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# Career strategies as factors of subjective career success: business school graduates' example

Master's Thesis by the 2nd year student  
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## ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

Я, Сыроваткина Полина Андреевна, студент второго курса магистратуры направления «Менеджмент», заявляю, что в моей магистерской диссертации на тему «Карьерные стратегии как факторы субъективного карьерного успеха: на примере выпускников бизнес-школы», представленной в службу обеспечения программ магистратуры для последующей передачи в государственную аттестационную комиссию для публичной защиты, не содержится элементов плагиата.

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## ABSTRACT

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| Description of the goal, task and main results | <p>The research goal of this paper is to determine the relationship between career strategies of students and subjective career success. To achieve this goal, the theoretical concepts of career success and career strategy was thoroughly studied, and a critical analysis of contemporary research devoted to the career strategies of students was carried out.</p> <p>As part of the work, a survey among graduates of 2016-2020 years of GSOM was conducted. The results of the regression modelling revealed the positive relationship between subjective success and four career strategies, namely networking, career exploration, career planning and professional identity development.</p> |
| Keywords                                       | Career strategy, subjective career success, determinants of career success, students  |

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## **Introduction**

Indubitably, career is an important aspect of one's life, as it usually defines social status, social circle and lifestyle. Career is also a significant marker of one's identity, and identity, for its part, impacts self-perception, motivation, interests, competences etc. Being an ultimate result of career development, career success is important as well and it has been a focal research topic in management and applied psychology since the 1970s (Spurk, Hirschi & Dries, 2019; Ng, Eby, Sorensen, & Feldman, 2005).

Empirical research on career success has been primarily focused on career success determinants and best practices for its achievement. Historically background factors, such as socio-economic origin, gender, marital status, the human capital factors, which comprises such attributes as education, skills and experience, and the organizational factors, including organizational size and internal promotional practices, were considered to be the key determinants of career success.

At present, the attention shifts to the different factors, especially given the changes in the landscape of work and careers. These changes are reflected in the development of new concepts and approaches. For instance, a substantial number of recent studies are devoted to the protean career concept. While this concept was introduced in 1970s, now it is given much more attention to it. Nowadays, in response to the volatile employment conditions and ambiguous career paths, careers have become increasingly directed by the individual and affected by intrinsic values rather than extrinsic motivations, which is reflected in protean career concept. (Cortellazzo et al., 2020). It not only suggests that career choices are personal and underlie the search for self-fulfillment, but it implies also that person's internal values provide the guidance and measure of success for the individual's career. Another theory, boundaryless career concept, implies that employees' careers are becoming more "boundaryless" and less dependent on traditional organizational career management. "Boundarylessness", while offering great opportunities for individuals to build a career based on their own preferences, requires from the individuals to engage in proactive behaviors and develop certain competences (Guan et al., 2019). Current studies on career success also examine the behavioral approach, which assumes that individuals are the ones who control their own career advancement and can therefore enact appropriate career plans and tactics that contribute to career success (Ballout, 2007). Advocates of the behavioral approach (e.g. Aryee et al., 1996; Gould and Penley, 1984; Greenhaus and Callanan, 1994) suggest that the employees should learn to play an active rather than passive role in the management of their own careers by engaging in career strategy behaviors that improve career prospects, rather than relying entirely on organizational career systems that are unlikely to meet their individual needs or expectations (Nabi, 1999).



Mentioned perspectives reflect the fact that the focus of contemporary research is on the individuals and their role in managing their own careers. The concept of career strategies goes in line with this, implying that individuals pursue certain career strategies to achieve career success (Penley & Gould, 1974).

Traditionally career success was measured with objective measures such as salary or promotions. However use of only objective measures of success led researchers to a question: why are there so many objectively successful but still vastly unfulfilled people? (Forbes, 2020). For the reason that the individuals may not be intrinsically satisfied with their careers, even if they have positive extrinsic career outcomes, some researchers consider subjective measures of career success to be more meaningful than objective ones (Kim and Beehr, 2017). It goes in line with number of concepts, e.g. The Well-being Five concept, which considers career well-being as one of five essential elements of overall individual's well-being (Rath & Harter, 2010). The idea of importance of subjective career success is being confirmed in practice. For example, Eith, Harald & Claudia demonstrated that more and more individuals make decisions based on subjective criteria, instead of salary or promotions. What's more, studies report that the correlation between objective career success and subjective career success is typically small to moderate, ranging from 0,22 to 0,3 (Ng et al., 2005).

A number of theories identify university studies period as the first or the second stage of career development, and this is particularly relevant nowadays. In addition to managing career more actively, individuals start to do it earlier. Students start to explore certain careers, actively network, work with mentors and pursue other career strategies during studies, as they are concerned about their career and take actions to make themselves marketable and improve chances of successful employment. Now, in coronavirus reality, students are even more concerned about their career paths (CTV News, 2020). While students engage in certain career-related activities, the impact of these activities is not well investigated in the literature. There is a gap in understanding which of these activities are common to the students and whether they can be positively related to career success. Therefore it is worth investigating if career-related activities of students can be associated with higher levels of subjective career success.

Research tasks are:

1. To define students' career-related activities as career strategies;
2. To define subjective career success and identify its measures;
3. To investigate what career strategies are inherent to students;
4. To examine which career strategies of students are related to the subjective career success;
5. To discuss implications of the research findings.

The results of this study will be valuable for students, employers and business schools. The findings will help students in choosing reasonable activities in which they engaged during the study. The employers can use the findings of the study to design selection process and internships in order to help potential employees to experience higher level of subjective career success and therefore have higher productivity (Pachulicz, Schmitt and Kuljanin, 2008), experience stronger organizational commitment (Rasdi, Ismail and Garavan, 2011), enhance the willingness of older workers to remain in the organization (Armstrong-Stassen & Ursel, 2009). Studies show that career satisfaction and subjective career success are ones of the strongest predictors of long-term positive company performance (Dai & Song, 2016). Business schools can use these findings in order to prioritize the extracurricular activities, choose the proper events, improve the curriculum etc.

The research is explanatory in type, as the main goal is to identify the relationship between career strategies of students and their subjective career success. First, career and career development concepts are discussed. Then the study proceeds with career success concept, which defines what career success is, what the determinants of career success exists in general. After general ideas about career development and career success are derived, the research moves on to study a specific subject which is the career strategies. The academic literature dedicated to the career strategies and their role in career success achievement is reviewed and analyzed. Then the research proceeds with the discussion of career strategies of students, discusses the results of existing studies and identifies gaps.

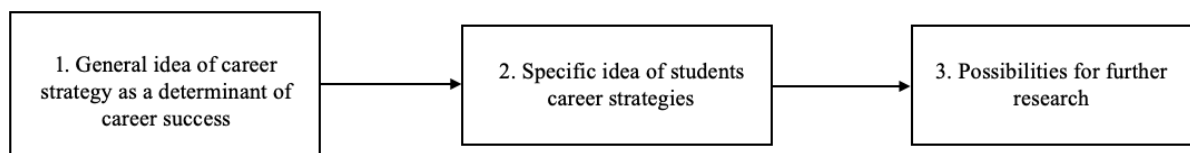


Figure 1 Exploratory research design

To analyze the career success the research uses secondary data such as academic literature as well as universities and various career services web-sites. To explore the research gaps first-hand data in the form of questionnaire data was used to draw some initial inferences and explore links between career strategies of students and subjective career success.

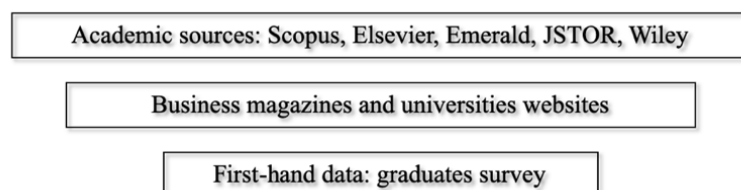


Figure 2 Sources of data used in the study

Research tactics answer the questions: what data to collect, how to collect it and how to analyze it. The summary of the research tactics is provided in Figure 3.

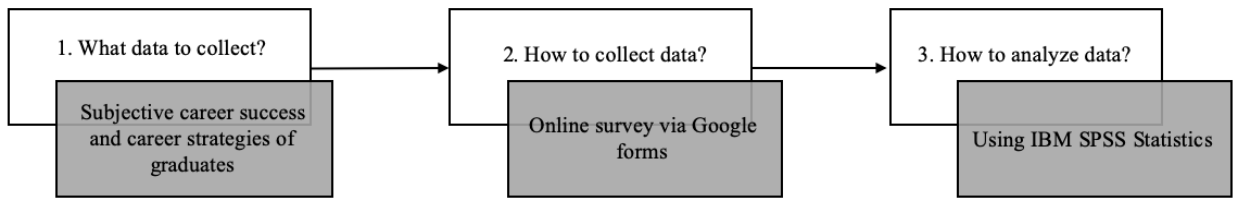


Figure 3 Research tactics

# CHAPTER 1. CAREER SUCCESS AND ITS TYPES, DETERMINANTS AND MEASUREMENT: THEORETICAL FOUNDATIONS

## 1.1 Concepts of career and career development in literature

Career success research draws on the career theory, and therefore on the ideas – underlying definitions, concepts, relationships and assumptions – included in career theory (Arthur, Khapova & Wilderom, 2005). Hence before diving into the concept of career success, it is imperative to introduce the concept of career.

Hall (1976) defined career as “the individually-perceived sequence of attitudes and behaviors associated with work-related experiences and activities over the span of a person’s life.” Another established definition of career is “the unfolding sequence of a person’s work experiences over time” (Arthur, Hall & Lawrence, 1989, p.8). However there are numerous perspectives on career concept. For example, from a viewpoint of psychology, career can be considered as a component of the individual life structure or as vehicle for self-realization or as vocation. From a viewpoint of sociology, career can be seen as social mobility, and from economics perspective, career can be viewed as a response to market forces. So, career concept is truly complex, multifaceted and can be regarded from different perspectives.

The career is being formed at all stages of the person's life path in the process of self-determination, self-organization, personalization, the process of formation of self-reflection. Greenhaus & Callanan (1994) defined career development as an ongoing process by which individuals progress through a series of stages, each of which is characterized by a relatively unique set of issues, themes and tasks. One of the most notable theories in career development area is Donald Super’s Career Development theory, which conceptualized career development as a lifelong process (Dries, 2013). Super identified 5 developmental stages of career: growth, exploration, establishment, maintenance, disengagement (Table 1). The exploration stage typically occurs at the age period from 14 to 24 years. During this stage an individual is engaged in setting a vocational goal. Then, he or she transforms the general preferences into a specific choice, a firm vocational goal. Then, he or she works on implementation of a career preference by completing appropriate training and securing a position in the chosen occupation.

Table 1 Stages of career development according to R. Super

| Stage         | Age range | Description   |
|---------------|-----------|---|
| 1 Growth      | 4-13      | An individual develops capacities, attitudes, interests. Later he or she becomes concerned about future, convince to achieve at school, increase personal control |
| 2 Exploration | 14-24     | An individual self-reflect and pursue (higher) education. Specification and implementation of career preferences occur.   |

|   |               |         |   |
|---|---------------|---------|---|
| 3 | Establishment | 24-44   | An individual establishes his or her place in a world of work. The main tasks are stabilizing a place in a organization and advancing up the career ladder. |
| 4 | Maintenance   | 45-65   | The tasks are holding on what has been achieved, updating competencies and finding innovative ways of performing one's job                                  |
| 5 | Disengagement | Over 65 | At this stage most people make active plans to retire.  |

Greenhaus & Callanan (1994) view development of a career in terms of four stages: occupational and organizational choice, early career, midcareer and late career (Table 2). The tasks for the first stage, occupational and organizational choice, include forming and refining an occupational self-image, exploring the qualities of alternative occupations, developing at least a tentative occupational choice and pursuing the type of education or training required to implement the choice. Authors define typical age range for this stage as around from 18 to 30 years old. The characteristics for other stages can be seen in Table 2.

Table 2 Four stages of career development according to Greenhaus & Callanan (1994)

|   | Stage                                  | Age range                      | Major tasks  |
|---|--|--------------------------------|--|
| 1 | Occupational and organizational choice | Initially 18-30; then variable | Develop occupational self-image and initial occupational choice, pursue necessary education  |
| 2 | Early career                           | 25-45                          | Learn job, learn organizational rules and norms, fit into chosen occupation and organization |
| 3 | Midcareer                              | 40-60                          | Reappraise early career and early adulthood, reaffirm or modify career goals                 |
| 4 | Late career                            | 55-retirement                  | Remain productive in work, maintain self-esteem, prepare for effective retirement            |

A review of career development theories allows to conclude that the career and career development start not at the first job, but earlier, at least during higher education. A number of universities' official websites consider university to be "the ideal place to start thinking about career" (University of Greenwich, 2020). Also career websites advise to start career planning earlier, e.g. "those who go to school with a career plan start the race with an advantage" (Career Vision, 2021).

A number of researchers consider looking forward and planning for the future as a normative developmental task for late adolescents (Laughland-Booÿ et al., 2017). During adolescence, students usually develop ideas about their future and formulate their career options. The choice of future represents an important decision that can affect adolescents' lives in substantial ways. This decision requires a careful preparation. Career orientation refers to this preparation process, which takes place before the actual decision and includes, for example, exploring career opportunities and thinking about the extent to which one's own interests and abilities match the requirements of a career (Piesch et al., 2020).

Not only early stages, but each career stage challenges individuals to make effective career decisions. Career management is the process by which individuals can make reasoned, appropriate decisions about their work. It is a continuing, life-long process of investing resources to accomplish future career goals. Greenhaus & Callanan (1994) proposed a career management model, which is normative in nature and hence describes how people should manage their careers (Figure 4).

