



Career Development and Success at Work in and around Construction Sites

**EXPERIENCES AND PERSPECTIVES WITHIN
FINNISH CONSTRUCTION MANAGEMENT**

KRISTA RAUTIO

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– Experiences and Perspectives within
Finnish Construction Management

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Tiivistelmä

Krista Rautio

Career Development and Success at Work in and around Construction Sites

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Työn ja uran merkityksellisyys on noussut yhdeksi merkittävimmäksi työssä viihtymisen tekijäksi niin arjen työpuheessa kuin työelämä tutkimusten tuloksissa. Työelämästä myös löytyy yhtä paljon kiinnostavia, yksilöllisiä uratarinoita kuin siellä on työntekijöitä. Menestyksekkäiden urien ja työelämäsidonnaisen aikuiskehityksen näkökulmasta rakennusala tarjoaa kiehtovan tutkimuskontekstin, jossa on lukuisia alakohtaisia erityispiirteitä. Aikana, jolloin rakennusala haastaa pula osaavista työntekijöistä ja ihmiset näyttävät viihtyvän työnjohdollisissa tehtävissä lyhyemmän aikaa, olisi kiinnitettävä enemmän huomiota rakennusalan urien houkuttelevuuteen. Jatkuvasti kehittyvä työympäristö aiheuttaa merkittäviä muutoksia alan urakehityksessä ja urien johtamisessa, mikä johtaa tarpeeseen tutkia organisaatiokäytäntöjä, jotka voivat edistää palkitsevien työurien kehittämistä.

Tämän tutkimuksen tavoitteena on tarkastella rakennusalan uriin sekä työssä menestymiseen liittyviä käsityksiä ja kokemuksia, jotka tällä hetkellä vallitsevat erityisesti rakennustyömaiden läheisyydessä. Tutkimusasetelman avulla pyrin tuomaan esiin uraan ja työssä menestymiseen liittyviä kokemuksellisia näkökohtia, ja tarjoamaan tutkittua tietoa, jota voidaan hyödyntää niin akateemisessa keskustelussa kuin myös rakennusalan koulutuksessa ja työelämässä. Väitöstutkimukseni pääkysymys on: Miten urakehitys ja työssä menestyminen koetaan, ja miten niitä tuetaan rakennusosalalla?

Urakehitykseen ja työssä menestymiseen rakennusosalalla syvennyin kolmen osatutkimuksen kautta, joihin tämän artikkelimuotoisen tutkielman julkaisut perustuvat: (1) työssä menestyminen ja sen edellytykset työnjohdollisissa tehtävissä toimivien uratarinoissa, (2) urakehitys rakennustyömaiden johtaviin tehtäviin ja (3) esihenkilöiden käsityksiä työntekijöiden urien tukemisesta rakennusalan yritysissä.

Monitieteinen teoreettinen viitekehys muodostuu urakehityksen ja työssä menestymisen ilmiön tarkastelusta, niiden määritelmistä ja niihin vaikuttavista tekijöistä. Tämän laadullisen tutkimuksen lähestymistapa on monimenetelmällinen,

ja se koostuu narratiivisesta ja fenomenografisesta tutkimusmenetelmästä. Aineisto perustuu yhteensä 44 rakennusalan edustajan haastatteluun, ja haastatteluaineisto on kerätty kahdessa vaiheessa, ensin kevään ja syksyn 2021 aikana ja sitten kesän ja loppusyksyn 2022 aikana. Tutkin rakennustyömailla ja niiden läheisyydessä työnjohdollisissa tehtävissä työskentelevien uratarinoita (N=21) ja haastattelin viiden Suomessa toimivan rakennusalan yrityksen edustajia (N=23) heidän käsityksistään työntekijöiden urien tukemisesta. Työssä menestymisen käsityksiä ja uratarinoita tarkastelin narratiivisella tutkimusotteella (Tutkimukset I ja II) ja rakennusalan yritysten esihenkilöiden käsityksiä uratuesta tarkastelin fenomenografisella lähestymistavalla (Tutkimus III).

Tulokset osoittavat, että työssä menestymisen käsityksistä oli tunnistettavissa kuusi roolia, jotka liittyvät työhön, yhteiskunnalliseen asemaan ja yksilöllisiin näkökohtiin. Johtavissa tehtävissä työmaiden läheisyydessä toimivien urapolut näyttivät ilmentävän joko ensisijaista kiinnostusta 1) rakentamiseen, 2) monipuolisiin hankkeisiin tai 3) johtamiseen. Uran tukeminen puolestaan ymmärrettiin uran eri määritelmiä koskevien käsitysten kautta. Käsitykset olivat ammatillisia, yksilöllisiä tai yrityslähtöisiä, ja niitä yhdisti tuki jatkuvaan oppimiseen. Tässä väitöskirjassa esitän, että menestyksekkäitä, työntekijälähtöisiä uria voidaan tukea ja johtaa yksilöiden itsensä sekä uran tukijoiden toimesta keskustelemalla ja määrittämällä kaksi peruskysymystä: minkä tyyppinen ura ja kiinnostuksen kohteet auttavat yksilöä kukoistamaan urallaan, ja mistä rooleista käsin yksilöt kokevat työssä menestymisen. Nämä määritelmät auttavat tunnistamaan ja suunnittelemaan keinoja, joilla tuetaan yksilöiden urakehitystä, työssä menestymistä ja jatkuvaa oppimista uran varrella. Lisäksi nämä tukikeinot voidaan jakaa yksilöllisiin, ammatillisiin ja työnantajayrityksen tarpeisiin perustuviin suuntauksiin.

Koska rakennustyömaiden johdon urakehityksestä on vain vähän tutkimuksia positiivisen psykologian näkökulmasta, tämä tutkimus tuo arvokkaan ja uudenlaisen lisän alaa koskevalle uratutkimuskentälle. Tulokset syventävät käsityksiä työssä menestymisestä ja urakehityksestä rakennusosalalla, tarjoten merkittäviä oivalluksia uratutkimuksen saralla yleisemminkin. Lisäksi väitöskirjan tulokset osoittavat, että vertikaalisen ja horisontaalisen kehittymisen rinnalla urat voidaan nähdä kehittyvinä myös saman tehtävänimikkeen sisällä. Tätä havaintoa tulisi painottaa enemmän koulutuksessa ja rakennusalan yrityksissä, ja sitä voitaisiin hyödyntää uratuen kehittämisessä.

Avainsanat: työssä menestyminen, urakehitys, urien tukeminen, rakennustyömaiden johtaminen, jatkuva oppiminen.

Abstract

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The goal of meaningful work and careers is emphasized in contemporary research as well as in everyday experiences. There are as many fascinating, individual career stories in the world of work as there are workers. Additionally, the sector in which a career takes place influences its course and content. From the perspective of successful careers and adult development, the construction field offers an intriguing research context with a multitude of branch-specific features. In a time when the field is suffering from labor shortages and people seem to be enjoying a shorter time in positions such as site manager, more attention should be paid to the attractiveness of careers in the construction sector in general. The constantly developing working environment is causing significant changes in career development and career management in the sector, leading to the need to explore organizational practices that can contribute to the development of satisfying careers.

