rest of the groups; unlike for others, out-competing others' achievement is not the most important thing for them. For all this, they have a high level of motivation for power; they want to influence others and they chase prestige and high positions. Material provision as a work value is a less important motivation for them. A job is important for them not because it provides them a livelihood, but because it gives them the possibility of managing and controlling others, organising the work for others and creating the conditions of work. Creativity is not a very important work value for them; they are not very good at innovations and at developing new theories or ideas. Aesthetics, however, is a very important value for them; it gives them satisfaction if every detail of the job they produce is perfect. The correctness of the classification of the Managers is 91 per cent.

Table 4: Characteristics of the managers.

Scales	Discriminant coefficient
Materials (career attraction Present)	0.26
Power, influence (career attraction Present)	-0.21
Power, influence (career attraction Future)	0.12
Public roles (career attraction Present)	0.07
General achievement motivation (motivation)	-0.06
Power motivation (motivation)	0.12
Material benefit (work value)	-0.23
Creativity (work value)	-0.15
Control, management (work value)	0.36
Aesthetics (work value)	0.28

Source: own research

As compared to the rest of the groups, the 'Entrepreneurs' are characterised by lower levels of general and goal-oriented achievement motivation. They do not seem to perform better or more effectively in their jobs and are not more motivated in the achievement of success than others, either. In terms of values, dominance, support, self-confidence and security are less important for them than are for others. This suggests that the Entrepreneurs are not motivated by having influence on

their working environment and they do not need the advices of their colleagues regarding their decisions. They consider harmony less important than others do and they do not think that security and stability are the most important values. Independence and conservatism, however, are more important for them then for others. They appreciate independence in making decisions. They want to preserve the actual state of affairs; they respect the customs and the establishment. In terms of work values, they prioritise the dimensions of diversity, independence, creativity and prestige. In sum, Entrepreneurs value diversity because it enables them to enjoy their work and lets them do their jobs in their own way. The members of this group have a motivation stronger than others to develop and introduce innovative products and new ideas and want to create jobs that inspire respect. There are work values, however, that are less valued by them than by the rest of the groups: management, aesthetics, hierarchy, self-assertion and security. This suggests that beauty and organising work for others are not dominant elements of their values preferences. Further on, a fair assessment of their job performance is less important for them. The choice of ideal life style or the safety of job is not on their priority list, either (Table 5). The correctness of the classification of the Entrepreneurs is 79 per cent.

Table 5: Characteristics of the entrepreneurs.

Scales	Discriminant coefficient
General achievement motivation (motivation)	-0.07
Goal-oriented achievement motivation (motivation)	-0.14
Dominance (value)	-0.07
Support (value)	-0.07
Independence (value)	0.15
Self-acceptance (Hedonism) (value)	-0.15
Conservatism (value)	0.17
Security (value)	-0.10
Diversity (work value)	0.13
Independence (work value)	0.07
Creativity (work value)	0.07
Prestige (work value)	0.23
Control, management (work value)	-0.07
Aesthetics (work value)	-0.14
Hierarchy (work value)	-0.06
Security (work value)	-0.10
Self-assertion (work value)	-0.06

Source: own research

The 'Employees' seem to be less concerned about power and influence when choosing a career than their colleagues in the previously discussed four groups are. It follows that they are not motivated by exercising influence over others or by achieving prestige and high positions. They tend to value recognition and support higher than their colleagues do. This suggests that the opinion of the others is important

for them when it comes to assessing their work performance and that they need the support by the others. They value goal-orientation less important, which suggests that goals achievement is not one of their top priorities. The fact that the work values of prestige, management, control and hierarchy do not play a decisive role in their list of preferences suggests that they are not motivated by achieving jobs that inspire respect, nor do they care much about organising and administering work for others (Table 6).The correctness of the classification of the Employees is 88 per cent.

Table 6: Characteristics of the employees.

Scales	Discriminant coefficient
Power, influence (career attraction Future)	-0.23
Power motivation (motivation)	-0.07
Recognition (value)	0.15
Goal-orientation (value)	-0.13
Support (value)	0.08
Prestige (work value)	-0.12
Control, management (work value)	-0.13
Hierarchy (work value)	-0.14

Source: own research

The aforesaid characteristics can help with identifying the differences between the groups and with giving appropriate definitions to the individual groups.

We can conclude that Hypothesis 3 has been approved, i.e. that the career anchors created on the basis of the inventories of motivation, preferences of values and work values are suitable to consolidate the differences between the clusters.

DISCUSSION

The results of the survey of the career orientations of the students revealed that 61 per cent in the sample would be ready to undertake managerial positions. Regarding their values assessment, however, they seem to be less ambitious: as students, they would prefer management positions at the medium level. This can logically be explained by their fears of the responsibilities and challenges associated with a top-manager's position. Only 13 per cent feels like undertaking top-management positions, 48 per cent would rather take the jobs of middle managers.

The career concepts of the students do not always coincide with the career values that were determined. This mismatch suggests that the students are not fully aware of their career potentials, or they do not have the right image of their personal capabilities. At this age, quite often, students are uncertain about their career potentials and they admit that they need information and guidance on this matter as part of their curriculum.

It would be worth organizing trainings for students in high education within organized frames relating to the carrier, in which they could get to know the carrier opportunities and get feedback on their own possibilities. Their experiences gained

during the training might help them in making decisions with respect to the carrier.

Using the method in high education within special trainings could be the practical utilization of the study. On the basis of the results a questionnaire can be compiled, which could help uncertain students relating to their carriers and future orientation containing information in connection with their carrier orientation, motivation, value preferences and work value.

Of course their attention was drawn to the fact that they should fill in the test again from time to time, as different effects reaching the individuals may modify the results.

Although several researchers carried out career anchor surveys in the world of work, such investigations in which clusters were formed on the basis of career anchor survey and all these were supplemented by motivation and work values examination have not happened before. Bester and Mouton (2006) revealed correlations between the career anchors and job satisfaction. Sumner *et al.* (2005) carried out a research among IT experts and found that the most frequent career anchors included "Entrepreneurial creativity" and "Autonomy/independence". There were researchers who found connections between the career anchors and organisational commitment. Positive significant correlation was found between the technical/functional capability, the managerial capability and the organisational commitment. In this present investigation the anchor "security, stability, loyalty" produced the highest average scores, thus we can consider it to be the primary anchor. The anchors "Technical/Functional" and "Autonomy/Independence" turn out to be the secondary anchors.

These results mainly relate to economic students. From these results it may be concluded that the primarily carrier anchor may be different in case of individuals representing different special fields. Revealing them may be important, as it may turn out that which motivating tools prove to be effective in their case. It may be worth spreading the research to the other faculties of the University of Debrecen, or even to several universities in Hungary, on which basis a representative sample may be compiled. Such a sample may be suitable for revealing differences in gender and special fields as well as to discover the differences between MA and BA training.

It would be practical to measure the test in the world of the work. A tool would be useful for helping in getting to know employees regarding their carrier idea, motivation and work value. Such a system would greatly support the carrier management processes of organizations. At the same time it must be highlighted that it is worth repeating these similar investigations within special periods bearing in mind the continuous development of the individuals.

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