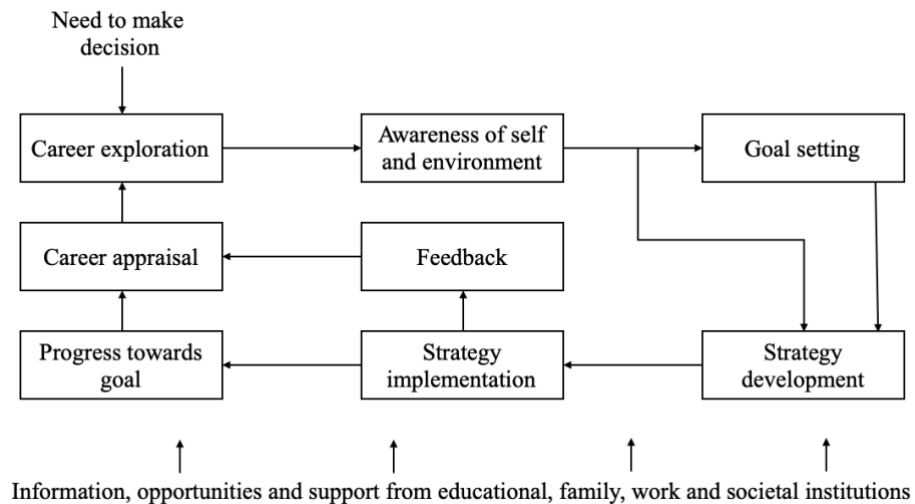


Figure 4 Career management model by Greenhaus and Callanan (1994)

The first stage is career exploration, which includes gathering information, checking the alternatives. Career exploration, being properly conducted, helps to increase awareness about certain occupation. A greater awareness of oneself and environment helps to choose and set reasonable goals. The establishment of realistic goals can facilitate the development and implementation of career strategies, which in turn should assist in producing progress towards goals. The implementation of career strategies can provide useful feedback, which can enable the person to appraise his or her career. The additional information derived from career appraisal becomes another vehicle for career exploration, that continues the career management cycle. In sum, the career management cycle is a problem-solving, decision-making process. The successful application of this career management model depends both on the individual and the organization. Greenhaus and Callanan (1994) acknowledged that the use of career-enhancing strategies can be characterized as an indicator of effective career management.

The ultimate outcome of career development is career success. Career success is not only one of the most critical goals in everyone's life (Abele, Spurk, & Volmer, 2011), it is a core construct in the career area, since it reflects an overall evaluation of the individual's career, a result of person's career experiences. Career success has long been of interest to both career researchers and managerial practitioners (Pan & Zhou, 2015), and still is so: the review by Akkermans, J., Kubasch (2017) revealed that career success to be the most trending topic in career research over

the 2012-2016 years. Career success definition, types, determinants and measures are discussed further.

## 1.2 Career success: definition, determinants and measurement approaches

Before proceeding with any kind of analysis of career success it is important to define what career success is and how it is measured and then in addressing factors of career success move from general to specific in order to ensure a logical and consistent flow of the literature review (Table 3).

Table 3 The structure of literature review on career success

|                           |                                 |                             |
|---------------------------|---------------------------------|-----------------------------|
| Career success definition | Career success types and metric | Career success determinants |
|---------------------------|---------------------------------|-----------------------------|

### *Definition*

Anyone who starts to build their career, one way or another strive for career success. It is an ultimate outcome of the career (Career Research, 2020). As career success is a complex concept, it can be viewed from various perspectives and considered from different approaches. There are three basic approaches to the explanation of career success (the individual, the structural, and the behavioral perspectives) and a number of contemporary approaches. Besides, there are objective and subjective perspectives on career success, and consequently, there different metrics: salary, promotion and satisfaction, perceived success. But before proceeding with types and metrics, it is important to define what career success is.

The question of determining career success is well covered in the scientific literature. Judge (1995, p. 486) defined career success as “the positive psychological or work-related outcomes or achievements one has accumulated as a result of one’s work experiences”, and it is one of the most frequently cited definition of career success, but it is not the only one. Arthur, Khapova & Wilderom (2005) defined career success as “the accomplishment of desirable work-related outcomes at any point in a person’s work experiences over time”. These definitions are quite similar, the idea is the same: career success is some positive outcomes from work-related activities. Career success can be also interpreted as a combination of achieving a reasonable level of financial stability and doing work an individual enjoys. This definition leads to the two perspectives of career success: objective (extrinsic) and subjective (intrinsic).

Objective career success is an external view on the success of an individual, which is usually measured with some tangible metrics. These are the indicators that can be seen and therefore evaluated objectively by others (Ng, Eby, Sorensen & Feldman, 2005). Objective career success

reflects shared social understanding rather than some individual understanding (Arthur, Khapova & Wilderom, 2005). Objective career success is sometimes called extrinsic career success, as it is supposed, that the rewards obtained are external to the work itself. However these rewards can be still associated with some psychological effects as an individual can perceive salary or promotion as an evaluation of his or her effort and diligence.

The most common examples of objective career success metrics are pay, salary progression, number of promotions, occupational status (Heslin, 2005). With respect to the last indicator, it can be defined as a reflection of extrinsic career success accumulated over time, which is manifested in salary, hierarchical position, and number of subordinates (Dietl, et al., 2017). Objective career success metrics and their association with various things are considered in many studies. E.g. Gutteridge (1973) used yearly salary as an indicator of career progression. Kranefeld, Nill & Blickle (2021) studied the association between occupational status as a metric of career success and emotional recognition ability. Koch, Park & Zahra (2021) studied the association between different self-employment career patterns and objective career success measured as natural logarithms of gross labor income adjusted for inflation. Blokker et al. (2019) examined the relationship between career competencies and perceived employability and used three indicators to measure objective career success in their study: salary (specifically, gross monthly salary), number of promotions in career and number of positive performance appraisals. The last one is an alternative for promotions indicator, and it is used for the reason that the participants of the survey got more positive appraisals than formal promotions.

Subjective career success (SCS) can be defined as the individual's internal evaluation of his or her career success, and it can encompass any dimensions which are important to the individual (Arthur, Khapova & Wilderom, 2005; Greenhaus et al., 1990; Turban & Dougherty, 1994). People have different values, desires, views and aims, so everyone can perceive career success differently. Subjective career success reflects individuals' judgments about their career attainments (Stumpf, 2010), their appraisals of their self-worth and capabilities (Chang, Ferris, Johnson, Rosen, & Tan, 2012), and the satisfaction they experience in their career (Burke, 2001; Judge et al., 1995). Individuals view their career success as a function of their own internal standards and perceptions of satisfaction and success in social networks of relationships (Ballout, 2007). Subjective career success can be measured through job or career satisfaction. It is much less visible characteristic than objective success. Still, it is important, as people can feel unhappy, unsatisfied, unfulfilled, even having high levels of objective career success (Forbes, 2020). Highly successful managers and professionals can experience social alienation, sense of meaninglessness, frustration, while they are expected to be satisfied (Korman, et al., 1981).



Therefore, at present, increasing attention is paid to subjective career success. Moreover, some researches consider subjective evaluations of career success to be more meaningful than objective evaluations for the reason that individuals may not be intrinsically satisfied with their careers, even if they have positive extrinsic career outcomes (Kim and Beehr, 2017). Dai & Song (2016) mentioned, that subjective career success is more and more important for employees. An increasingly large percentage of employees define their career success in terms of subjective indicators rather than in terms of objective indicators like salary and frequency of promotions (Eith, Stummer & Schusterschitz, 2011). The review by Akkermans, J., Kubasch (2017) revealed that in the articles published in fore core career journals (Career Development International, Career Development Quarterly, Journal of Career Assessment and Journal of Career Development) in 2012-2016 only a few studies examined objective indicators of career success and most studies related to career success assessed some type of subjective career success, mostly operationalized in terms of career satisfaction.

In a number of recent publications subjective career success metrics are used. Schworm et. al (2017) in their study of international business education' impact on career success used subjective career success for the following reasons: variations of objective career conditions, difficulty of measuring objective career success when dealing with an internationally and organizationally diverse sample and the importance of satisfaction shown by Shen et al. (2015). Gordon & Shi (2021) examined the links between recovery experience and career success in hospitality management industry and used subjective career success. Haenggli & Hirschi (2020) investigated the impact of career adaptability on career success and also used subjective career success.

### *Measurement*

The review of scientific literature on subjective career success identified several scales for its measurement. In most cases the researchers conceptualize the subjective career success as career satisfaction or as overall career perceptions.

The scales used by Turban & Dougherty (1994) conceptualize subjective career success as perceived overall career success and measure it with the four following items: "How successful has your career been?", "Compared to your coworkers, how successful is your career?", "How successful do your 'significant others' feel your career has been?", "Given your age, do you think that your career is on "schedule", or ahead or behind the schedule?". These items are quite similar to those used by Munson & Posner (1980), which measured self-perceived success with questions such as "Compared to other people your age and who have the same job classification, how successful do you feel you are?" and "How do you feel your career is progressing compared to your peers?". Munson & Posner used 5-point Likert-type scale with response categories ranged

from considerably below average (1) to considerably above average (5). These questions clearly guide the respondent to answer in terms only of organizational peers. This perspective lacks information about subjective factors that drive the overall assessment of success. (Shockley et al., 2015). However, other instruments are more open-ended (Arthur, Khapova & Wilderom, 2005).

The most of studies operationalize subjective career success as satisfaction (Pan & Zhou, 2015). E.g. Greenhaus, Parasuraman & Wormley (1990) used this approach (Shockley et al., 2015) and developed the scales for the measurement of career satisfaction expressly for their research. They used the following items:

1. I am satisfied with the success I have achieved in my career;
2. I am satisfied with the progress I have made toward meeting my overall career goals;
3. I am satisfied with the progress I have made toward meeting my goals for income;
4. I am satisfied with the progress I have made toward meeting my goals for advancement;
5. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

To let the respondents express to what extent they agree with the statements the authors used 5-point Likert-type scale as well. The responses were averaged to get a total career satisfaction score.

The scales developed by Greenhaus, Parasuraman & Wormley (1990) called Career Satisfaction Scale (CSS) are the most widely used instrument on subjective career success. It was used in a number of studies (Table 4). Spurk, Hofer & Kauffeld (2021) studied how competitive psychological climate in an organization can affect objective and subjective career success, and the last one was measured with CSS developed by Greenhaus, Parasuraman & Wormley. Gordon & Shi (2021) examined the relationship between recovery experience and career satisfaction with workaholism as a moderating factor, having career satisfaction measured with the CSS. Aryee, Chay & Tan (1994) applied it when examined the impact of such factors as human capital, work values, family variables and structural variables on subjective career success on a sample of managerial employees. Blokker et al. (2019) examined the relationship between career competencies and perceived employability and used CSS as well. Schworm et al. (2017) investigated how business education impacts on career success and also used the scales by Greenhaus et al. to measure subjective career success in their survey. Wayne et al. (1999) examined examine a range of objective and subjective antecedents of career success and used the scales by Greenhaus et al. as well.

Table 4 Studies which used the CSS (Career Satisfaction Scale) developed by Greenhaus et al.

| # | Journal   | Authors   | Year | Aim of the study   |
|---|---|---|------|--|
|   | Journal of Vocational Behavior                      | Spurk, Hofer & Kauffeld                                     | 2021 | Study the relationships between competitive psychological climate and career success                                 |
|   | International Journal of Hospitality Management     | Gordon & Shi  | 2021 | Examine the relationship between recovery experience and career satisfaction with workaholism as a moderating factor |
|   | Journal of Vocational Behavior                      | Blokker, Akkermans, Tims, Jansen, Khapova                   | 2019 | Examine the relationship between career competencies and perceived employability                                     |
|   | European Management Journal                         | Schworm, Cadin, Carbone, Festing, Leon, Muratbekova-Touron. | 2017 | Investigate the impact of business education on career success   |
|   | Jurnal Pengurusan                                   | Amin, Arshad & Ghani  | 2017 | Study the relationships between family support and subjective career success   |
|   | Zagreb International Review of Economics & Business | Nikandrou & Galanaki  | 2016 | Study the impact of career strategies on career outcomes within the context of boundaryless career concept           |
|   | Career Development International                    | Dierendonck & Gaast   | 2013 | Investigate the impact of goal orientation on objective and subjective career success                                |
|   | International Journal of Business & Society         | Yean & Yahya  | 2013 | Study the mediating role of career strategy on the relationship between HRM practices and career satisfaction.       |
|   | Journal of Vocational Behavior                      | Converse, Pathak, DePaul-Haddock, Gotlib, Merbedone         | 2012 | Examine proactive personality and self-control as predictors of career success                                       |
|   | International Journal of Hospitality Management     | Kong, Cheung, Song  | 2012 | Study the determinants of career competences and their impact on career outcomes                                     |
|   | Jurnal Pengurusan                                   | Yean & Yahya  | 2011 | Study the relationships between personality traits and career strategies and career satisfaction.                    |
|   | Journal of Applied Psychology                       | Wolf & Moser  | 2009 | Study the impact of networking on career success   |
|   | International Journal of Management Studies         | Yean & Yahya  | 2008 | Examine the relationships between career strategies and subjective career success                                    |
|   | Career Development International                    | Lee   | 2002 | Study the impact of career strategies of information technology professionals on their professional enhancement      |
|   | Cross Cultural Management: An International Journal | Burke   | 2001 | Investigate the interplay between career experiences and outcomes of managerial women                                |

|  |                                    |                             |      |   |
|--|------------------------------------|-----------------------------|------|---|
|  | Journal of Organizational Behavior | Wayne, Liden, Kraimer, Graf | 1999 | Examine the objective and subjective antecedents of career success  |
|  | Human Relations                    | Aryee, Chay & Tan           | 1994 | Examine the impact of as human capital, work values, family and structural variables on subjective career success |

A number of researches proposed multidimensional models of subjective career success. Gattiker & Larwood (1986) scales for subjective career success included four domains: job success (sample items are “I am most happy when I am at work” and “I am dedicated to my work”), interpersonal success (sample items are “I am respected by my peers” and “I am having my superior’s confidence”), financial success (sample items are “I am receiving fair compensation compared to my peers” and “I am earning as much as I think my work is worth”) and hierarchical success (sample items are “I am reaching my career goals within the time frame I set for myself”).

Shockley et al. created a multidimensional scale for subjective career success based on Heslin’s (2005) suggestions on how to improve the measurement of SCS. In the study they asked people with diverse backgrounds, career stages and occupation to define career success and then used this information to create the scales, which called the Subjective Career Success Inventory (SCSI). SCSI consists of 24 items related to the eight areas: recognition (the sample item is “Considering my career as a whole the organizations I worked for have recognized me as a good performer”); quality work (the sample item is “Considering my career as a whole I am proud of the quality of the work I have produced”); meaningful work (“Considering my career as a whole I believe my work has made a difference”); influence (the sample item is “Considering my career as a whole the organizations I have worked for have considered my opinion regarding important issues”); authenticity (the sample item is “Considering my career as a whole I have felt as though I am in charge of my own career”); personal life (the sample item is “Considering my career as a whole I have been able to have a satisfying life outside of work”); growth and development (the sample item is “Considering my career as a whole I have continuously improved by developing my skill set”); satisfaction (the sample item is “Considering my career as a whole my career is personally satisfying”). The validity of the SCSI was proved on the sample of 216 survey’s participants, however the authors highlighted the necessity of future research for assessing the generalizability.

Thus, the Career Satisfaction Scale developed Greenhaus, Parasuraman & Wormley (1990) can be considered the most reliable as it was successfully applied in many studies.