This dissertation aims to provide an academic overview of the perceptions and experiences of individuals who shape and support careers in the construction field, particularly those involved in and around construction sites. With the research design, I aim to highlight experiential aspects of career development and success at work and thus provide researched information that can be utilized not only in the academic debate on careers and success at work, but also in construction education and working life. In order to meet these objectives, I have designed research consisting of three studies, which together answer the dissertation's main research question: How are career development and success experienced and supported in the construction field? To this end, the publications of this article-based thesis are based on the following studies: (1) success at work and its preconditions in construction site managers' career stories, (2) career development to construction site managerial positions in the construction field and (3) supervisors' perceptions of career support in construction companies.

The theoretical framework is multidimensional and consists of an examination of the phenomenon of career development and success at work, their definitions, and factors affecting them. The research approach of this qualitative study is multi-methodological, consisting of narrative and phenomenographical approaches. I have collected research material, consisting of 44 interviews, in two phases: first during the spring and autumn of 2021, and second during the summer and late autumn of 2022. I examine the individual career narratives of those working in managerial positions in and around construction sites (N=21) and have interviewed representatives (N=23) of five construction companies operating in Finland for their perceptions of employee career support.

The material is analyzed through various methods. The perceptions of success at work and career stories are examined with a narrative approach (Studies I and II), and the perceptions of career support of construction companies' supervisors are examined with a phenomenographical approach (Study III).

The results reveal that success at work is perceived through six roles relating to work, society, and individual aspects. Managerial career paths in the construction field seem to involve primary interest in either: 1) construction actions, 2) versatile projects, or 3) management. Career support, then, is understood through perceptions of various definitions of career. The conceptions are professionally-, individually-, or company oriented, interwoven by support for continuous learning. This dissertation suggests that successful, employee-centered careers can be supported and managed by individuals and those who support career development through the discussion and definition of two fundamental issues what type of career and interests contribute to individuals thriving in their careers, and what role(s) they perceive to be successful at work. These definitions will then assist in identifying and designing ways to support individuals' career development, success at work and continuous learning. Further, these supportive means can be divided according to their orientation, based on the individual, the professional, and the needs of the employer.

Little research has been conducted on the career development of construction site management from a positive psychology perspective, making this study a valuable and novel contribution to the field of career research. The results enhance the understanding of success at work and career development in the construction sector, offering important insights for broader career research. Additionally, this dissertation highlights that careers can evolve within the same job title, in addition to vertical and horizontal development. This observation could be more strongly emphasized in education and construction companies, potentially guiding the development of career support practices.

Keywords: Success at work, career development, career support, construction site management, continuous learning.

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Omistan tämän väitöskirjan isälle ja Akillle.

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List of Original Articles

This doctoral dissertation is based on the following research publications. In the text, the publications are referred to by their sequence number as Study I, Study II, and Study III.

All three sub-studies and the research articles based on them were designed to become parts of my doctoral thesis. Both the research designs and research work were conducted under the guidance of my supervisors Prof. Satu Uusiautti and Dr. Sanna Hyvärinen. I was responsible for the acquisition and processing of the research data and writing up the results. The first article I wrote independently. The second article, specifically the methodology, theory, and results sections, was co-written with Prof. Uusiautti and Dr. Hyvärinen. The third article, specifically the introduction, theory, and result sections, was co-written with Prof. Uusiautti.

1. Rautio, K. (2022). Success at Work and Its Preconditions in Construction Site Managers' Career Stories. In S. Hyvärinen, T. Äärelä & S. Uusiautti (Eds.) *Positive Education and Work: Less Struggling, More Flourishing* (pp. 121–148). Cambridge Scholars Publishing.
2. Rautio, K., Uusiautti, S., & Hyvärinen, S. (2023). Career Development to Construction Site Managerial Positions in the Construction Field. *Journal of Professional and Vocational Education*, 25(2), 20–33. <https://doi.org/10.54329/akakk.130984>
3. Rautio, K. & Uusiautti, S. (2024). New Insights into Career-Related Continuous Learning in Construction Companies - Supervisor Conceptions of Career Support. *Journal of Adult and Continuing Education*, 30(2), 370–394. <https://doi.org/10.1177/14779714241254205>

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Definitions of Construction-Related Terms

Construction Site	e.g., building site, a piece of land on which a house or other building is being built (Cambridge dictionary). In this research, construction sites refer to any physical environment where construction work is conducted.
Construction Site Management	e.g., leadership at construction sites. On a daily basis, sites are led on operational as well as strategic levels (Fraser, 2000; Grill et al., 2018). Thus leadership on or near construction sites consists of (at least) a dual role in leading both work activities and people. Leading work activities may include project / construction site oversight: overall coordination and execution of construction projects, quality control (ensuring that work meets specified standards and adheres to design plans and regulations), budget management (monitoring project costs, materials, and resources), and timeline management (keeping the project on schedule by overseeing task sequencing and deadlines) (e.g., Pekuri, 2015). Leading people refers to leading and coordinating diverse teams, including subcontractors and various trades, communication (facilitating clear communication between team members, clients, and stakeholders), problem resolution (addressing issues and conflicts that may arise among team members or during construction), safety oversight (prioritizing and enforcing protocols to ensure a safe working environment), and motivation (inspiring and supporting the motivation of the team to achieve project goals and overcome challenges) (e.g., Hillebrandt, 2000; Pekuri, 2015).

Construction Site Manager	occupies a middle management position operating across organizational boundaries, coordinating many interacting employees, subcontractors, and external organizations (Grill et al., 2018; Styhre & Josephson, 2006). “In the construction industry, site managers are responsible for the day-to-day on-site running of a project. Site managers are required not only to ensure that work is done safely, on time, within budget, and to the right quality standards but also to manage any delays or problems encountered on-site during a construction project. Thus, a site manager has a significant position in the success of a construction project.” (Zavari & Asfar, 2023).
Construction Manager	a professional whose tasks may include planning, organizing, directing, controlling and evaluating construction projects from start to finish according to schedule, specifications, and budget. Prepares contracts and negotiates revisions, changes, and additions to contractual agreements with architects, consultants, clients, suppliers, and subcontractors. Represents the employer company on matters such as business services and union contract negotiations. Directs the purchase of building materials and land acquisitions. Hires and supervises the activities of subcontractors and subordinate staff. (Careers in Construction, n.d.) In Finland, a construction manager’s position is a higher managerial position than a site manager.
Foreman	a skilled person with experience who is in charge of and watches over a group of workers (Cambridge dictionary). A foreman in the construction field is a contractor’s representative responsible for supervising work on a building site (Jokiniemi & Davies, 2012).

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1 Introduction

1.1 Research Background

There are as many fascinating, individual career stories in the world of work as there are workers. For those interested in career research, the construction field offers an intriguing research context with a multitude of branch-specific features. Wouldn't it be interesting to explore how success at work is experienced and what kind of unique career narratives can be found in and around construction sites? Or to strive to uncover perspectives on career support from employer organizations? To me, these reflections were appealing and thus, they form the basis of the research design of this dissertation.