#### *Determinants*

The recognition of career as vehicle for personal growth and success in contemporary achievement-oriented societies has precipitated a steady stream of research on the factors that

influence career success (Aryee, Wyatt & Stone, 1996). Understanding these factors is of interest to both employees and organizations. Knowledge of these factors would be important in helping organizations design more effective career systems and individuals develop career management strategies that would enhance their career success (Aryee, Chay & Tan, 1994).

Few would dispute the importance of the individual in contributing to career success, and much research has been done to demonstrate the effects of individual differences in predicting career success (Poon et al., 2015). Although individual differences have a high impact, situational determinants are also considered to be important for predicting career success.

There are several classifications of career success determinants, which are identified in the existing research. Whitely et al. (1991) organized various factors, which influence career progress, specifically the early one, into these influences into four categories: human capital, job-organizational, motivational, and demographic. Ballout (2007) summarized three categories of antecedents of career success: individual, structural and behavioral antecedents. Another classification divided the determinants of career success into four categories: human capital, socio-demographic status, organizational sponsorship and individual differences (Supangco, 2011; Ng et al., 2005). More recent review by Ng & Feldman (2014) defined six groups of factors: background-related, skill-related, motivational, social network, organizational and trait-related factors.

Background factors can be both sources of advantages and disadvantages for career development and success. The impact of socio-economic origin, gender, marital status, having children is usually examined with respect to this group of factors. For example, traditionally being female and having children lowered the odds to get desired positions and promotions due to some negative stereotypes. While the impact of gender and marital status becomes less pronounced and less obvious, the impact of origin still exists. According to study by Duta et al. (2020) graduates from lower social classes of origin have more diverse and less stable trajectories, are less likely to enter top-level jobs in their 20s and more likely to enter and remain in lower social classes than their more socially advantaged counterparts.

A substantial amount of studies is devoted to skills and their importance for building a successful career. These factors are studied within human capital theory and individualistic approach to career success. Skills factors include education, development activities and training, work experience, tenure. The linkages between these factors and career advancement are rather obvious, e.g. low education level is usually a barrier for enter into high-paid prestigious positions.

Motivational factors, while not being identified as separate group in many studies, play an important role in career advancement, because despite of background, traits and skills, it is difficult to build a successful career without investing time, effort and energy into the career. Motivation,

involvement, commitment to job are especially crucial when one faces obstacles and failures on the career path, which are usually inevitable. Certainly, motivational factors are important not only in terms of “maintaining a fighting spirit”. Non-committed workers are less likely to put extra effort in job. The absence of enthusiasm about a job usually prevents employees from receiving sponsorship and mentorship.

One of the variables which reflects an individual’s motivation is career planning (Wayne et al., 1999). Individuals set career goals, implement and attain them, taking into account an assumption that setting goals leads to the increase of effort expenditure on their achievement. A number of studies showed the relationship between career planning and career success.

Social capital factors are considered to be of equal importance as human capital factors. Social capital consists from relationships with colleagues and supervisors within a firm, contacts with professional outside the firm, relationships with mentors. Irrespective of the source of the contacts, individuals with little social capital are disadvantaged in terms of learning about new job opportunities, successfully realizing them and getting sponsorship and mentorships (Ng & Feldman, 2014).

Organizational context can be favorable or not in terms of promoting career advancement of employees. Organizational context can empower one for achieving career success by giving challenging assignments and providing trainings. Besides positive impact, organizational environment can be a source of high levels of stress. For example, competitive psychological climate in organization can increase job engagement or cause burnout, which then should be positively or negatively related to objective and subjective career success, respectively (Spurk et al., 2021). One of the forms of organizational sponsorship is mentorship. Mentorship has two functions: career development and psycho-social support.

Trait-related factors, or individual differences, are usually expressed with the Big Five personality factors (neuroticism, conscientiousness, extroversion, agreeableness and openness to experience). Besides them, some researches include proactivity, locus of control and cognitive ability (Ng et al., 2005). Individuals with low openness to experience can have lower chances to be successful and satisfied with the career due to constrained choice of career paths and hence lower chances to find a suitable job. A similar suggestion can be made with respect to low extraversion and low conscientiousness. Low agreeableness can impede the development of network of social contacts, which is important for building a successful career. Personality traits play such an important role in determining career satisfaction. because personality traits are the inherent characteristics that can override individual’s career-related decisions (Yean & Yahya, 2011). Now increasing attention is paid to proactivity. Individuals, which can be described as proactive, take action to influence their environments, scan for opportunities, show initiative and

persevere until they bring about significant change (Converse et al., 2012). People low in proactivity are less aggressive in looking for job opportunities and realizing them, and hence experience lower levels of success (Ng & Feldman, 2014).

A literature review shows that there is a wide variety of career success determinants. At various times under the influence of different trends and approaches in career research different groups of determinants prevailed. Attention is currently being paid to boundaryless and protean career orientations. In this light, the attention of researchers is focused on the role of individual in career advancement. This discussion will continue in the next section.

### **1.3 A modern view of career advancement and a role of career strategy**

Previously there were two traditions in career success research, namely individualistic and structural, which while contributing substantially to the understanding of career success, neglected to study the effect of career strategies on career success. The individualistic approach implies that individuals themselves, their abilities, efforts, education and training, determine their career success (Aryee et al., 1994). This approach is based on the human capital theory, which implies that those who invests more in human capital attributes, achieve higher performance. The structural approach focused on organizational practices as defined by the career system. It contends, that organizational factors such as organizational size and internal promotional practices are prerequisites for successful individual careers in organizations (Ballout, 2007).

Two mentioned approaches neglected to examine the influence of human agency in career success progress. The admonition that career aspirants adopt a proactive orientation to their careers suggests that career success research should focus on the career strategies employed by career aspirants to implement their career goals resulting in career success (Aryee, Wyatt & Stone, 1996). Some researchers wrote about the behavioral approach to career success, which assumes that career success is a function of certain career strategies (Ballout, 2007). According to the behavioral approach, the employees have certain control over their career advancement and can pursue certain strategies to achieve it. This approach implies that individuals actively participate in facilitating their career advancement and pursue certain career strategies (Gould and Penley, 1984).

Not only approaches to career success change, but the career patterns do as well. In today's complex world of work and continually changing environment, there is a shift from the traditional view of careers, which are linear and stable, toward new career patterns (e.g. boundaryless and protean careers), which are dynamic, individual goal-oriented and independent of organizational boundaries (Ekmekcioglu, 2020). There is a shift from the deliberate development of people to

match the organization's goals to an approach which emphasises the individual's responsibility for their own career development (Wilson & Davies, 1999).

Another concept, a boundaryless career concept still stimulates a wide theoretical debate as well. Boundaryless career means career which involves a certain degree of physical mobility, meaning structural factors, and psychological mobility, e.g. employability without employers (Sullivan & Arthur, 2006). The growing prevalence of a boundaryless career suggest that "the locus of career development responsibility will shift even more to the individual in part because boundaryless organizations will not be able to meaningfully plan an employee's career... This means that the individual will truly be on his or her own in developing career" (Mirvis & Hall, 1994). Indeed, individuals are increasingly responsible for navigating their own way through this environment, as organizations are less likely to have clearly identifiable career paths for employees to follow. Given this, individuals must rely more heavily on their own capabilities to effectively influence their environment and regulate their behavior in order to succeed in work settings (Converse et al., 2012).

While the concept of protean career was introduced in 1970s, now it is given much more attention. In response to the volatile employment conditions and ambiguous career paths, careers have become increasingly directed by the individual and affected by intrinsic values rather than extrinsic motivations (Cortellazzo et al., 2020). The individual values freedom and self-growth and defines career success in terms of psychological factors as compared with traditional career (Wong et al., 2017). Protean careerists less rely on organizational support and actively manage their career development with the career strategies. What's more, protean career concept not only suggests that career choices are personal and underlie the search for self-fulfillment, it implies that person's internal values provide the guidance and measure of success for the individual's career.

In summary, at present the research on career success determinants shifts from the background, human capital and structural factors to the individuals' efforts and their role in managing their own careers. This is reflected in the concept career strategy as a determinant of career success and a mean which can facilitate managing career development.

The concept of career strategies is a well-established one in literature. A number of recent studies are devoted to career strategies which shows that this topic is still of interest for researchers. Colakoglu et al. (2018) examined the career strategies of high-skilled female immigrants. Asghar et al. (2017) studied the career strategies of employees of multinational corporations. Nikandrou and Galanaki (2016) studied the impact of career strategies on career outcomes within the context of boundaryless career concept.

Gould and Penley considered to be the first who systematically investigate the impact of career strategies on career success. In their study (1984) they defined career strategies as behaviors



which may be utilized by an individual to decrease the time required for and uncertainty surrounding the attainment of important career objective. In other words career strategies are activities designed to help a person meet career goals (Lee, 2002). Gould and Penley (1984) identified seven career strategies: creating career opportunities, extending work involvement, self-nomination/self-presentation, seeking career guidance, networking, opinion conformity and other enhancement (Table 5).

Table 5 Seven career strategies identified by Gould and Penley (1984)

|  |  |
|--|--|
| Creating opportunities                     | Developing skills and seeking out experiences critical to a person's career success  |
| Extending work involvement                 | Working outside of hours and preoccupation with work-related issues  |
| Self-nominating                            | Communicating to superiors a desire to assume greater responsibility in the organization and presenting oneself in the best possible light |
| Seeking career guidance                    | Seeking guidance from a more experienced person or mentor either in or outside the organization  |
| Networking                                 | Connecting with people in and/or outside the organization  |
| Conforming to others' opinions             | Holding the same opinion or thinking highly of one's superior's  |
| Ingratiating oneself with one's supervisor | Expressing a favorable evaluation of the superior  |

Gould and Penley (1984) proposed the Career Strategies Inventory (CSI), an instrument for measuring career strategies. The idea was to develop single-statement items, presented in Likert scale, using which subjects of the survey indicated the extent to which they engaged in the behaviors indicated by the CSI scale items. For example, a career strategy “extended work involvement” was measured with the following items: “working at your job outside of normal work hours”, “taking your work home with you”, “spending considerable time thinking about your job outside of normal work hours”. The Likert scale points for the items were summarized to get a score for a strategy “extended work involvement”.

A number of researchers later used the CSI methodology in their studies. For example, Creed & Hughes (2012) used it to assess career-related strategies of first-year students with some adjustments: “some items were modified to make them suitable for university students who were contemplating their future career”. Lee (2002) used it to study the career strategies of information technology professionals.

Lau & Pang (2000) summarized the research on various career strategies and categorized them into enhancing promotability, improving image with superiors and strengthening external contacts. Each of these are discussed further.

With respect to the first one, one way to enhance promotability is to create opportunities by skills development and seeking out experiences which will form a broad base for launching a

career (Gould & Penley, 1984). This base is likely to increase a number of career options for the individual. Performing effectively at the current job, gaining, enhancing relevant skills, pursuing additional education can help with promotability. On the other side, promotability can be enhanced through networking, which means building formal and informal connections with people within the company. This in turn can help to get necessary information, obtain career guidance and support. The relationships with superiors are very important and can be helpful as well. Superiors can guide career planning, provide linkages to relevant resources, coach and provide opportunities for development. Some popular strategies in this field are seeking supervisors' career guidance, publicizing successes, and less assertive behaviours such as working longer hours or conforming to supervisor's expectations (Gould & Penley, 1984, Greenhaus & Callanan, 1994). The development of contacts outside the organization can also assist in reaching career goals. Participation in various external organizations, e.g. professional bodies or social organizations can be helpful.

The career strategies pursued by the individuals are different, and the usefulness of a particular career strategy depends on number of factors, such as type of job, the nature of the industry and the national context. Also Greenhaus & Callanan (1994) offered some observations and suggestions regarding the development of career strategies. Firstly, there is no one best career strategy, and the effectiveness of a particular strategy depends on the nature of the career goal and on the organization's norms and values. Secondly, individuals should not limit themselves to one single strategy but should engage in a variety of strategic behaviors. Thirdly, strategies should be used not only to reach a career goal but also to test one's interest and commitment to a goal.

In addition, the use of career-enhancing strategies does not occur in a vacuum, it occurs in a socio-organizational context (Nabi, 2003). The individuals' degree of career strategy usage can be influenced by the organization or other institutions. Therefore educational institutions and employing organization can impact the implementation of career strategies of students. The mentioned earlier career management model suggests, that the usefulness of career strategies depends on the support received from educational, family, work and societal institutions. Nabi (2003) explained how organizational characteristics can facilitate the use of career strategies: "good opportunities for advancement are likely to stimulate the proactive use of career strategies... and in contrast, if employees feel threatened by a lack of organizational opportunities, then they are less likely to use career strategies because they are unlikely to perceive any value in doing so".

To summarize, in today's reality, the era of protean and boundaryless career it is essential for individuals to take control over their career development, put effort into facilitating career advancement and pursue certain career strategies.

## **1.4 Career strategies of students and their impact on career success**

### **1.4.1 Applicability of career and career development concepts to students**

The term “career” can be applied not only to employees, but to students as well. There are several reasons for that. Firstly, the theories on career development stages, mentioned in paragraph 1.1, while identifying different career stages and assigning different times frames for them, agree on that individuals are already in the process of career development during their university studies or even earlier. Specifically, according to Greenhaus & Callanan, 18-30 years period is the first stage of career development, and according to Super, 14-24 years period is the second stage of career development.

Secondly, there are numerous resources, such as blogs and websites, which offer various kinds of information on career for students, e.g. Top Resume, Indeed, CareerWise etc. The majority of universities, colleges, business schools have their career centers. There are firms, which provide career-related paid services for students, e.g. Start, Marg etc.

Thirdly, the nature today’s reality makes the term “career” applicable to students. Job uncertainty and insecurity regarding future occupation, position, salary, career path, job satisfaction forces students to deliberately prepare for the future job. The majority of students are concerned about their employment (Gault, Redington & Schlager, (2000). One of the most important sources of anxiety for students is professional future (Nastase & Staiculescu, 2015). Not only uncertainty and volatility of the world, but also protean and boundaryless nature of careers nowadays make students start their career earlier. Students increasingly engage in proactive career behaviors as their job search becomes more immanent (Strauss, Parker & Griffin, 2012).

To summarize, students are engaged in the process of career development, and it is relevant to speak about students’ career. Therefore, it is relevant to discuss the career strategies, which are pursued by students and are typical for them. Moreover, according to Chan (2017), for students to better prepare for the future world of work engagement in proactive career behaviors is essential.

### **1.4.2 The classification of career strategies common to students**

What career strategies can students pursue? The Career Development Center of Oregon State University (2013) suggest following career strategies for students: keeping the grades up; going through self-assessment (to identify interests, skills, values and personal characteristics); exploring career options (includes attending any career seminars, career fairs and career speaker panels); involvement in community service (volunteer activities); completing an internship; studying

abroad; creating a LinkedIn profile; using career center. This list is rather extensive; however it is not exhaustive. The Office of Career and Professional Development of University of Redlands (2020) offers career strategies for students taking into account the coronavirus pandemic reality, specifically making use of available digital platforms; building personal online brand and paying attention to digital shadow. University of Maryland adds such strategies as creating a “career map” and thinking of what value the one can bring to profession.

Talking about academic literature, Sagen et al. (2000) in their study has the longest list of possible career strategies of students, including working with mentor, internship, advanced skills courses, courses out of major and several others. However all these variables were measured as binary ones (1 or 0), which is a limitation. Besides, the dependent variable, used in the study, namely, success in securing baccalaureate level employment within two months of graduation, is rather one-sided.

While there is a lack of literature devoted to career strategies or proactive career behaviors of students, there are several studies, which are worth mentioning. Creed & Hughes (2012) examined career-related strategies of first-year university students to identify their moderating effect on the relationship between career compromise and distress. role of motivational processes in students’ engagement with proactive career behaviours. Clements & Kamau (2018) studied the role of motivational processes in students’ engagement with proactive career behaviours. Chan (2017) investigated the relationships between proactive career engagement, career goal clarity and positive student outcomes. Sagen et al. (2000) studied the effect of career preparation experiences on initial employment success of university graduates.

Further based on literature review a number of possible career strategies of students are discussed.

#### *Academic activity*

The importance of higher education for career is acknowledged. While not giving a guarantee for success, higher education not only trains individuals in chosen fields, but also teaches to understand complex subjects, think analytically and communicate ideas effectively. It helps to develop important skills, such as organization, self-discipline and how to see a task from start to finish (Vista College, 2019). The impact of high education on extrinsic career success was examined by numerous studies (e.g. Jackson & Bridgstock, 2019, Vermeulen & Schmidt, 2008). There are also studies, which investigate the impact of high education on career satisfaction, perceived employability and perceived career success. In addition, the intention of adults to return to university to get additional education reflects the role of higher education in career success. Smith (2013) in her article wrote about that, citing Laura Vanderkam, an author on career development, which said people generally decide to go back to school because they “hope

additional education will help them achieve their career goals, like making more money, advancing in their current occupation, or starting in a different one.”

While an impact of higher education in general on career success is well examined in literature, the impact of the academic activities in which students can involve in addition to their studies. This is about such activities, as student publications, taking courses out of major (Sagen et al., 2000) aiming at higher grade point average (GPA) and others. In the literature some of these activities are referred as educationally purposeful activities. Primarily these activities are examined with respect to student engagement. Hu and Kuh (2002) suggested that student engagement is attainable through these educationally purposeful activities, which are characterized by student time on task, use of institutional resources and student-faculty or student-peer interactions on substantive topics. Carr, Jackson & Murphy (2014) in their study provide examples of educationally purposeful activities for biochemistry students at Huntingdon College, which are undergraduate research with faculty, student research presentation at professional meetings, involvement in discipline-specific mentoring programs, active involvement in a professional or preprofessional organization etc.

The investigation of the possible effect of these activities is relevant, as getting a degree or deliberate involvement in these activities are different things. While students generally study at the university, they can do differently: just attend classes and pass the exams or do significantly more. Preventing the GPA from dropping below a certain threshold differs from aiming at the highest GPA, with the former being a part of possible career strategy. Students tend to have high GPA for various reasons, e.g. the internship requirement can include certain GPA or students can be selected for some activities or rewards based on grade point average criteria. Making publications can be also a part of a career strategy of a student. The reasons can be different as well: from getting an expertise in a field to enhancing a resume by mentioning a publication in a top journal. Getting courses out of major can help to broaden one’s mind, get additional knowledge and to create an image of an excellent motivated student. Studying additional literature on subjects can be one of the ways of mastering the major. All mentioned activities will be summarized at present study as a career strategy named academic activity.

### *Networking*

Networking can take different forms, ranging from going to informal meetings to attending professional conferences. Networking can be defined as behaviors that are aimed at building, maintaining, and using informal relationships that possess the (potential) benefit of facilitating work-related activities of individuals by voluntarily granting access to resources and maximizing common advantages (Wolff & Moser, 2009), or as the individuals' attempts to develop and maintain relationships with others who have the potential to assist them in their work or career

(Forret & Dougherty, 2004). Networking as a career strategy is important especially within the paradigm of protean careers, discussed earlier. Writings on the protean career stress the importance of performing self-assessments, obtaining developmental work experiences and networking (Forret and Dougherty, 2004).

A number of studies examined the impact of networking behaviors on career success, and it is proven that there is a positive relationship between both objective and subjective success and networking (Wolff and Moser, 2009; Michael and Yukl, 1993; Gould and Penley, 1984). This impact can be explained in the following way: engaging in networking behavior is one of the means to develop individual's social capital - a complex set of interconnections with various with whom each person is tied. These interconnections can provide one with access to new information, resources, and opportunities (Nahapiet & Ghoshal, 1998), which can result in direct enhancements of one's career, including promotions and compensation.

There is no a variety of proved scale of networking behaviors, and usually scale is developed for a particular study, e.g. Forret & Dougherty developed a comprehensive scale of networking behaviors for their study, which comprises 33 items combined into 5 groups: maintaining contacts (sample item is "Within the last year, how often have you ever gone to lunch with persons outside the company?"), socializing (sample item is "Within the last year, how often have you ever participated in social gathering with people from work?"), engaging on professional activities (sample item is "Within the last year, how often have you ever acted as a commentator for a newspaper, magazine or talk show?"), participating in church and community, increasing internal visibility (sample item is "Within the last year, how often have you ever accepted new, highly visible work assignments?").

Students can both network with peers by volunteering, joining student societies and attending talks (The Guardian, 2014) and network within the field they want to work in after university by attending this field's events. Universities are the best places for students to start building a strong network of individuals that can help them with future career path (Lane, 2019). Universities offer various opportunities for networking, and the websites and pages in social networks of business schools show it, e.g. Graduate School of Management of Saint Petersburg State University (GSOM) every year undertakes the conference "Management of the Future". This conference let the best management students of Russia meet the companies' representatives, attend master-classes, listen to open lectures and so it is a great opportunity for networking.

There are also sites that are used specifically for networking like LinkedIn. Moreover, GSOM and other business schools often organize meetings with employers' representatives. Students usually actively participate in these events and activities, get contacts of HR departments of companies they are interested in or get acquainted with the representatives of these companies.

Another possibility to network is to do it while being on internship. Interns can actively network with other interns as well as with the employees already working at the company. Those students, which complete an internship successfully, create contacts they can re-visit. With respect to the specific examples of ways to network at workplace, the researchers name seeking high-visibility assignments and participating in social functions (Forret and Dougherty, 2004).

Any competitions that fit the student's profile and through which he or she can prove the skills can be also be an opportunity to network (College Life, 2021). A perfect example is hackathons and case-championships. Hackathons are events at which you compete as an individual or team by using data for a particular purpose. Case-championships are events at which participants strive to develop the best solution to a business or education-related case-study an allocated time frame, typically with teams of two or more individuals pitted against each other in a head-to-head or broader relative ranking (Wikipedia, 2021). Case-championships provide participants with opportunities to gain specialized knowledge, improve communication skills, develop a sense of teamwork and heighten their chances in the job market (Maier-Lytle et al., 2010).

### *Career planning*

In essence career planning outlines how one is going to get from Point A (where he or she is now) to Point B (the ultimate career goal). With an end goal in mind, one will be able to identify which actions he or she need to take to get there (Calling All Optimists, 2020). Career planning is a complex process, which includes different activities. It is a continuous process of understanding oneself, setting career goals, revising skills and searching for the right career options. Gould (1979) wrote that career planning includes setting goals, developing plans and forming strategies for a career.

Studies show the significant correlations between career planning and career success (Orpen, 1994). Indeed, most of successful people had a career plan. There are numerous examples showing that those people, which had their 3, 5 or 10-year career development plan, appeared to much more successful than those ones who did not.

Nowadays not only employees consciously develop career plans, more and more students make an early start on their career planning (Black, 2020). Business schools' students have career plan before entering school or develop them during studies, although the level of detail may vary. Having career goals increase motivation of students, help with persistence, help to set priorities (Stewart and Maisonville, 2019). Career planning makes students aware of their strength and weaknesses and the skills and knowledge that are required to achieve their goals in future.

Nowadays universities have career centers or career counselling services, which can help students to plan their careers. Students who received career counselling have more clearly

developed career goals, which in turn can lead to higher career success (Stipanovic, Stringfield & Witherell, 2017). The goals of career centers can be: to educate students about the career development, planning, and implementation process; to support students in the vocational exploration, identification, pursuit, and integration of personal and professional career goals; to teach students effective career navigation strategies, skills, and techniques etc. However career planning should be an initiative of oneself. The universities can explain the importance of career planning and provide the tools.

The extent of career planning can be measured by scale developed by Gould (1979). The scale consists of six Likert-scale items, namely:

1. I have not really decided what my career objectives should be yet (reverse).
2. I have a plan for my career.
3. I have a strategy for achieving my career goals.
4. I know what I need to do to reach my career goals.
5. My career objectives are not clear (reverse).
6. I change my career objectives frequently.

To determine a numerical value of an extent to which a respondent is involved in career planning, Gould summarized the values of the positions checked. The coefficient alpha computed for this scale was 0.80, which indicates that the scale is consistent.

#### *Career exploration*

Career exploration refers to the gathering of information relevant to the progress of one's career (Zikic & Klehe, 2006). With respect to students, it means researching, evaluating and learning about modern work opportunities. Career exploration is one of the most important subjects in terms of long-term life planning for students in any grade (ASE, 2019). Within career exploration students discover career options, learn about the income they can expect from a career, how they can obtain that income, and how they can advance throughout the tiers of their career's expertise (ASE, 2019).

Typically career exploration process includes research and evaluation. The research step is aimed at creating a list possible careers, about which students want to know more. The research can be done e.g. through reading about specific career or networking with professional of the area. The evaluation step includes first of all analysis if this career is a good fit for a student. It can be done with the help of tests and theories such as, e.g. John Holland's Six Types of Personality (the RIASEC theory defines six categories of people based on personality, interests and skills: realistic, investigative, artistic, social, enterprising and conventional) or through the consultation with career counsel.



The educational organizations can assist students in career exploration. For example, Annual Career Symposium gathers alumni and students for different industry panels and a networking reception. In contrast to career fair, students do not attend it with the explicit purpose of finding an internship or job. The focus is truly on learning about different industries and jobs without the pressure of meeting a potential employer (Wisr, 2018).

Career exploration is commonly measured with the Career Exploration Survey (Stumpf, Colarelli, & Hartman, 1983), e.g. Gamboa et al. (2013) used this instrument to assess career exploration of students. The scale assesses self (4 items; sample item is “In past 3 months I have been retrospective in thinking about my career”) and environmental (6 items; sample item is “In past 3 months I sought more information on specific career options of interest to me”) career exploration, answered on a 5-point Likert-type scale ranging from 1 (a little) to 5 (a great deal).

#### *Professional identity*

Professional identity is defined as the internalization of one's professional values, identification with one's occupation, and psychological unification with it (Trede, Macklin & Bridges, 2012).

Many scholars have verified the significant positive correlation between professional identity and job-related outcomes (Wang et al., 2020; Mancini et al., 2015)

Formal education can be effective in acculturating students to develop their professional identity (Tan, Van der Molen & Schmidt, 2015). Professional identity can be formed during studies being affected by such factors as: knowledge about professional practices, having the professional as a role model, experience with the profession, preference for a particular profession and professional self-efficacy. Same as at work, professional identity formed before or during studies can have an impact on future career success. Students with a commitment in particular identity (or identities) can choose electives courses more consciously to get relevant knowledge for future career, suitable internships to get useful experience and skills necessary for the chosen professional area, that in ultimately will make those students more attractive candidates for the chosen company or area.

The extent to which an individual is committed to some professional identity can be measured with scale substantiated by Mancini et al. (2015). The scales comprises five sections: affirmation (sample item is “Are you looking forward to becoming a psychologist?”), in-depth exploration (sample item is “Do you ever think about the advantages and disadvantages associated with becoming a psychologist?”), practices (sample item is “Do you ever seek information about the different job options that a degree in psychology may offer?”), identification with commitment (sample item is “Does thinking of yourself as a psychologist make you feel self-confident?”), reconsideration of commitment (sample item is “Are you considering the possibility of changing

your University major in order to be able to practice another profession in the future?”). The items were measured with 5-point Likert scale.

Thus, the literature review made it possible to classify the career activities of students and identify 5 possible career strategies for students. Through empirical research, it is possible to examine whether these strategies are inherent in students. So the first research question is: what career strategies are inherent to the students of business schools?

The five strategies described above may be equally inherent in students, or the sets of strategies may differ. The research on career strategies of the employees revealed that career strategies' use may be different for managers and non-managers, males and females, plateaued and non-plateaued subjects (Gould and Penley, 1984; Viega, 1981). Age and position are also examined as covariates of the relationship between career management and employee performance and development behavior (Noe, 1996). The usefulness of a particular career strategy depends on type of job, nature of the industry (Gattiker & Larwood, 1988) and the national context (Counsell, 1999). While not of these grounds for difference can be applied to students, the question arises whether there are differences in the use of career strategies between students or the set of strategies used is relatively universal. So the second research question is: are there any differences in the use of career strategies between students?

### **1.4.3 Relationships between career strategies of students and subjective career success**

Taking into account that individuals during their studies are already in the process of career development and can pursue certain career strategies, it is logical to assume, that there should be some outcomes of using these strategies. The career success in the ultimate result of career development, and career strategy is one of the key determinants of career success. As discussed in paragraph 1.2, in contemporary research more attention is paid to the subjective career and subjective evaluations of career success are considered by many researches to be more meaningful than objective ones (e.g. Kim and Beehr, 2017; Akkermans, J., Kubasch, 2017). Therefore the question of the relationships between career strategies pursued during studies and future subjective career success arises. The third research question is: is there any relationship between career strategies and subjective career success of graduates?

Studies, devoted to the career strategies of students, state that students' experiences at the university, both in and out of the classroom, can have a significant impact on their success during college and after (Millunchick, 2021). The review by Akkermans, J., Kubasch (2017) showed that in recent studies one of the trending direction in career success related articles is examination of

career success dimensions and antecedents for particular groups on the labor market, including students. However the research on students' career strategies themselves is and their impact on career success, especially subjective one, is limited. A review of the literature on the determinants career success and career strategies revealed, that there is a gap in understanding what career strategies students pursue and which of these career strategies are associated with higher levels of career success.