There is evidence of building traditions everywhere, both in everyday building products and historic examples of craftsmanship. Construction work is described as an ancient occupation, as the need to build structures has been a fundamental aspect of human civilization throughout history (e.g., Chang & Swenson, 2023). The methods and tools have evolved but the core activity of constructing buildings and infrastructure has been a longstanding and essential occupation (e.g., Chang & Swenson, 2023; Dunkeld, 1987). The fields' project-based nature, traditional and gradually changing male dominance, cyclical nature, growing multiculturalism, and high turnover (e.g., Rosa et al., 2017), as well as an exceptional age-structure, add interesting dimensions to careers.

The dynamic and challenging environment in various construction careers provides multiple chances to develop but also to respond to challenges. The industry is thus said to require motivated and highly skilled people (Becker et al., 2014). Recent research shows that the industry is facing significant challenges as new technologies, digitalization, internationalization, evolving business models, and climate change continue to reshape operations (Akinosho et al., 2020; Adeel et al., 2023). The work that relates to construction activities and site management involves a mix of indoor and outdoor work, mobile work, collaboration with diverse teams, and the satisfaction of seeing tangible results (Dainty et al., 2007). Challenges such as physical demands, gender inequality, varying climate conditions, and project deadlines are inherent (e.g., Dainty et al., 2007; Rosa et al., 2017) and it is crucial to maintain and improve productivity and safety measures, which contributes to the development of a wide range of practices (Pekuri, 2015; Akram et al., 2019). Thus, the modern construction industry must respond to the ongoing improvement of efficiency, quality, and safety standards with new, efficient, and

intelligent construction (Adeel et al., 2023). Overall, the field provides a rewarding yet demanding workspace. One might ask, though, if the construction industry is a single industry or several separate sub-industries (Byers, 2016; Dainty et al., 2007; Ive & Gruneberg, 2000). Dainty et al. (2007) admit that what constitutes the ‘construction industry’ is in itself subject to several different boundary definitions. They show, however, that it is possible to identify a range of characteristics that, when combined, comprise a unique industry context. Further, Toor and Ofori (2008) state that the uniqueness of the construction industry is probably the most frequently mentioned feature in literature. Therefore, this dissertation does not concentrate on a particular type of construction, as the industry-wide characteristics outlined in Introduction and Chapter 2 are representative of the entire field.

Regardless of the type of construction, demand has traditionally been highly cyclical (Hillebrandt, 2000). This means that, for example, capital investment suffers during any economic downturn. Non-transportable, durable goods are especially sensitive to the business cycle as they cannot be transported to locations with greater demand (Dainty et al., 2007). The aforementioned characteristics still fit the field and the operating environment is affected by socio-cultural, economic, technological, legal and regulatory, and ethical factors. Globalization has also led to internationalized and larger projects, and multi-project environments challenge the actors (Tabassi et al., 2019; Toor & Ofori, 2008). Additionally, the construction industry has an important role in achieving society’s sustainable development goals (Agyekum et al., 2020). Striving towards sustainability in the construction field presents one of its leadership challenges known for years (e.g., Opoku & Fortune, 2011).

Topically, the construction field in Finland is lacking a skilled work force and engaged professionals; in recent years, construction site managers are especially lacking (Ministry of Economic Affairs and Employment, 2022). The challenge of labor shortage in the construction industry is also shared internationally (Gajjar et al., 2019; Ministry of Economic Affairs and Employment, 2022). In the last two years in Finland, the construction sector accounted for about 9.8% of all enterprises and 10.8% of person-years worked (Statistics Finland, 2022), a significant share of Finnish careers. Though both in Finland and internationally, the vast majority of construction companies are still small and local (ILO, 2024). The share of foreign workers in construction has also increased in recent years. In November 2023 in Finland, the average share of foreign workers on construction sites was around 20%. This figure represents the average for the country as a whole and includes workers in both building and infrastructure construction and specialist contractors (The Confederation of Finnish Construction Industries CFCI, 2024). As the sector has a large foreign workforce, there are also general tendencies towards inequality in the labor market (Mankki & Sippola, 2015). Despite the cyclical nature of the field and the contemporary downturn (CFCI, 2024), the mismatch between supply and

demand for skilled labor is not necessarily a function of the business cycle but also of the attractiveness of careers in the industry (e.g., Bigelow et al., 2018; Gajjar et al., 2019).

All the aforementioned illustrates the macro-level need for numerous forms of co-operation and balancing in the field, posing remarkable challenges but also major opportunities for career development, and makes work in the construction industry an appealing field of research. One purpose of this research is also to find out which elements make a construction career attractive and how to enhance engagement in the field from the perspective of personal career experiences. In Finland, the construction field differs from many other sectors in its age structure, with a lower-than-average number of people aged 55 and over and a higher-than-average number of young people under 25 (CFCI, 2024). The number of people employed in the construction sector in Finland in 2019 was between 175 000 and 185 000 (employees in building construction, infrastructure construction and specialized contracting, as well as white-collar workers and self-employed persons) (CFCI, 2019) and according to the Finnish Construction Trade Union (2023), in 2023, only 7.3 % of its members were women.

This multidisciplinary thesis examines career development and success at work from the perspectives of individuals in leadership positions in the construction industry, as well as career support from the viewpoint of company supervisors. The theoretical framework is primarily positioned within the fields of educational and positive psychology. Additionally, the research is situated within the areas of work-life research, leadership research, and organizational research. Over the last few decades, research on successful work-life and leadership has shared a growing interest in the optimal use of human capital, which requires fostering a deeper understanding of psychological aspects (Luthans et al., 2010, see also Arnold et al., 1993). Career-related research in the field emphasizes the importance of the individual perspective and that, by understanding individual dimensions, common benefits can be achieved (Achor, 2010; Hyvärinen et al., 2022; Linley et al., 2013; Niles et al., 2011; Seligman, 2013). Individual perceptions of the possibilities of success are also meaningful (Uusiautti, 2013). Today's psychological approaches to careers show that work which provides a sense of purpose, challenge, and self-fulfillment, along with rewarding income, becomes a positive source of identity, creativity, and life challenge as well as status and social networking (Baruch, 2004; Uusiautti & Määttä, 2015). These approaches thus emphasize the aim to increase success by understanding human behavior through strengths and a deep knowledge of human development (Peterson et al., 2005; Seligman, 2013). In order to achieve positive experiences such as joy and accomplishments along one's career, it is essential to do a job and follow a personally suitable career path. As an outcome, opportunities for flourishing and favorable career development are apt for promoting a successful career path (Uusiautti & Määttä, 2015). Today's career development also includes

new perspectives for occupational adaptation and continuous learning (Uusiautti & Määttä, 2015; Zaitouni et al., 2020).