Summarizing the identified research gaps and the research questions formulated throughout the literature review, this study aims to answer the following research questions:

**RQ1.** What career strategies are inherent to the students of business schools (on the example of GSOM)?

**RQ2.** What factors shape the differences in students career strategies?

**RQ3.** Is there a positive relationship between career strategies and subjective career success of graduates?

The research gap can be filled by answering these research questions with a help of quantitative research methods.

## CHAPTER 2. METHODOLOGY OF THE STUDY

### 2.1 Research design: sampling technique and questionnaire

The research on career strategies of students is rather limited, so there are few studies to refer when predicting outcomes. To answer the research questions the alumni records from the master programs of 2016 through 2020 of Graduate School of Management of Saint Petersburg State University were used. The graduates were chosen as they are able to access their career success. Last 5 years were selected to ensure the presence of more or less active relationships between graduates and business school and thus the willingness to pass the survey. Besides, last years' graduates are more likely to clearly remember the activities they participated in during studies, than those one, which graduated long ago. The choice of master students stems from the consideration that enrollment in the master program signals the students' seriousness in empowering themselves to take a proactive role in their career development. Graduate School of Management was chosen mainly for convenience which is due to uncomplicated access to graduates and established contacts.

The lists of master programs' graduates were obtained and contained 575 persons. It was decided to distribute the survey through the social networks directly, by searching each person via VKontakte or LinkedIn and sending the link to the survey to the persons, which were successfully accessed. The reasons for not accessing a person were: the absence of social network profile, using fake name or having popular name and surname which results in tens profiles with the same names; the privacy settings which did not allow sending messages; inactive social network profile. From 575 graduates 231 ones were accessed, and 150 of them passed the survey, thus the response rate is 65%.

So, the convenience sampling technique was used, and it is a convenient and inexpensive way of getting an approximation of truth (Maheshwari, 2017). The main drawback of convenience samples is that they have less clear generalizability than probability samples (Jager, Putnick & Bornstein, 2017).

#### *Construct measurement and research reliability*

Likert scale was selected to measure the attitudes of the respondents. While it is not the only one option among attitude scales (there is also semantic differential), it is the most common one, as it is easy to read and complete. Specifically, 5 points Likert scale with labels "Disagree", "Somewhat disagree", "Neural", "Somewhat agree", "Agree" was chosen. While Likert's scales 6 and 7 points are often used, 5 points was chosen for the following reasons: regarding the number of categories, 5 points scales appears to be less confusing and tend to increase response rate (Bouranta, Chitiris & Paravantis, 2009); with respect to the odd or even number of categories,

odd numbers of response categories have generally been preferred, because they let people with truly neutral position choose the midpoint and prevent forcing to take a side (Taherdoost, 2019). The labels “Disagree”, “Somewhat disagree”, “Neutral”, “Somewhat agree”, “Agree” were chosen as labels “Strongly disagree” and “Strongly agree” make the participants avoid such “extreme” responses. While a person can truly agree with a statement, he or she can be confused by “strongly” and hence choose the 4<sup>th</sup> options.

As the respondents may not find it obvious that the distance between the options is the same, the scale was visualized. The answer options were visually spaced equidistant, and numbers were used in addition to response categories descriptions (Figure 2). Besides, 5 point Likert scales was applied in a number of studies devoted to career success (Haenggli & Hirschi, 2020; Binha & Nguyenb, 2020; Blokker et al., 2019; Stumpf & Tymon, 2012; Gault, Redington & Schlager, 2000).

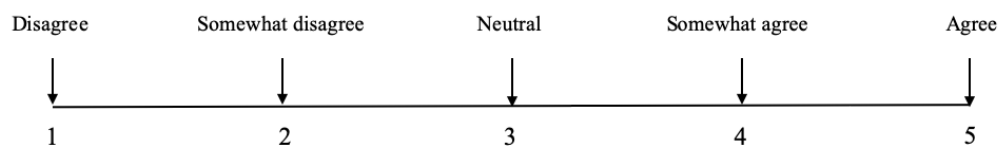


Figure 5 Likert scale 5 point used in the survey

### *The questionnaire*

The questionnaire developed for this study comprised seven parts, namely subjective career success, professional identity, career planning, academic activity, networking, career exploration and demographics. A pilot survey was conducted to ensure that everything was clear and understandable. The questionnaire contained a letter explaining the focus of the study and assuring subjects of the confidentiality of their responses.

To measure subjective career success, professional identity, career planning, networking and career exploration the corresponding scales were used: Career Satisfaction Scale developed by Greenhaus, Parasuraman & Wormley (1990), Professional Identity Status Questionnaire by Mancini et al. (2015), Career planning scale by Gould (1979), Networking scale by Forret & Dougherty scales (2001) and Stumpf’s Career Exploration Survey (1983). The description of the scales is provided in the first chapter. All the scales were whether shortened and/or adapted for this study. All items were measured with 5-point Likert scale, as mentioned earlier. The explanations were added where necessary. The brief overview of adapted scales is provided further.

For measurement of subjective career success the Career Satisfaction Scale developed by Greenhaus, Parasuraman & Wormley (1990) was chosen, as literature review showed that this scale is proven and reliable. Five questions of the original scale were used.

To measure professional identity the shortened version of the scale by Mancini et al. (2015) was used: 5 items related to the in-depth exploration, identification of commitment and affirmation were chosen.

Career planning was measured with a shortened version of Gould's (1979) career planning scale. The scale contained the 4 positively phrased items of the original scale: "I have decided what my career objectives should be", "I have a strategy for achieving my career goals", "My career objectives are clear", "I rarely change my career objectives".

To measure an extent to which an individual is engaged in networking, the version of Forret & Dougherty scales (2001), shortened and adapted for this study, was used. The version was aimed to measure specifics of students' networking activity, e.g. active use of professional social networks, such as LinkedIn, attendance of events organized by employers, organization of activities for students. The scale has 5 items, sample item is "I actively used LinkedIn: filled out and updated my profile, expanded my network of contacts etc.").

To measure career exploration the shortened version of Stumpf's Career Exploration Survey (1983) was used. The scale was adapted to capture the specifics of career exploration, peculiar to students. The used scale consists of 4 items, sample item is "I initiated conversations with 1 other students about their careers").

The academic activity was measured with the scales developed for this study. The scale contains 6 items comprised various aspects of academic activity, such as publishing articles in scientific journals, studying additional literature, taking extra courses etc. The sample items are "I took courses out of major", "I devoted considerable effort and time to writing my master's thesis, striving to get interesting and practical results").

The full list of items for each scale can be found in the Appendix.

Respondents were asked to indicate the extent to which they engaged in the behaviors indicated by the items. All items were measured with the same five-point Likert scale to let the participants focus primarily on the statements. To avoid artificially high reliabilities due to the grouping of like items the statements were dispersed throughout the questionnaire. The demographics questions were placed in the end of the survey.

## 2.2 Data analysis

The raw data was downloaded in xlsx format and prepared for the analysis: statements and answers were translated from Russian into English; names of variables were created. The data was analyzed using IBM SPSS Statistics, a widely used program for statistical analysis in social science.

Frequency tables were used to analyze the number of times an observation occurs in the data set. The internal consistency of the scales was assessed with Cronbach's coefficient, a measure of reliability. Cronbach's coefficient tests if scales measure what they should measure. Acceptable value in most researches is 0.7, however the value of the alpha depends on the number of the items, as the more items present the more likely the alpha will be acceptable and vice versa (Birnbaum and Sheps, 1991).

Factor Analysis was carried out to verify the internal validity of the measures. To examine the suitability of the data set for factor analysis the Bartlett test of sphericity and the measure of Kaiser–Meyer– Olkin (KMO) were used. The null hypothesis in the Bartlett test states that the correlation matrix is an identity matrix, which indicates that the variables are unrelated and therefore unsuitable for structure detection. The KMO is a statistic that indicates the proportion of variance in the variables that might be caused by underlying factors. High values indicate that conducting of a factor analysis is reasonable (IBM Knowledge Center, 2020). There are several methods of factor analysis with principal component analysis being used most often (e.g. Yean & Yahya, 2012; Pan & Zhou, 2015). Rotation aims to minimize the complexity of the factor loadings. As a rotation method the varimax rotation was chosen, as it simplifies the interpretation of the factors. This method minimizes the number of variables that have high loadings on each factor. Traditionally eigenvalues were used to determine the number of factors. According to the Kaiser Criterion, if Eigenvalues is greater than one, one should consider that a factor and vice versa. Factor loading is the correlation coefficient for the variable and factor. To demonstrate the results the rotated factor matrix was used, which contains the rotated factor loadings, which represent both how the variables are weighted for each factor but also the correlation between the variables and the factor (IBM Knowledge Center, 2020).

### *Multiple regression analysis*

Likert scales belong to the group of measures which can be referred to as summated (or aggregated) rating scales, as they are based on the idea that some underlying phenomenon can be measured by aggregating an individual's rating of his/her perceptions related to a series of individual statements (Spencer, 2015). For each item, the response set consisted of a set of equally

spaced numbers accompanied by approximately equally spaced anchors. In the original article, Likert proposed that the distances between the numbers in the response set were equal. Similarly, the distances between the anchors were equal. So this suggested an interval level of measurement of scales. Likert proposed to determine the score for each individual by finding average of the numerical values of the positions checked, or sum of the numerical values, as the number of statements was the same for all individuals (Likert, 1932). Likert proposed this “1 to 5 method” as a simpler alternative to the sigma method, which was used previously and was much more time-consuming (Spratto, 2018).

The examples of applying this method can be found in the articles, devoted to career success and career strategies. Aryee, Chay, & Tan (1994) used five-point Likert scales for career success, work role salience, competence etc. and summed the numerical values to get the composite scores. According to Scopus data, the study has 93 citations in such journals as Journal of Vocational Behavior, European Management Journal, Human Resource Management Journal, Career Development International etc. The other examples are summarized in Table 6. There are also examples of studies which used the average score instead of sum (Gould and Penley, 1974; Turban & Dougherty, 1994; Greenhaus et al., 1990), however the idea is the same since the number of items are equal for all individuals. Kong et al. (2012) wrote that the items can be aggregated within components by summing or averaging, and that the resulting aggregates can be used as indicators of the component. In the present study sums of the numerical values was used for scales construction. Each constructed scale was developed to be only as a group and was analyzed as a group, and only as a group, as separating the items conceptually “breaks” the theoretical measurement properties of the aggregated scale as it was originally developed (Spencer, 2015).

While the respondents were informed about the equal distances between the anchors and so the scales could be treated as continuous data, the assumptions of statistical tests had to be checked, as their violations could influence the statistical power.

Table 6 Studies in which the 1 to 5 method was used

| # | Journal                            | Authors                     | Citation  |
|---|------------------------------------|-----------------------------|---|
| 1 | Organization studies               | Whitely, Coetsier           | “A mentoring scale was constructed by summing the unweighted item scores to obtain a total career mentoring activity score.”      |
| 2 | Journal of Applied Psychology      | Childs, Klimovski           | “Criterion composites were created by standardizing and summing the responses to the high-loading items that denned each factor.” |
| 3 | Journal of Organizational Behavior | Wayne, Liden, Kraimer, Graf | “The items were summed to create the career planning variable.”   |



|   |                                   |                            |  |
|---|-----------------------------------|----------------------------|--|
| 4 | The Academy of Management Journal | Whitely, Dougherty, Dreher | “We constructed a mentoring scale by summing the unweighted item ratings to obtain a score.” |
|---|-----------------------------------|----------------------------|--|

To study the relationships between subjective career success and career strategies of students, multiple regression model was used. In general the equation of multiple regression looks like:

$$y_i = b_0 + b_1x_{1i} + b_2x_{2i} + \dots + b_nx_{ni} + \varepsilon_i$$

in which  $y$  is the outcome variable,  $b_1$  is the coefficient of the first predictor  $x_1$ ,  $b_2$  is the coefficient of the second predictor  $x_2$ ,  $b_n$  is the coefficient of the  $n^{\text{th}}$  predictor  $x_n$  and  $\varepsilon_i$  is the error for the  $i^{\text{th}}$  participant. In this study, the outcome variable, also called dependent variable, was career success, and the predictors, also called independent variables, were career strategies of students (Figure 6). The parameters were assessed with ordinary least squares method.

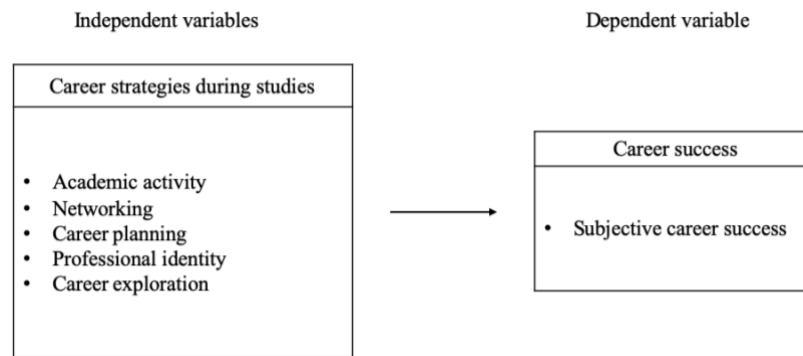


Figure 6 The model

Before conducting regression analysis, the scatterplots were plotted to look at the relationships between the outcome variable and the predictors. Scatterplots can show if any predictors have reasonably linear relationships with the outcome and if there are no any obvious outliers. If so, there is a reason to conduct a regression analysis.

After the model is estimated, the goodness of fit should be assessed. The coefficient of determination, or  $R^2$ , represents the proportion of variation in the outcome variable explained by the model. The F-test tests whether any of the predictors are significant. The significance of individual predictors is assessed with t-test.

When producing a model, it is important to check if it has been biased by unusual cases. To do it, the one should look at the outliers. An outlier is a case that differs substantially from the main trend of the data, and it has a dramatic effect on the regression model (Field, 2013). The outliers can be detected by looking at residuals, the differences between the predicted and observed values. If the model fits the data well, the residuals will be small. Standardized residuals are often used.

The second important question is if the model generalizes to other samples. For a regression model to generalize the assumptions should be met. The main assumptions of the linear regression model are the following: additivity and linearity, independence of errors (absence of autocorrelation), constant variance of the residuals (homoscedasticity), normally distributed errors; no perfect collinearity, non-zero variance of predictors. The violation of these assumptions impacts the significance of tests. For checking assumptions histogram of regression residuals, probability-probability plot, Durbin-Watson test, Variance inflation factor and other methods are used.

### CHAPTER 3. THE RELATIONSHIP BETWEEN STUDENTS' CAREER STRATEGIES AND SUBJECTIVE CAREER SUCCESS: RESULTS OF EMPIRICAL ANALYSIS

Total number of the survey's respondents comprised 150 people, from which 68% are the Master in Management (MiM) program graduates, 25% are the Master in Corporate Finance (MCF) program graduates, 5% are the Master in Public Management (MPM) program graduates, 3% are the Master in Urban Management and Development (MUMD) program graduates (Table 4). As MPM program was transformed into MUMD program, further the answers of MPM and MUMD programs was summarized. Described distribution was to be expected, since MiM has the highest number of places in comparison to MCF and MUMD programs.

Among the respondents of the survey there are representatives of different occupational areas, with FMCG, Oil&Gas and management consulting being the leading ones. Others in "Area" include retail, audit, cryptocurrencies and blockchain, e-commerce, pharmaceuticals, logistics, transportation, product management, real estate, strategy. The tenure distribution is logical, specifically a substantial part of the respondents (31%) have less than 1 year of the tenure on the current place, 59% have 1 to 3 years of tenure, 7% has 4 to 6 years of tenure and 3% of the respondents have more than 6 years of tenure (Table 7).

Demographics statistics is represented in the Table 8. Age distribution is similar to the tenure distribution; hence it can be supposed that a significant part of the respondents has not changed the place of work. Age distribution is roughly equal with a slight preponderance of males. With respect to the employer's country of origin, 48% of the respondents have Russian employer and 52% have a foreign employer.

Table 7 Statistics on master program, occupational area, tenure on the current place and employer's country of origin

|                  |                             | Frequency | %    |
|------------------|-----------------------------|-----------|------|
| Master program   | MiM                         | 102       | 68   |
|                  | MCF                         | 38        | 25,3 |
|                  | MPM                         | 10        | 6,6  |
| Area             | Management consulting       | 16        | 11   |
|                  | FMCG                        | 19        | 13   |
|                  | Oil&Gas                     | 30        | 20   |
|                  | Technological company       | 11        | 7    |
|                  | Data science/Data analytics | 8         | 5    |
|                  | Start-up                    | 8         | 12   |
|                  | Finance                     | 7         | 5    |
|                  | Investment banking          | 5         | 10   |
|                  | Marketing                   | 3         | 2    |
|                  | Public administration       | 3         | 2    |
|                  | Others                      | 40        | 13   |
| Tenure           | 0 (less than 1 year)        | 47        | 31   |
|                  | 1-3                         | 88        | 59   |
|                  | 4-6                         | 12        | 7    |
|                  | 6+                          | 5         | 3    |
| Company's origin | Russian                     | 72        | 48   |
|                  | Foreign                     | 77        | 52   |

Table 8 Demographics statistics

|                 |        | Frequency | %  |
|-----------------|--------|-----------|----|
| <b>Gender</b>   | Male   | 83        | 55 |
|                 | Female | 67        | 45 |
| <b>Age</b>      | 23-24  | 34        | 23 |
|                 | 25-26  | 67        | 45 |
|                 | 27-28  | 38        | 25 |
|                 | 29-30  | 9         | 6  |
|                 | 30+    | 1         | 1  |
| <b>Location</b> | Russia | 125       | 83 |
|                 | Abroad | 25        | 17 |

The frequency distribution of mean values of the subjective career success, calculated as the average value of ratings for 5 items of subjective career success scale, can be seen in Figure 4. The distribution is left skewed (Figure 7, 8) with mean = 3,75, median = 4 and a coefficient of skewness equal to -0.89. Hence there are more respondents in the sample with higher values of subjective career success. The mode is 4, meaning that the most frequent average value of subjective career success equals to 4.

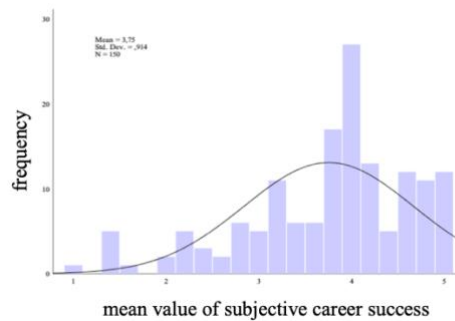


Figure 7 Frequency distribution of subjective career success

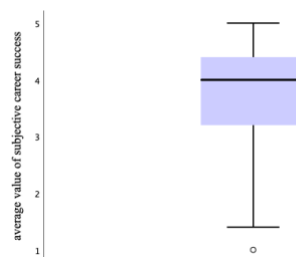


Figure 8 The box-plot of average values of subjective career success

The mean values of career strategies items can be seen in Figure 9. All five strategies are inherent to the students, but to a different extent. In the sample respondents on average pursue more intensively such strategies as development of professional identity, networking and career planning.

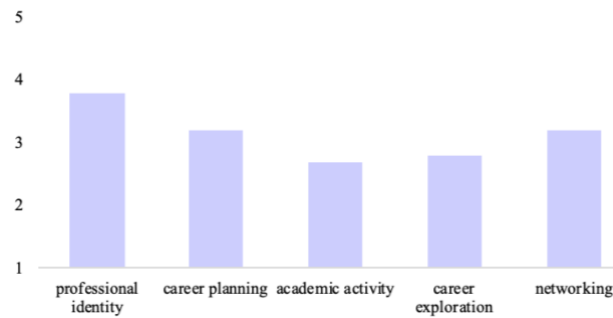


Figure 9 Average values of career strategies items

The average values of career strategies items by master program can be seen in Table 9. Presumably there is no significant differences in career strategies of students of different programs.

Table 9 Average values of career strategies items by master program

|                       | MiM | MCF | MUMD |
|-----------------------|-----|-----|------|
| Professional identity | 3,8 | 3,9 | 3,6  |
| Career planning       | 3,3 | 3,2 | 2,8  |
| Academic activity     | 2,7 | 2,6 | 3,2  |
| Career exploration    | 2,9 | 2,7 | 2,4  |
| Networking            | 3,2 | 3,1 | 2,6  |

For the scales, which were significantly adapted or developed for the study, factor analysis was conducted. Before proceeding to factor analysis, some pre-analysis tests were conducted to examine the suitability of the data set for factor analysis. The Bartlett test of sphericity was significant ( $p < .001$ ) and the measure of Kaiser-Meyer-Olkin (KMO) was 0,715, indicating the data was suitable for factor analytic procedures (Table 10).

Table 10 KMO and Bartlett's Test results

|  |                    |          |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | 0,715    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 1680,260 |
|  | df                 | 351      |
|  | Sig.               | 0,000    |

After that principal components analysis with varimax rotation was performed on items, resulting in a three-factor model accounting for 51% of the total variance (Tables 11, 12).

Table 11 Total variance explained

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 3,534               | 23,559        | 23,559       | 2,705                               | 18,033        | 18,033       |
| 2         | 2,429               | 16,190        | 39,749       | 2,492                               | 16,611        | 34,644       |
| 3         | 1,621               | 10,809        | 50,558       | 2,387                               | 15,914        | 50,558       |

The factor loading matrix (Table 12) shows that there are three factors: first 5 variables weighted for the first factor, next 6 variables weighted for the second factor and the last 5 variables weighted for the third factor, networking.

Table 12 Factor loadings matrix

|               | 1 | 2            | 3            |              |
|---------------|---|--------------|--------------|--------------|
| academic_1    |   | -0,073       | <b>0,333</b> | 0,225        |
| academic_2    |   | 0,256        | <b>0,375</b> | 0,429        |
| academic_3    |   | 0,132        | <b>0,541</b> | -0,121       |
| academic_4    |   | -0,045       | <b>0,898</b> | 0,102        |
| academic_5    |   | -0,101       | <b>0,878</b> | 0,057        |
| exploration_1 |   | <b>0,649</b> | -0,053       | 0,402        |
| exploration_2 |   | <b>0,791</b> | -0,02        | 0,184        |
| exploration_3 |   | <b>0,801</b> | 0,08         | -0,038       |
| exploration_4 |   | <b>0,786</b> | -0,011       | 0,054        |
| exploration_5 |   | <b>0,548</b> | 0,008        | 0,021        |
| exploration_6 |   | <b>0,657</b> | 0,113        | 0,223        |
| network_1     |   | 0,428        | 0,139        | <b>0,101</b> |
| network_2     |   | 0,079        | 0,227        | <b>0,58</b>  |
| network_3     |   | 0,06         | 0,104        | <b>0,76</b>  |
| network_4     |   | 0,094        | -0,044       | <b>0,825</b> |
| network_5     |   | 0,265        | -0,177       | <b>0,565</b> |

The rotation of career strategies' items produced three factors (Table 13) namely academic activity, career exploration and networking. The results prove the constructs' validity.

Table 13 Rotated component matrix

| Items                     | Factor 1 | Factor 2 | Factor 3 |
|---------------------------|----------|----------|----------|
| <b>Academic activity</b>  |          |          |          |
| • academic_1              |          | 0,333    |          |
| • academic_2              |          | 0,375    |          |
| • academic_3              |          | 0,541    |          |
| • academic_4              |          | 0,898    |          |
| • academic_5              |          | 0,878    |          |
| <b>Career exploration</b> |          |          |          |
| • exploration_1           | 0,649    |          |          |
| • exploration_2           | 0,791    |          |          |
| • exploration_3           | 0,801    |          |          |
| • exploration_4           | 0,786    |          |          |
| • exploration_5           | 0,548    |          |          |
| • exploration_6           | 0,657    |          |          |
| <b>Networking</b>         |          |          |          |
| • network_1               |          |          | 0,101    |

|             |       |
|-------------|-------|
| • network_2 | 0,58  |
| • network_3 | 0,76  |
| • network_4 | 0,825 |
| • network_5 | 0,565 |

The test of Chronbach’s Alpha resulted in the values of 0.62-91 meaning scales have a satisfactory level of internal consistency and the result is acceptable to proceed with further analysis (Table 14). Nunnally (1967) indicated that reliabilities above .60 are acceptable for developing new measures of constructs.

Table 14 Reliability statistics

|                           | Cronbach’s Alpha | Number of items |
|---------------------------|------------------|-----------------|
| Subjective career success | 0,914            | 5               |
| Professional identity     | 0,777            | 6               |
| Career planning           | 0,792            | 4               |
| Academic activity         | 0,657            | 6               |
| Career exploration        | 0,797            | 4               |
| Networking                | 0,624            | 5               |

An examination of the column “Cronbach’s Alpha if item deleted” for the networking scales revealed that the deletion of the first item would increase the reliability, so the item was deleted. (Table 15).

Table 15 Item-total statistics

|           | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| network_1 | 13,3200                    | 13,951                         | ,181                             | ,669                             |
| network_2 | 13,5133                    | 11,996                         | ,379                             | ,570                             |
| network_3 | 12,1800                    | 12,605                         | ,498                             | ,521                             |
| network_4 | 12,3533                    | 11,277                         | ,559                             | ,476                             |
| network_5 | 12,2867                    | 12,716                         | ,331                             | ,594                             |

In summary, the scale reliability results showed a satisfactory level of internal consistency within the four constructs.

Spearman’s Rho correlation analysis found the following associations between the variables:

- Weak association between: networking – academic activity
- Moderate association: career planning – professional identity, career planning – networking, career planning – career exploration, professional identity – networking, professional identity – career exploration, networking – career exploration.

There is no strong positive as well as negative associations between the variables. If it was, it would imply that the variables measure the same constructs. The findings imply that there is some association between the variables and they measure different constructs.

Table 16 Correlation matrix

|                       |      | 1      | 2      | 3      | 4      | 5 |
|-----------------------|------|--------|--------|--------|--------|---|
| career planning       | r    | 1      |        |        |        |   |
|                       | sig. |        |        |        |        |   |
| professional identity | r    | ,542** | 1      |        |        |   |
|                       | sig. | ,000   |        |        |        |   |
| academic activity     | r    | ,070   | ,151   | 1      |        |   |
|                       | sig. | ,397   | ,067   |        |        |   |
| networking            | r    | ,552** | ,515** | ,210** | 1      |   |
|                       | sig. | ,000   | ,000   | ,010   |        |   |
| career exploration    | r    | ,543** | ,572** | ,092   | ,686** | 1 |
|                       | sig. | ,000   | ,000   | ,265   | ,000   |   |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Before proceeding to the regression analysis, the scatterplots were plotted. Examination of the scatterplots (Figure 10) suggests that linear relationships between the outcome and predictors are possible. However the used of scatterplots for likert scale data, even for aggregated scores, is limited as the dots simply line up along the Likert scale values, rather than being scattered. Still, there is a reason to conduct a regression analysis.

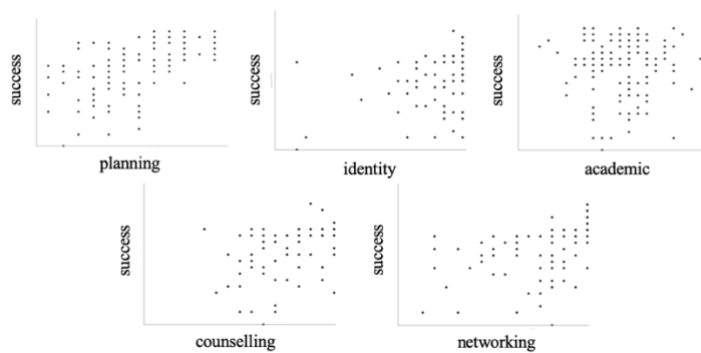


Figure 10 Scatterplots

The value of the coefficient of determination is 0.614, meaning that the predictors can account for 61,4% of the variation in subjective career success (Table 17).

Table 17 Multiple regression model summary

| R    | R <sup>2</sup> | Adjusted R <sup>2</sup> | Std. Error of the Estimate | Durbin-Watson |
|------|----------------|-------------------------|----------------------------|---------------|
| ,784 | ,614           | ,601                    | 2,86262                    | 2,028         |

From the ANOVA results it can be seen that F-ration equals to 45,58 (Table 18), which is significant at  $p < 0.001$ , hence the model overall is significant.

Table 18 ANOVA test results

| Model          | Sum of Squares | df | Mean Square | F      | Sig. |
|----------------|----------------|----|-------------|--------|------|
| 1   Regression | 1867,533       | 5  | 373,507     | 45,580 | ,000 |



|          |          |     |       |  |  |
|----------|----------|-----|-------|--|--|
| Residual | 1171,823 | 143 | 8,195 |  |  |
| Total    | 3039,356 | 148 |       |  |  |

The ANOVA does not provide information about the individual contribution of variables in the model. The estimates of the model parameters (the beta values) and the significance of these values can be seen in Table 19. The beta coefficients for 4 variables out of 5 are significant at the significance level 0.05.