Research on success at work, particularly in the construction field, is still relatively scarce, both nationally and internationally, although there certainly are studies on gendered practices (Dainty & Neale, 2000; Naoum et al., 2019; Raiden, 2016; Styhre, 2011) or on performance management and site management (Fraser, 2000; Grill et al., 2018), for example. As the pioneers of positive psychology, first Abraham Maslow in 1954 and later Martin Seligman in the 1990s stated that more attention must be paid to human potential, achievable aspirations, virtues, and full psychological height to recognize and emphasize what is going well to build stronger humans and societies (Gallagher & Lopez, 2021, 3). I was inspired to explore the links between construction site managers' career stories, success at work and career support – whether and what answers can be found to help individuals succeed at work. The results of this research contribute to success at work in the construction industry, offering the field a great angle of entry to enhance human potential while improving career related well-being and productivity in the long term. I will introduce new ways of perceiving successful construction careers and ways to support them.

It is inevitably important to view the themes of this thesis – career development and success at work – through the lenses of leadership. Work, and thus career development, in the construction industry has typically been project-based and sometimes fragmented (e.g., Dainty et al., 2007), requiring organizations to quickly adopt temporary work processes to ensure the prompt delivery of a service or product (Turner et al., 2008). This creates a dynamic work environment where employees are under pressure from high workloads, unclear expectations, and overly diverse job descriptions. These, in turn, are likely to affect employee well-being, job satisfaction, management, and ethical treatment (e.g., Turner et al., 2008). Success in work communities and management can be supported by promoting a positive organizational culture and the factors that contribute to employee job satisfaction (e.g., Garcea et al., 2010, p. 323).

1.2 Structure of the Thesis

This article-based dissertation follows a logical structure, which I will outline next. In this chapter, I briefly summarize the content of the three sub-publications (Studies I-III) and explain how the entire dissertation is organized. This work includes three peer-reviewed publications in which I examine experiences and perceptions of career development and success at work within Finnish construction management. All sub-publications are original, data-driven studies.

Study I focuses on uncovering perceptions of success at work and its preconditions, as experienced by individuals in managerial positions on construction sites. Study

II explores the career narratives of construction site managers with different professional backgrounds. Study III investigates how career support is perceived by supervisors across five construction companies.

Following this Introduction chapter, I will present the theoretical background of the study. Then, I will outline the research questions and the research design, including the methodological choices made. Towards the end of the dissertation, I will summarize and review the original publications, which form the basis for the summary and synthesis of this work. I will then discuss the study's findings and assess its limitations. Finally, I will conclude with theoretical and practical implications, along with suggestions for future research.

The primary aim of this dissertation is to shed light on how career development and success at work are experienced and supported within Finnish construction management, particularly in and around construction site activities. The use of this context provides flexibility to explore different perceptions of success and career development, allowing a more open-ended career examination rather than confining it to predefined descriptions. The full versions of Studies I-III are provided at the end of the dissertation (see Appendix 7).

2 Theoretical Perspectives on Careers in the Construction Field

This thesis focuses on the careers of people in various leadership positions in and around construction sites, positions which typically require higher education and work experience. In this theoretical section, I will begin by exploring the current characteristics of careers, relating them to specific features of the construction sector. Following this, I will present cross-sectoral perspectives on careers and career development. Success at work will then be defined through the lens of positive psychology, taking into account employee-specific factors, continuous learning, and other support mechanisms, both in general and in relation to career development in the construction field. This chapter will, therefore, establish the theoretical foundations on which this article-based dissertation is built.

2.1 Introduction to Modern Careers

In this doctoral thesis, I approach *career* by combining its psychological-sociological origins which focus on the career stages that surround occupational choice and development (Arthur et al., 1989; Chen, 1998; Dalton, 1989; Super, 1957) to the psychological approach which focuses on the broader notion of adult life course and the relationship of career to other major life activities (see e.g., Arthur et al., 1989). I thus define the concept of a career as an individual combination of education and work experience – linking primarily to working life and involving the importance of work and other life events (Chen, 1998; Gouws, 1995). In this case, career experiences, narratives, and goals are linked to the individual situation of each person and intertwined with contexts and environments (Baruch & Bozionelos, 2011; Cohen et al., 2004). This perspective recognizes the complex interplay between personal aspirations and external factors that influence an individual's career development.

I define career narratives and career development in this context as individual experiences intertwined with the contexts and environments which take into account all the shades and stages of life (see Arthur, 1994; Inkson et al., 2015; Vihtari, 2021). To understand learning and thus development, both an individual-cognitive and situational perspective are necessary (Greeno, 2015; Roth & Jornet, 2017). They can be used to examine, for example, whether a field is thought to be generative, whether the surrounding society determines activity in the midst of career choice, and whether careers can be actively constructed at all (Inkson et al., 2015; Super & Bohn,

1970; Vihtari, 2021). A multi-perspective approach also allows an interpretation of how society views the responsibility of the individual, the community, and society in career choice situations (e.g., Betz et al., 1989; Vihtari, 2021).

Several decades ago, careers were associated with people moving up the career ladder from performance-level positions in an organization to management positions in a company (Vihtari, 2021; see also Arthur, 1994; Super & Bohn, 1970). This organizationally linked view of careers has changed from aspiring to work in the same organization to working in different organizations and changing roles (Savickas, 2015; Vihtari, 2021). Simultaneously, attitudes towards life goals and career expectations have changed over recent decades (Uusiautti & Määttä, 2015). As Uusiautti and Määttä described, up until the 1970s, Finnish workers valued work more highly than home and leisure time, and success at work was mainly seen as climbing hierarchical ladders. Values began to change in the 1980s as the home and family began to receive greater levels of appreciation. Nowadays, these factors are of greater importance to employees' lives and workplaces have become less and less hierarchical (Uusiautti & Määttä, 2015, p. 2). These shifts reflect a broader transformation in the meaning of career success, with employees today seeking a more balanced approach that prioritizes personal fulfillment alongside professional achievement.

Today's psychological approaches to careers show that work that provides sense of purpose, challenge, and self-fulfillment, along with income, also becomes a positive source of identity, creativity, life challenge, as well as status and access to social networking (Baruch, 2004; Uusiautti & Määttä, 2015). In this context, the concept of modern careers can also refer to new approaches to career development. For example, career researchers have discussed the idea of future-oriented career adaptability, which refers to the psychosocial resources and continuous learning that enable individuals to overcome challenges in their career development (e.g., Savickas & Porfeli, 2012). Career adaptability focuses on four key dimensions: concern (i.e., future planning), control (i.e., career ownership), curiosity (i.e., exploring options), and confidence (i.e., belief in overcoming obstacles) (Savickas, 2011). These dimensions reflect a proactive approach to career development, emphasizing the importance of self-awareness and resilience in navigating today's dynamic work environments.