Table 19 Multiple regression coefficients

|                                   | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.    | VIF   |
|-----------------------------------|-----------------------------|------------|---------------------------|-------|---------|-------|
|                                   | B                           | Std. Error | Beta                      |       |         |       |
| (Constant)                        | 3,127                       | 1,580      |                           | 1,980 | ,050    |       |
| career planning                   | ,258                        | ,085       | ,206                      | 3,044 | ,003**  | 1,703 |
| professional identity development | ,197                        | ,069       | ,193                      | 2,844 | ,005**  | 1,714 |
| academic activity                 | -,028                       | ,054       | -,028                     | -,515 | ,607    | 1,062 |
| networking                        | ,288                        | ,081       | ,272                      | 3,550 | ,001**  | 2,184 |
| career exploration                | ,312                        | ,086       | ,280                      | 3,615 | ,000*** | 2,225 |

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

The normality of errors is checked using the normal predicted probability plot (p-p plot) and the histogram. It can be seen from the Figure 11 that the plotted points lie somewhere around to straight line with deviations, but not drastic ones, indicating that the distribution is somewhat normal. The histogram (Figure 12) is more-or-less bell-shaped, confirming the conclusions from the normal probability plot.

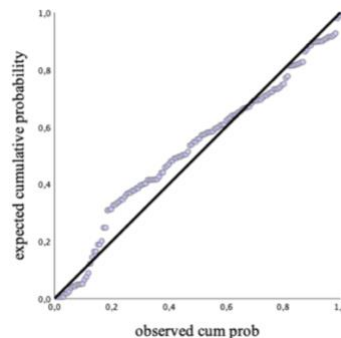


Figure 11 Normal P-P plot of regression standardized residuals

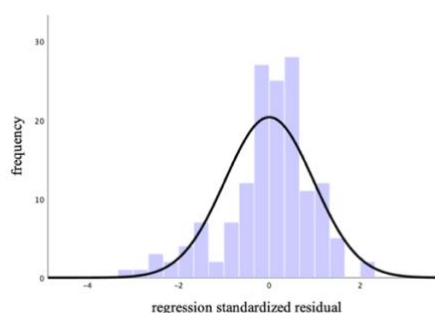


Figure 12 The histogram of regression residuals

To check the assumptions of linearity and homoscedasticity the scatterplot of the values of the residuals against the values of the outcome predicted by the model is used (Figure 12). Looking at the plot it can be said that there are no obvious patterns, any systematic relationships between the predicted values and the errors in the model, hence the assumptions are met. As the residuals are normally distributed and homoscedastic, the linearity assumption might be not checked.

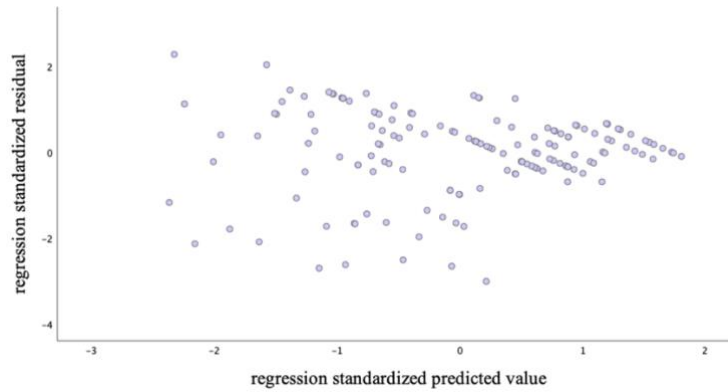


Figure 13 Scatterplot of standardized residuals against predicted values

To check the independence of errors (lack of autocorrelation) the Durbin-Watson test is used. As the statistic equals to 2.028 (Table 17) the residuals are uncorrelated.

The multicollinearity is checked with variance inflation factor (VIF) values (Table 18). As all the values are less than 5, the assumption is met.

The academic activity is insignificant in the model. Supposedly, the academic activity strategy is more beneficial for students, which have more or less clear career goals. To check this hypothesis the regression model exclusively for the observations with high career planning level was built. The results are provided in the Table 20. The academic activity is significant factor.

Table 20 Multiple regression coefficients (observations with high career planning level)

|                                   | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.    |
|-----------------------------------|-----------------------------|------------|---------------------------|-------|---------|
|                                   | B                           | Std. Error | Beta                      |       |         |
| (Constant)                        | -,743                       | 2,684      |                           | -,277 | ,785    |
| career planning                   | ,301                        | ,156       | ,160                      | 1,925 | ,069    |
| professional identity development | ,178                        | ,086       | ,165                      | 2,077 | ,052    |
| academic activity                 | ,125                        | ,027       | ,414                      | 4,632 | ,000*** |
| career exploration                | ,363                        | ,137       | ,262                      | 2,651 | ,016    |
| networking                        | ,271                        | ,077       | ,364                      | 3,520 | ,002**  |

The differences in career strategies are checked with ANOVA tests. The analysis of variance by gender revealed, that there are significant differences in academic activities between female and male students (Table 21). The mean values presented in table 22 show that academic activity is more used by females.

Table 21 ANOVA by gender

|                                   | Sum of Squares | df | Mean Square | F      | Sig.    |
|-----------------------------------|----------------|----|-------------|--------|---------|
| career planning                   | 7,397          | 1  | 7,397       | ,559   | ,456    |
| professional identity development | ,141           | 1  | ,141        | ,007   | ,933    |
| academic activity                 | 246,624        | 1  | 246,624     | 13,383 | ,000*** |
| networking                        | 45,934         | 1  | 45,934      | 2,537  | ,113    |
| career exploration                | ,254           | 1  | ,254        | ,015   | ,902    |

Table 22 Mean values of academic activity for male and female

| gender | Mean    | N  | Std. Deviation |
|--------|---------|----|----------------|
| male   | 14,9880 | 83 | 3,89964        |
| female | 17,5672 | 67 | 4,73614        |

The analysis of variance by master program revealed, that there are no significant differences in all strategies between students of different programs (Table 23).

Table 23 ANOVA by master program

|                                   | Sum of Squares | df | Mean Square | F    | Sig. |
|-----------------------------------|----------------|----|-------------|------|------|
| career planning                   | 20,905         | 2  | 10,452      | ,790 | ,456 |
| professional identity development | ,279           | 2  | ,140        | ,007 | ,993 |
| academic activity                 | 8,822          | 2  | 4,411       | ,219 | ,804 |
| networking                        | 14,215         | 2  | 7,108       | ,385 | ,681 |
| career exploration                | 15,476         | 2  | 7,738       | ,464 | ,629 |

The analysis of variance by tenure revealed, that there are significant differences in career planning and career exploration strategies between students with different tenure (Table 24). The mean values presented in table 25 show that both mentioned strategies were more used by respondents with higher tenure. The questionnaire did not include the question on graduation year, that is why tenure on the current place is used instead, assuming that the fresh graduates have lower tenure and vice versa.

Table 24 ANOVA by tenure

|                                   | Sum of Squares | df | Mean Square | F     | Sig.   |
|-----------------------------------|----------------|----|-------------|-------|--------|
| career planning                   | 295,773        | 8  | 36,972      | 3,115 | ,003** |
| professional identity development | 185,424        | 8  | 23,178      | 1,178 | ,316   |
| academic activity                 | 134,629        | 8  | 16,829      | ,830  | ,578   |
| networking                        | 340,670        | 8  | 42,584      | 2,513 | ,014   |
| career exploration                | 327,281        | 8  | 40,910      | 2,683 | ,009** |

Table 25 Mean values for career planning and career exploration for respondents with different tenure

| tenure             | 0    | 1    | 2    | 3    | 4    | 5   | 6   | 7  | 8  |
|--------------------|------|------|------|------|------|-----|-----|----|----|
| career planning    | 5,6  | 5,7  | 6,2  | 6,9  | 10,9 | 9,3 | 2,5 | 13 | 8  |
| career exploration | 13,6 | 13,6 | 14,5 | 14,2 | 18,3 | 17  | 6,5 | 19 | 18 |

The results of the empirical study indicate that there are differences in sets of career strategies pursued by students. The obtained data let to test differences by gender and tenure. Further research is required in order to understand what other factors can shape these differences.

The implications of the study and recommendations are provided in the next section.

## CHAPTER 4. DISCUSSION

The discussion is organized in following. First, the answers to the research questions are summarized. Then it is discussed, how the findings can be used by the students, the educational organizations and the employers: first, it is explained what role the educational organizations and employers play in relation to career strategies of students, then the potential benefits for the educational organizations and employers are discussed.

Answering the first research question, it can be concluded that students indeed pursue the career strategies, which are addressed in the study: academic activity, networking, career planning, professional identity development and career exploration (Table 26). With respect to the second research questions, the sets of strategies utilized by students are different: the study revealed that there are differences by gender and tenure. The differences exist, the strategies are not universal. Moving to the third research question, not all of career strategies are significantly related to subjective career success. However the absence of direct association does not imply the absence of any impact. The impact can be indirect, e.g. academic activity implies certain networking, and networking ultimately leads to higher subjective career success. The mechanisms / underlying reasons through which career strategies pursued by students influence their future career success are different. The findings might be valuable for the students, the educational organizations and the employers. These are three groups of participants involved in the process of the implementation of students' career strategies. First, students cannot implement their career strategies autonomously. Second, there are certain benefits for both the educational organizations and the employers.

Table 26 Summary of students' career strategies

| <b>Career strategy</b>            | <b>Definition</b>   |
|-----------------------------------|---|
| Career exploration                | A strategy aimed at proactive researching, evaluating and learning about different industries and jobs  |
| Academic activity                 | A strategy which implies involvement in studies issues beyond the average level and can take form of getting optional courses, engaging in research or aiming at very high GPA                    |
| Professional identity development | A career behavior, characterized by a purposeful formation of professional identity by a student through getting knowledge about professional practices, having professional as a role model etc. |
| Networking                        | A strategy which implies continuous attempts of a student to develop and maintain relationships with others who have the potential to assist them in their work or career                         |
| Career planning                   | A career behavior, characterized by purposeful setting career goals and identifying means to achieve them   |

The business schools' assistance, promotion and creation of conditions for the implementation of students' career strategies play an essential role. In this regard the experience of business schools can serve an example for other educational institutions carrying out master

degree program in economics and management. How do business schools help students? For example, business schools assist students in career exploration strategy by conducting tests on personality types and various workshops and trainings dedicated to the possible career paths. Also business schools organize events, thereby providing opportunities for networking, and include classes on career planning into curriculum and help students through career centers.

The employers' role is difficult to overestimate. The employers can contribute to the development of students' professional identity through holding meetings of representatives of the profession with students or giving them the opportunity to spend time in the work environment, thus helping students to form an idea about a certain professional community, about the duties of representatives of the profession, about the pros and cons of the profession. Employer organizations can also provide networking opportunities by holding events such as hackathons and case championships, which, in addition to networking, allow students to immerse themselves in the internal processes of the company and get acquainted with the specifics of the industry. Social media play an important role - both employers and schools already run Instagram and TikTok accounts, YouTube channels. In this sense, business schools can serve as an example and a model of best practice for other educational institutions implementing master's programs. Likewise, a number of employers and their social media work can serve as an example for other organizations. For example, Boston Consulting Group often shares "Day in the life" videos with consultants, which set appropriate expectations for candidates, specifically help potential applicants to understand whether the work type fits them or not before applying.

As mentioned above, there are certain benefits for both the educational organizations and the employers. For example, for business schools subjective career success of graduates is important, as successful graduates are those who constitutes an alumni community, and strong network is one of the most valuable assets of a business degree. Regarding the employing organizations, in general, subjective career success is an important factor of employee's performance, organizational commitment, retention (Rasdi, Ismail and Garavan, 2011; Armstrong-Stassen & Ursel, 2009; Dai & Song, 2016; Pachulicz, Schmitt and Kuljanin, 2008). By assisting students with career strategies, the employers can benefit in different dimensions. For example, students, who are engaged in career planning, will strive not just to get an offer to the company, but rather look a few steps ahead, they will stay motivated in long-term, plan their career advancement and proactively achieve it. These students also make decisions regarding the employer more thoroughly. They do not accept a job offer just for the sake of it. Career planning makes students more realistic about career advancement. As a result, an employer faces less cases when a recent graduate spends several months at the company and leave it fast to a "better"

one. Nowadays new hires quit is a common issue (Carucci, 2018), and considerable time and effort is spent on recruiting talent (Zivcovic, 2021). The common reasons are discrepancy between the real role responsibilities and expected ones; misalignment with work culture, perceived lack of career development and growth (Fitzharris, 2020). Career exploration can potentially decrease the new hires turnover: study of job responsibilities and career opportunities, sufficient familiarity with the culture of the company and its values will reduce the risk of mismatching reality with expectations. Graduates, who developed a strong professional identity, understand their inner beliefs and values (Randall, J, 2018) and therefore are more likely to find organization which fit him or her. Person-organization fit is the congruence between the employee's values and the values of the organization, according to the employee's perception, and it is an important antecedent of performance (Farooqui & Nagendra, 2014). The employers usually focus on their onboarding programs, which welcomes new hires, gives them the information and connections they need to succeed, and eases them into their new role at an appropriate speed (Chignell, 2021). While the onboarding process is important, it can be beneficial to help the potential employees to ensure the person-organization fit, to discover the opportunities and to examine the responsibilities before the selection process. Hence helping students implement their career strategies is reasonable for the employers.

Further the recommendations for the educational institutions carrying out master degree program in economics and management and the employing organizations on each career strategy are discussed.

#### 4.1 Recommendations

Further the recommendations for both educational institutions and employing organizations with respect to each career strategy are discussed. A short summary can be found in Table 27.