A career is made up of day-to-day work, and field-related features also affect individual construction careers. First, work at or near construction sites is experienced to be rewarding, heavy, and full of challenges that are nonetheless manageable (Mäki, 2021; Savinainen et al., 2011; Styhre, 2011). Mäki (2021) also states that site managers' daily work varies significantly between various managerial roles while being mobile, prone to disturbances and many types of problem-solving situations, and filled with collaboration. Secondly, social stereotypes and norms are still recognized and experienced in the field (Naoum et al., 2019; Raiden, 2016;

Styhre, 2011). Sandberg (2017) adopts a critical perspective, though, that challenges the assumption that site managers' everyday work practices are solely derived from macro-level industry characteristics. Instead, he emphasizes the importance of understanding managers' experiences, meaning-making, and responses to explore the practical manifestations of their work and how they navigate their work-life situations. But when considering gender effects, the construction industry is traditionally identified as masculine since physically demanding jobs favored men (Dainty & Neale, 2000). For example, the differences between men's and women's career progression have been studied and at all stages of their careers, it was found that women's career progression was more difficult, with pressures compounded by inflexible work arrangements and the open resentment of male colleagues. Addressing the gender issue has been identified as important if the sector is to develop a skilled workforce (e.g. Naoum et al., 2019; Raiden, 2016). The third typical feature is that, in the construction field, career calling (Hall & Chandler, 2005) is strong among actors (Wu et al., 2019) and the industry offers many satisfying and well-paying career paths (Gajjar et al., 2019).

As I explore different perceptions of career development and success, I acknowledge that career development can be multidirectional, with possible periods of study and training that strengthen an individual's professional competence (Vihtari, 2021). My interest is particularly focused on how careers develop in the construction field in, towards or around a leadership position. Therefore, on one hand, this thesis concerns the careers and success at work of people in leading or managerial positions around construction site operations. In a series of career presentations, Byers (2016) describes a construction manager's career and highlights that a construction site manager is not an entry level job, but rather a higher rung on a 'career ladder'. In practice, she clarifies that those working in managerial positions in the field are usually required to not only have a university degree but also work experience in construction.

Overall, leadership in and around construction sites is complex due to the many specific characteristics of the sector presented above. Pressure on economic productivity is indeed one of the most important criteria for site management (see Pekuri, 2015). As new construction projects begin, they bring people together from different organizations such as temporary work agencies and various contractors, and people should quickly create collaborative working conditions. This poses considerable challenges for management on construction sites where managers should lead both projects and people in this context (Styhre & Josephson, 2006). Various leadership styles and their combinations have thus been studied in the field and common elements seem to be that many of them emphasize the human and qualitative aspects even when speaking about productivity and performance management (e.g., Grill et al., 2023). Pekuri (2015) concluded that construction managers should avoid an overemphasis on productivity as there are several performance areas and metrics more

indicative of success. He continued that managers should understand, in practice, that the greatest economic benefits in the construction sector can potentially be obtained by streamlining non-value adding activities, rather than by working faster. Leadership style has been shown to have a direct impact on project success and thus, it is also important to select appropriate site managers for construction projects (Zavari & Asfar, 2023; see also Grill et al., 2023). The careers of managers in the construction field are strongly influenced by collective identification with the construction worker's profession, which emphasizes practicality and extensive work experience (Löwstedt & Räisänen, 2014). Overall, it seems that the industry does recognize the human values of leadership development and shares an interest in achieving productivity and success through positive means. Modern qualitative leadership studies (e.g., Hyvärinen, 2016; Karima, 2023; Klenke, 2008) confirm this trend in general.

It is worth mentioning that the consistent use of the terms *management* and *leadership* presents a challenge in this thesis, as management-related terms are commonly used in construction-related job titles. I will use *management* when referring to specific titles or tasks characteristic to the field or when this term is used in the sources from which I have quoted, as well as when discussing the concept of career management (see Hlanganipai & Mazanai, 2014). Otherwise, I will use *leadership*, with which I refer to key career support behaviors in leadership or consider leadership as a phenomenon or action in general (Klenke, 2008; see also Karima, 2023).

As shown in this chapter, career is a broad concept that can be considered to involve different stages of learning and working. In order to make the aspects of careers visible and to develop successful careers in the construction field, a closer look at careers in a specific context, as in this thesis, is both interesting and worthwhile. When researching careers, it is also important to be familiar with career theories, which will be presented in the next chapter.

2.2 Career Development Theories

The main traditions of career research that underpin and support the research design and multidisciplinary approach of this career development research is presented in this section. Dalton (1989) explains succinctly why career development as a term pair works. The term *career* in English dictionary (originally *carriere* in French) initially referred to *racing course*, expanding to also refer to 'swift course as of the sun through the sky' or to 'one's progress in life'. *Career* brings with it a connotation of progression or development with some course and when the word is used in organizations, it is frequently associated with the word development (p. 89).

Occupational choice, adjustment, and success are interactively produced by two distinct forces – the individual and the environment in which the individual

functions (Betz et al., 1989, p. 26). One way to categorize career theories is to classify them based on their historical background; as psychological where a career is viewed as coming from within a person, and as sociological where a career is viewed as coming from wider society (Super & Bohn, 1970; Vihtari, 2021). Thus, it can be viewed from an objective and subjective perspective (see Arthur, 1994; Marttila, 2015; Vihtari, 2021). Objective careers emphasize the aspect of being connected to social and cultural environments. According to Vihtari (2021; see also Arthur, 1994), objective careers start from the perspective of institutions and organizations. Qualifications, job titles, and position in the work community are central to the analysis of objective careers. A subjective career, in turn, refers to a person's capabilities and can be compared to an objective career, i.e., a person's position in an organizational structure (Arthur 1994; Vihtari, 2021). Vihtari (2021, p. 37) goes on to argue that a subjective approach can take into account the personal dimension of careers and the individual's own interpretations, explanations, and definitions. With this research design, I intend to enable a study of career development from both an objective and a subjective perspective.

The concept of a career does not belong to any one theoretical or disciplinary view, but merely shared among many perspectives: psychological notions may concentrate on the effect of dispositional differences on job adaptation, sociology on, for example, role behavior in organizational settings, and economic views on human capital accumulation through education and experience (Arthur et al., 1989, p. 7). A comprehensive system of theories and intervention strategies has one hundred years of history, starting from Parsons' Trait and factor theory (Leung, 2008). Further theories recognize parallel, and sometimes even competing, perspectives on careers, yet they commonly share developmental aspects (e.g., Arthur et al., 2019; Driver, 1982; Plant, 1997; Super, 1980). According to Leung (2008, p. 115), the following five career theories have guided career guidance and research in the past few decades internationally: (1) Theory of Work-Adjustment, (2) Holland's Theory of Vocational Personalities in Work Environment, (3) the Self-concept Theory of Career Development formulated by Super and later by Savickas, (4) Gottfredson's Theory of Circumscription and Compromise, and (5) Social Cognitive Career Theory. Additionally, careers can be approached, for example, through a life-span theory (Super, 1980; Super et al., 1996) or through the external influencers on career theories (Amundson, 2005) or careers themselves. Careers are conceptualized, for example, according to Inkson and Amundson's (2002, pp. 104-105) archetypal metaphors. Plant (1997) formulates work value thinking and Savickas (2011), in turn, presents a career construction theory which emphasizes the idea that individuals actively construct their careers throughout their lives.

It is also worth looking at non-mainstream career theories, and these also have a psychological outcome perspective on careers and success at work. Such is the *intelligent career theory* (Beigi et al., 2018; Xu et al., 2022), which is based on the

intelligent career framework of DeFillippi and Arthur (1996) (see also Parker et al., 2009). At the turn of the millennium, the ideals of the boundaryless career (Arthur & Rousseau, 1996), the protean career (Briscoe & Hall, 2006), and the intelligent career (Arthur et al., 1995) also began to challenge the traditional vertical and fixed career concept as models of career narratives in Finland (Marttila, 2015). Thus, the concept of the boundaryless career is a counterview to the traditional career concept, where work organizations and occupations created the structures, boundaries, hierarchies, and career paths for people to follow (Beigi et al., 2018; Marttila 2015, p. 28). This career idea might also be explored in other career contexts requiring higher education, such as the construction industry where the skills required of workers are very broad.

The above-mentioned theories and their primary orientations are presented in Table 1. The table includes the objective/organizational and the subjective/individual perspectives (see Dalton, 1989; Vihtari, 2021). A comprehensive perspective has been added by which I specifically refer to theories which seem to holistically consider both subjective and objective aspects of career development. I present theories with specifically developmental aspects, also utilizing Dalton's (1989), Coertse and Schepers' (2004) and Vihtari's (2021) works when formulating the division. In the table, the theories are presented in chronological order within the columns, and the order of the orientations presented is based on the changes in attitudes towards life goals and career expectations over recent decades (see Chapter 2.1).

Table 1. Division of career theories according to orientation

Career Theories		
Objective / Organizational Perspective	Subjective / Individual Perspective	Integrated Perspective
Driver's Theory Driver (1982) Division of various career types according to their developmental directions: linear, steady state, and spiral. Career Classification Plant (1997) Career classification formulates work value thinking into three categories: wage earners, career, creators and entrepreneurs.	Theory of Vocational Personalities in Work Environment Holland (1959) The Six Personality Types: Realistic "Do-ers" Investigative "Thinkers" Artistic "Creators" Social "Helpers" Entrepreneurial "Go-getters" Conventional "Organizers" The specific activities are related to the personality types and activities manifesting in certain occupations. The matching of an individual to one of these personality types provides direction for career choice.	The Trait and Factor Theory Parsons (1909) <i>Factors</i> refer to potential jobs and occupations, while <i>traits</i> refer to the characteristics of people seeking careers. The choice of a career depends on an accurate knowledge of the self, a thorough knowledge of job specifications, and the ability to find an optimal match between them. The theory assumes that there are individual characteristics and environmental requirements that can be matched to occupational profile and career choices.
Career Metaphors Inkson and Amundson (2002) Career metaphors and their application in theory and counseling practice. Metaphorical thinking advocates the use of "multiple metaphor" as a means of understanding careers. Ten archetypal career metaphors that describe them: 1) Journey, 2) Heritage, 3) Fit, 4) Seasons, 5) Growth, 6) Creative work, 7) Network, 8) Resource, 9) Story, and 10) Cultural phenomenon.	Career Anchors Model Schein (1978) Developmental career theory which focuses on five individual career anchors: Technical-functional competence Managerial competence Security and stability Creativity Autonomy and independence	Life-Span, Life-Space Theory Super (1957, see also 1980) The theory combines a developmental psychological view of human growth with a sociological view of occupational careers. It combines economic and social perspectives and the individual psychological study of career choice and career development. Developing a sense of self and realizing that one changes over time is important when planning one's career. Growth (14 – 15 yrs) Exploration (15 – 24 yrs) Establishment (to about 44 yrs) Maintenance (to about 65 yrs) Decline (65 yrs +)
Theory of Circumscription and Compromise Gottfredson (1981) The theory aims to describe how career choice develops in young people, focusing on the development of an individual's view of the occupational choices available. The theory assumes that people build a cognitive map of occupations by picking up occupational stereotypes from the environment: utilizing the dimensions of sex-type, prestige level, and field of work.	Hope Theory Snyder (2002) The Hope Theory defines the skills of self-motivation and reaching goals with the concept of hope. In the theory, hope is defined as a positive motivational state based on the interaction between goals, planned actions, and agency. Boundaryless Career Arthur and Rousseau (1996) A career that is not bound or tied to an organization and not represented by an orderly sequence. Boundaryless career is marked by less vertical coordination and stability than an organizational career.	Theory of Work-Adjustment, TWA Dawis, England and Lofquist (1964) This theory is also known as the Person-Environment Correspondence Theory and describes the relationship of the individual to his or her work environment. Social Cognitive Career Theory, SCCT Lent, Brown and Hackett (1994) Based on the Social Cognitive Theory developed by Bandura in 1986 (Bandura, 2001). The theory emphasizes the role of learning experiences, self-efficacy, and outcome expectations in the career development process. It is a model of career development delineating that a person's inputs, contextual affordances, and socio-cognitive variables affect the formation of vocational interests, career goals, and actions.
Intelligent career theory DeFillippi and Arthur (1994) The theory introduces three core competencies of intelligent enterprises: the company's 'knowing-how', social network, and organizational culture. These require employees to develop their 'knowing-how' career capital, 'knowing-whom' career capital, and 'knowing-why' career capital.	Protean Career Model Briscoe and Hall (2006) The protean career model approaches an individual's professional development that emphasizes self-direction, adaptability, and personal values. Protean career can refer to a career based on self-direction in the pursuit of psychological success in one's work.	Planned Happenstance Krumboltz (1999) Krumboltz's theory of career challenges conventional views around indecision, which is a response to the complex and changing world in which we live. The theory claims that complexity reduces the usefulness of career planning in a traditional sense. Instead, it supports the idea of how one can utilize ideas around luck and happenstance, claiming that external factors, chance events, and the unexpected dominate people's careers.
Intelligent Career Arthur, Claman and DeFillippi (1995) Career building in boundaryless contexts implies that the acquisition of career skills is the responsibility of the individual. The term 'intelligent career' was adopted in response to Quinn's (1992) ideas about intelligent enterprise.	Career Flow Model Niles, Amundson and Neault (2011) In this model, the flow metaphor illustrates different types of career experiences by comparing them to water conditions (e.g., still water, white water, stagnant water, or waterfall). Optimal career flow occurs when individuals are well-suited to the types of work challenges they encounter.	Career Construction Theory Savickas (2011) Career construction theory has three domains: vocational personality, career adaptability, and life themes. The theory emphasizes the idea that individuals actively construct their careers throughout their lives. The theory's five key points relate to life themes: career adaptability, narrative approach, life design, and the postmodern perspective.

The presented perspectives of career development may consist of measurable steps and career stages, or they may include an individual perspective such as values, goals, and the meaning of work set by the individual. Based on the multidisciplinary research and theories listed above, a career should not be defined as a single entity, nor does it appear the same to everyone. Instead, career studies recognize that first, careers are affected by the interaction between an individual and environment (see Arthur et al., 1989) and second, can be approached from individual, developmental, or organizational viewpoints, for example.