Table 27 Summary of recommendations

| <b>Career strategy</b>            | <b>Recommendations for the employers</b>  | <b>Recommendations for the educational institutions</b>   |
|-----------------------------------|---|---|
| Professional identity development | Incorporate mentorship initiatives into the internships to promote professional socialization | Organize events or incorporate into curriculum projects, which involve collaboration and interaction with professionals |

|                    |   |  |
|--------------------|---|--|
| Career exploration | Encourage the employees to engage in informational conversations<br>Conduct case-championships<br>Tell about the specifics of work in social media (e.g. “Day in Life” videos)<br>Make appropriate job descriptions | Invite the professional to tell about the specifics of profession<br>Provide information about knowledge and skills required for particular occupations<br>Provide career services (e.g. Vault Industry Guides)<br>Hold a mentorship program (e.g. “Talent Up!”) |
| Networking         | During internships put students in an authentic work environment where they can establish relationships with peers, partners and clients<br>Provide an opportunity to make informational conversations              | Conduct training or course for students on how to network effectively;<br>Organize events and meetings with the companies’ representatives;  |
| Career planning    | Clearly broadcast what is required to receive a promotion (e.g. how long it takes, how the career ladder looks like etc.)<br>Assess career planning dimension during in the interview process                       | Conduct workshops and events dedicated to the successful career start (e.g. how to make yourself visible, set development goals, how to benefit from feedback, how to be proactive etc.)<br>Provide the course on the principles of career planning              |

### *Professional identity*

The strategy of professional identity development is common not only to the students which are already committed to some profession, but to those, which do not define their professional identity yet. The former ones can enhance their sense of identity. The latter ones can take actions to find themselves: learn about their personality, interests, abilities.

Both educational institutions and employing organization can assist students in professional identity development by the establishment of mentorship programs. GSOM’s program “Talent Up!”, which joins students as mentees and successful graduates as mentors, can serve as an example. The employers can incorporate mentorship initiatives into their internships. Mentorship can have a positive impact on professional identity development (Chin et al., 2020), but mentoring relationship must be built on mutual trust as this is what encourages deeper self-reflection, professional growth, and receptivity to feedback (Petrilla, Fireman, Fitzpatrick, Hodas & Taussig, 2015). In mentorship process mentor acts as a role model to help a student achieve professional and personal growth by providing knowledge, advice, challenge and support. Mentoring supports professional socialization that is critical to help students work towards joining the professional ranks of a profession through the sharing and exposure to social norms, values and standards of behavior held by a profession.

Professional socialization, or a sense of belonging to a professional community, is a strong determinant of professional identity formation. In this way, professional socialization can facilitate professional growth, innovation, pride, confidence, and a sense of belonging that internalizes the values, beliefs and attitudes of a profession. Students should be encouraged to



ask questions, share their interests, concerns, and experiences with a professional community, and take part in special work projects (Karel et al., 2011). The educational organizations can organize events or incorporate into curriculum projects, which involve collaboration and interaction, during which the employers' representatives will treat students as professionals. GSOM's consulting project held at the 2<sup>nd</sup> year of master program can serve as an example. The employing organization can contribute in the professional socialization formation of students during the internships by giving occupational titles as these show an organization's trust in interns, which helps them become committed to tasks and appreciate how they fit into the bigger picture; by creating opportunities for students to work in an authentic work environment where they can establish relationships with peers, partners and clients (Leong & Crossman, 2015); by helping students to immerse in a profession's culture (Birden, Barker, & Wilson, 2016).

#### *Career exploration*

For students, committed to some professional identity, the strategy of career exploration can be more relevant, as a way to research possible career options, identify necessary skills, find relevant connections. Regarding this strategy, educational institutions can invite the employers' representatives to tell about the specifics of profession; to provide information about knowledge and skills required for particular industries, especially for the ones, which are the most popular among students (e.g. management consulting, investment banking); create communities or clubs of students interested in the same profession. The employing organizations can organize meetings of company's representatives with students, do office tours, conduct case-championships, tell about the specifics of work in social media. The students can try to learn more about an attractive profession for them: read articles and watch videos about the profession, search through the company's social networks, try to communicate with representatives. If there is no interesting profession yet, they can visit different events, consider different options, try themselves in different roles and functions during group projects.

#### *Networking*

Higher education institutions considered to be one of the greatest places to network. During studies students have various opportunities to establish connections working professionals, experts, thought leaders or even professors (Higher Education Review, 2020). It is important to start building up the network during studies, before entering the workforce, because it helps to create opportunities for oneself after graduation by forming the relationships with people which can assist with the career in future. Networking not only helps to become connected with professional in one's field, it also can help to get additional knowledge about the field from the networking experiences. There is a formal component in networking advantages, which is referrals, which can help a lot when one will apply for a job. However there is less

formal, more personal impact. The people met at the university influence each other for the rest of the life. They can be useful contacts when finding a new job, or investors in one's great idea, or friends which will give a useful advice for one's career (Forbes, 2016).

The question which students often face is how to network effectively. Here the educational institutions can help by providing training or course for students on how to network, by tips such, e.g. using resume as a tool for advice instead of asking for a job; presenting a success story; ask for suggestions on how to expand the network; finding reasons for follow-up (Kangan Insitute). However the main issue which the educational institutions can help with is the creation of opportunities for network by the organization of various events: meetings with the companies' representatives; case-championships etc. A great example is the "Management of the Future" conference, held annually by GSOM, which is a place for networking for students and the employers. The employing organizations themselves can help students with networking by acknowledging the importance of network for students. Even small changes can help, e.g. leaving more time for networking during the events.

#### *Career planning*

A career plan is a practical strategy that allows to determine skills and interests, set career goals, and put actions in place to reach them. Career planning is based on self-assessment and self-evaluation, exploring of possible career options and identifying different ways one can contribute successfully. Students who devote time to career planning can set priorities in terms of required knowledge and skills, be more conscious approach to the selection of courses, events and so on. They better understand the purpose of each internship, competition or event. As a rule, they are more likely to retain the motivation.

The career planning usually becomes relevant for the students already committed to a specific career (Penn State, 2020). When an individual understands in what professional field, he wants to build his or her career, the question arises, what steps to take in order to succeed in this field. This is especially true for students who face uncertainty after the graduation or, for example, after an internship, for example, the offer received, but what's next: go with the flow or to consciously plan career development within the company? Trying to determine exactly what role in the chosen to aim for and developing a strong career plan can be difficult. Understanding the particular occupation's world can also be confusing – even after several years of study. There is usually a lot of jargon and job roles are often unclear from the outside. Knowing which jobs are best fitted for oneself and the required skill set can be challenging. It is important for one to understand what he or she is expecting from the ideal work life and how to achieve it.

Students themselves can search job role descriptions and analyze required skills in order to get an impression of how possible career plan for them can look like (CFA Institute, 2020). The

educational organizations can offer workshops and events dedicated not only to how to get on offer, but also on what to do after the receipt of the offer, e.g. how to share the achievements to make yourself visible, set development goals, work with mentor, how to react on feedback and how to benefit from it, how to manage risks in career, how to be proactive etc. Besides, the educational organizations can teach the principles of career planning: short-term and long-term goals etc. What is more, the educational organizations can help students to determine what success means to them, as success is a broad term and it means different things for different people. Personal success factors course in GSOM is a great example.

The employing organizations, for their part, can clearly broadcast to students what is required of them to receive a promotion, etc., how long it will take, how the career ladder looks like and so on.

#### *Academic activity*

In present study set of the educational activities, such as student publications, taking courses out of major, aiming at higher grade point average and others, is named as academic activity. According to the results of multiple regression there is no association between students' career strategy "academic activity" and subjective career success. There are several explanations. First, the relationships can be non-linear. Second, the scale that was supposed to measure this construct does not measure it properly. Third, it is possible that sample size is too small relative to the variability in data.

Indeed, chaotic study of courses outside of major might be not very useful. It is important for students to understand that their objective is not to take as much courses as possible or get the highest GPA, but to gain relevant knowledge and to get transferrable skills. Underlying every career is a broad knowledge base and a set of strong transferable skills. Transferable skills are interpersonal skills, effective written and verbal communication skills, data management, budgeting and time management (Penn State, 2020). With respect to the knowledge it is crucial not just to gain knowledge, but to understand how to apply them. With respect to this issue, case-method, consulting projects and other practices, incorporated at GSOM, can contribute a lot.

It was supposed, that academic activity as career strategy brings less benefit until students start pursuing other strategies, namely professional identity development, career exploration and career planning. In other words, presumably for those students which do not put effort into professional identity development and career planning, it is not relevant to put effort into academic activity, as they cannot do it consciously. The hypothesis was checked with another regression model. The results indicated that for respondents with high level of career planning academic activity is significantly related to subjective career success. It reinforces the importance of career planning for students.

It is worth mentioning that presumably students pursue different sets of career strategies. The differences can be based on personality traits, career aspirations etc. This study revealed differences by gender and year of graduation, but other factors are possible as well. It is a one of the suggestions for further research, which are discussed further.

#### **4.2 Limitations and suggestions for further research**

As every research this master thesis has a number of limitations. First, it cannot be said that the sample size is large ( $n = 150$ ), and despite the check of model's assumptions, the generalizability of the findings should be done with caution. Second, the sample includes graduates only of one business school and the results may be not applicable to business schools' students across countries or students of other educational institutions. However, such limitation does not invalidate the conclusions drawn from the findings. It prepares the basis for future research of a larger sample. Third, only self-report data was used in the study and there is a risk for common method variance. Moreover, as the respondents were asked to evaluate themselves, there is a chance that the participants were not completely objective in their evaluations. In other words, the responses could be distorted due to some biases, like desirability bias, extreme response bias, contextual biases etc. To reduce these risks the researcher made sure the questions obtain the explanations, where necessary, and provided the required context to the respondents, such as motivation of the study, goal etc. Certainly, the participants were assured that the obtained data is strictly confidential and used only for research purposes.

In this study subjective career success was chosen as a dependent variable. While it was done on purpose, the link between career strategies of students and objective career success can be also examined. The relationship between subjective career success, career strategies of students and objective career success is of particular interest. Besides, the list of career strategies is not exhaustive and it cannot be, as new career strategies appear. While the existence of positive association is proved, further research on possible career strategies is required. It would be also interesting to examine the differences in students' career strategies based on different factors; e.g. professional area chosen after graduation. In addition, further research is needed to better understand the mechanism through which career strategies pursued during studies influence on subjective career success.

## Conclusion

This study has examined students' career strategies and their role in subjective career success achievement. As a result of the study five career strategies inherent to students were identified, namely networking, professional identity development, career planning, career exploration and academic activity. The study revealed that there are differences in sets of strategies utilized by students. It has found that there is a positive association between subjective career success and all mentioned career strategies, except for academic activity, which supposedly has an indirect influence.

First of all, for the purpose of completeness of literature review, career and career development concepts were introduced. Then overview of several theories on career development stages was conducted, from which it was concluded that individuals are already involved in the process of career development during university studies. The research proceeded with consideration of career success concept. Several definitions of career success, two types of career success (objective and subjective), their definitions, example metrics and differences between the types were discussed. The conducted analysis indicated that in contemporary career research more attention is paid to subjective career success rather than to objective one. The issue of measurement of subjective career success was subsequently discussed: it was concluded that Career Satisfaction Scale developed by Greenhaus, Parasuraman & Wormley (1990) is one of the most reliable scales, successfully applied in many studies.

The research proceeded with brief description of determinants of career success. Behavioral approach, along with traditional approaches (individualistic and structural) to career success were discussed. In addition, two popular concepts in career research were described - concepts of protean and boundaryless careers. Summarizing the behavioral approach and mentioned concepts, it was concluded that at present the focus of researchers' attention shifts from background-related, organizational, motivational factors to the individuals' role in their own career success. It explains the attention to the concept of career strategy as a determinant of career success.

Logically, further career strategy definition was given and previous research on career strategies was overviewed. Moving from the general to the specific, career strategies of students were discussed. First, the applicability of the concept to students was proved. Then, on the basis of the literature review 5 potential career strategies of students were identified for the consequent empirical research. Existing research on career strategies of students and their possible impact on subjective career success was summarized as well and research gaps were identified.

The questionnaire was developed and distributed among the graduates of Graduate School of Management of Saint Petersburg State University. To measure the constructs of

subjective career success, networking, professional identity development, career planning and career exploration, the appropriate scales were chosen and adapted to the specifics of the study. To measure the academic activity the scale was developed for this study. The validity of constructs was checked with Cronbach's alpha and factor analysis. The multiple regression model with five career strategies as factors and subjective career success as a dependent variable was built. According to the model, subjective career success and four career strategies (networking, professional identity development, career planning and career exploration) are positively related. With respect to the academic activity, it was supposed that this strategy is more relevant in combination with career planning strategy, and this hypothesis was confirmed.

The conclusions reinforce the idea that, taking into account the unconditional influence of other factors, the human agency plays an important role in career success advancement in a sense that already during university studies individuals can pursue certain career strategies in order to be more successful, specifically, within their own evaluations. The latter nowadays is a very important issue: a lot of attention is paid to the job satisfaction, career satisfaction, perceived success of employees. Subjective career success is a concern not only for employees, but for employers as well, as it is an important factor of employee's performance, organizational commitment, retention. For the educational institutions and the employing organizations, involved in planning and implementation of students' career strategies, the recommendations were made based on study's results.

The importance of higher education in itself cannot be underestimated, but at the same time it must be recognized that students should take certain actions themselves to increase the chances for career success, and the educational institutions and the employing organizations should actively participate in this process.

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## Appendix 1. Questionnaire

### Questionnaire: Career strategies of students

#### Subjective career success

1. I am satisfied with the success I have achieved in my career.
2. I am satisfied with the progress I have made toward meeting my overall career goals.
3. I am satisfied with the progress I have made toward meeting my goals for income.
4. I am satisfied with the progress I have made toward meeting my goals for advancement
5. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

#### Professional identity

6. I thought about the advantages and disadvantages associated with this occupation.
7. Thinking of myself within this occupational area made me feel self-confident.
8. I contemplated on whether this profession was the most suitable for me.
9. I paid attention to what other people thought or said about this profession.
10. I was proud of joining this professional community.

#### Career planning

11. I have decided what my career objectives should be.
12. I have a strategy for achieving my career goals.
13. My career objectives are clear.
14. I change my career objectives frequently

#### Networking

15. I actively visited events organized by the employers (BCG, PwC etc.)
16. I actively used LinkedIn: updated profile, expanded my network of contacts etc.
17. I actively visited events organized by GSOM (e.g. GSOM Family Day)
18. I actively participated in social gathering with peers
19. I deliberately took highly visible assignments

#### Career exploration

20. I actively obtained information on specific jobs or companies.
21. I initiated conversations with knowledgeable individuals in my career area.
22. I actively obtained information on the labor market and general job opportunities in my career area.
23. I actively participated in various case-championships, business games etc.
24. I reflected on how my past integrates with my future career.
25. I initiated conversations with I other students about their careers.

#### Academic activity

25. I took effort for getting high GPA.
26. I devoted considerable effort and time to writing my master's thesis, striving to get interesting and practical results.
27. I took courses out of major.
28. I studied additional literature on the subjects of the curriculum.

29. I was engaged in scientific research.

Demographics

30. Gender: male, female

31. Age

32. Master program: MiM, MCF, MUMD

33. Occupational area

34. Location: Russia, abroad

35. Tenure