By presenting the theoretical diversity of career research, I aimed to illustrate its complexity and multidisciplinary, which concern construction field, too. I also emphasize that some theories have been further developed by other researchers and that Table 1 is merely illustrative rather than all-inclusive. The focus of the theories may thus be on the construction or formulation of a career, on personal traits or identities, on ethnic, cultural or gender aspects, on political or rhetorical viewpoints, on specific occupational fields, on perceptions of a career and, for example, on various career systems. As there are many career theories, it is reasonable to assume that there are differences in people's experiences and views on careers and therefore, it is also meaningful to study careers from the perspectives of experiences and conceptions. There are many career theories that can assist in analyzing the difference in people's experiences and views on careers. For the purposes of my research, I identified some similarities between the theories that I will review further. First, I am interested in how career development is perceived through the experience of succeeding in one's work and during one's career. This is also in line with the positive psychological starting point in my research. Second, I noticed that the theories pointed out numerous employee-specific factors. Third, some of the theories focus on identifying and conceptualizing careers largely through different organizational viewpoints, which is also an area of interest in my research as I examine construction organizations. Fourth, as my research concerns career development, which also initially includes learning aspects, career-long learning, or continuous learning, can be noticed in many of the career theories regardless of their orientation.

2.3 Elements of Successful Careers

The dynamics of a successful career are shaped not only by personal ambition but also by the evolving nature of work in today's world. This chapter will focus on the key elements that influence career success, both at the individual and collective levels. Additionally, by the following I will integrate established scientific traditions related to successful careers and work-related adult development.

2.3.1 Success at Work

The concepts of career success and success at work are often used interchangeably, both referring to succeeding either in a particular job or across a series of jobs throughout one's career. In this research, I have chosen to use the term *success at work* to refer to the success experienced and researched both in individual jobs and more broadly over the course of a career. But in this chapter, I will also introduce the concept of *career success*.

I approach success at work in this study specifically within the framework of positive psychology. Success at work is a viewpoint of careers that has seldom received academic attention in the construction field. However, based on the idea of identifying the premises of flourishing and optimal functioning at work (Csikszentmihályi, 2008; Seligman, 2013), and given the current changes in the nature of construction work introduced in Chapter 1, I find it important to analyze how success at work is perceived in the field and how it can be supported. The perspectives that *career success* and *success at work* provide to work in the construction field vary between the whole career span, to which *career success* refers, and the wide spectrum of successes in a particular job (e.g., expanding expertise at work or successful development during changes to work) on which *success at work* focuses.

Success at work is already a very widely researched topic (e.g., Achor, 2010 47 ; Hyvärinen et al., 2022, Karima, 2023; Linley et al., 2013; Uusiautti, 2008; 2016; 2019; Uusiautti & Määttä, 2016) and research often also covers educational and occupational perspectives (e.g., Gilman et al., 2009; Linley et al., 2013, Uusiautti & Määttä, 2015; Määttä & Uusiautti, 2023). The fundamental understanding of the topic is based on the view that, rather than seeking a generally measurable definition or indicators, success is understood as an individual experience (e.g., Uusiautti, 2019) where various definitions may be equally correct or relevant. Career success may thus refer to happiness and satisfaction but also to mastery and visible achievements (Seligman, 2013). When an employee is enthusiastic about work and feels self-fulfillment, work provides a state of flow (Csikszentmihályi, 2008) and there is a sense of commitment and joy (Uusiautti, 2016).

Some researchers divide success at work into positive psychological or work-related outcomes that one accumulates as a result of work experiences (Seibert, 1999; see also Bargsted et al., 2021). Thus, the first mentioned outcome could be described as the subjective judgments and experiences regarding individual career accomplishments and the meanings, such as career satisfaction and perceived career success (Heslin, 2005). For example, Uusiautti (2013) defined the concept of a worker's personal success at work as the combination of three elements: firstly, individual and context-bound features; secondly, positively focused proactivity at work; and finally, success manifested as a sense of meaningful doing, productivity, and perceived well-being at work. Therefore, success is conceived as outcomes people achieve during their work-life, which, in turn, influences worker satisfaction

and overall sense of well-being (Seligman, 2013; Uusiautti & Määttä, 2015). Work-related outcomes, in contrast, allude to aspects that are visible to others, such as salary, professional category, historical promotion trajectory, and prestige according to the social norms of what is expected (Heslin, 2005). Seligman (2013) suggests that success concerning careers is related to various aspects of an individual's life and states it can be experienced and defined in multiple ways; it may refer to happiness and satisfaction but also to mastery and visible achievements (Seligman, 2013), as approached in more traditional, objectively measurable initiatives.

Success can also be approached in relation to motivation (intrinsic motivation is also crucial when defining success from this positive perspective), good performance, and positive strategies, being also always context-bound (Deci & Ryan, 2008; Uusiautti, 2013) or viewed in the light of different career models and theories (Uusiautti, 2008). Also in the context of success at work career adaptability has been recognized as a significant predictor for positive career outcomes such as salary, promotability, and career satisfaction (Johnston, 2018; Rudolph et al., 2017).

Studies have also linked motivation and commitment dimensions to success at work. The concepts of competence and learning are closely related to motivation and job performance: the path from maximum performance to competence illustrates the learning mechanism associated with competence-enhancing work experiences (e.g., Uusiautti, 2016). Research has consistently shown that developing and flourishing at work in areas that interest an employee also strengthen the commitment to work, provide joy and well-being, and in many ways contribute to the success of individuals and thus, the whole company (Achor, 2010; Seligman, 2013; Uusiautti, 2015). As a result, the theoretical framework of success at work in this thesis is psychological so that individual experiences of success do not automatically exclude measurable indicators of success nor produce only *non-visible* outcomes.

Furthermore, success at work and career success can be seen as partly synonymous with the achievement of goals (e.g., Bargsted et al., 2021). The identification and perception of success is influenced, among other things, by an individual's attitude and curiosity towards life and self (Haenggli & Hirschi, 2020). While success at work is generally considered an outcome, there is evidence and theoretical approaches which show that success at work can also influence a range of career attitudes and behaviors (Spurk et al., 2019; see also Bargsted et al., 2021). Following Hyvärinen et al. (2015), the reasons for success, or alternatively failure, are thus seen depending on the individual attitude, either in oneself, outside oneself or, realistically, in their interaction.

2.3.2 Employee-Specific Factors

Employee-dependent factors in career paths include psychological, social, and cognitive elements that shape how an individual's career develops. These can involve personality traits and strengths (psychological), the social environment

and interactions (social), as well as educational background and work experience (cognitive). Ways to approach these factors may relate to socio-emotional intelligence (e.g., Lappalainen, 2015) or different types of capital, as I present in this chapter.

Previous research shows that both *psychological* (e.g., Saleem et al., 2022) and *social* capital (e.g., Naiduwa-Handi, 2020) contribute to the success of construction workers in their careers. Psychological capital can have a promising impact on construction workers' psychological health and possibly on positive performance (Saleem et al., 2022). Traditionally, *economic* capital received significant attention, but for at least two decades now, enlightened managers have recognized the importance of intangible human capital or intellectual capital – "*human* referring to the people working at all levels of the organization, and the economic term *capital* referring to the resources withdrawn from consumption that are invested for future anticipated returns." (Luthans et al., 2004, p. 45). As Luthans et al. (2004, p. 46) continue, human capital is "what you know," whereas social capital is "who you know" and positive psychological capital is "who you are". Next, I will provide a closer look at specifically social and psychological capital and how they are perceived in research.

Social capital, as Luthans et al. (2004) defines, is who people know and what kinds of social networks they have (see also Bourdieu, 1985). Social relationships and networks play an important role in both the successful career paths of those working in managerial positions in and around construction sites (e.g., Mäki, 2021) and in their everyday work. From the perspective of an individual who aspires to be a successful civil engineer (which is often the educational base of construction site managers), it appears that high social capital pays off (Ganiron, 2013). The work of construction site managers is described as 'work done with people' and site managers' descriptions of their job are fairly consistent, sometimes even heroic (Mäki, 2021). Social capital enhances their ability to work collaboratively, access resources, and build a support system that contributes to long-term success in their careers (e.g., Bryan et al., 2011).

In working life, "social capital can be used both inside a firm ("Whom can I turn to for help in solving this problem?") and outside ("Who can advise me on finding the best price and quality in making this purchasing decision?")" (Luthans et al., 2004, p. 46). Additionally, social capital has been stated to have a positive impact both on human resources and organizational areas, such as career success, turnover, executive compensation, and job seeking support as well as on inter-unit resource exchange, entrepreneurship, supplier relations, regional production networks, and intercompany learning (Adler & Kwon, 2002; Luthans et al., 2004).

In the construction context, networks and relationships, collaboration and mentorship, and social support are examples of social capital. Building strong professional networks within the construction industry can lead to opportunities and support (e.g., Mäki, 2021). Construction has been shown to be team-based work

in which effective collaboration improves overall project outcomes (e.g., Naiduwa-Handi, 2020). Having mentors can provide guidance, transfer of knowledge, and career development (Higgins & Kram, 2001) and finally, social support and positive relationships at work contribute to job satisfaction and mental well-being (e.g., Seligman, 2013).

An individual's career trajectory is strongly influenced by the psychological characteristics of the individual, such as personality and *psychological capital*. In this thesis, the focus is particularly on the latter, but studies of career (or life) outcomes and career success have also paid attention to personality traits (Madter et al., 2012; Soto, 2019). Before focusing on positive psychological capital, I will briefly present how personal traits (Soto, 2019) have been linked to career studies in the construction field. For example, there has been interest in studying the relationship between personality traits in the contexts of safety behavior (Sing et al., 2014; Hu et al., 2023), women's career choice in construction management (Moore & Gloeckner, 2007), and successful leadership in engineering fields (Lappalainen, 2015). Personal characteristics have also been found to moderate work stress in construction professionals (Kamardeen & Sunindijo, 2017) and the traits of construction management professionals have been studied (Ling et al., 2020), as has project management career development through personalities (Madter et al., 2012). In the context of psychological aspects in leadership research, *motives*—such as those identified in Murray's (1938) taxonomy—are crucial as they drive action. Murray's taxonomy outlines around thirty psychological needs or motives, such as the need for achievement, leadership, and cooperation, each with significant implications for human behavior and social functioning (Nederström & Niitamo, 2010). Expanding on this, McClelland (1975) identified a specific pattern of motives, known as the empire-building or leadership motive pattern, that contributes to effective management. This leadership motive encompasses various dimensions of leadership, including ambition, social status, power, titles, competition, as well as task and people management (Lappalainen, 2012). In addition to examining specific motives, the broader concept of motivation is also relevant in this context. Research indicates that discussions typically focus more on what motivates employees rather than leaders (Erceg et al., 2019). Erceg et al. (2019) emphasize that successful managers require a combination of specific competencies and a strong sense of motivation to effectively lead both their team and the organization.

Distinct from personality traits and motives, by *positive psychological capital* researchers primarily mean psychological capacities. Luthans et al. (2004) refer to four positive psychological capacities: confidence, hope, optimism, and resilience, thus specifically emphasizing strengths rather than weaknesses and health and vitality rather than illness and pathology (see also Seligman, 2002). Confidence is the power of believing you can (Maddux, 2009) and is the core belief that one has the power to produce desired results, so unless people believe that they have this power, they

have little motivation to act or persevere in the face of difficulty (Bandura, 2001). Optimism refers to people's expectations of the future, where optimistic people are the ones who expect a positive outcome even when things are hard (Carver & Scheier, 2009). There are benefits to positive thinking, as expectations influence how people confront situations and thus influence the degree of success they experience (Carver & Scheier, 2009). While hope, as defined by Snyder, et al. (1996), is "a cognitive set comprising agency (belief in one's capacity to initiate and sustain actions) and pathways (belief in one's capacity to generate routes) to reach goals". Enrick (2005) described hope as a positive motivational state with two important components, "willpower" and "way power". In other words, hopeful thoughts reflect the belief that one can find pathways to desired goals and become driven to use those pathways (Snyder et al., 2002). According to Elsafty et al. (2020, p. 62) resilience is the process of adapting well in the face of adversity (see also Enrick, 2005); it is the capacity to bounce back from hardship (see also Luthans et al., 2004). In the construction context, resilience becomes significant during the often-demanding construction projects and helps workers bounce back from challenges and setbacks. Optimism, e.g., a positive outlook, can enhance problem-solving and coping abilities, fostering a proactive approach to work and self-efficacy: e.g., believing in one's capabilities contributes to confidence and the ability to take on new challenges (Elsafty et al., 2020).

In order to grow a workforce with social and psychological capital, it is crucial to promote the development of these qualities already at the educational stage. Effective career guidance itself can be seen as a form of social capital for students (Bryan et al., 2011), while it also increases a student's psychological capital to make self-appreciative and well-being-promoting career decisions that illustrate hope, optimism, self-confidence, and resilience (Luthans et al., 2004; Katajisto et al., 2021). If students are equipped with a strong foundation of psychological and social capital, they will be better prepared to navigate the complexities of the modern workforce. Previous research asserts the need to both raise awareness of career possibilities related to construction management (Wilkes et al., 2015) and to consider gender diversity when directing students to construction (Francis & Prosser, 2013). Such guidance helps students find meaningful careers and understand their abilities and strengths in different positions (see also Hyvärinen et al., 2022). If career guidance in the construction field is to be developed in such a way that inspires new students and future employees, it is essential to reveal the aspects individuals see as important in their career development (MacDonald & Durdyev, 2021; Francis & Prosser, 2013).

As shown in this section, there are numerous employee-specific factors that influence careers and success at work, which makes the research around the topic multidimensional. Next, I will present a variety of organizational mechanisms that support employees' career development in the construction field.

2.3.3 Organizational Support Mechanisms

From an organizational point of view, there are numerous support mechanisms that impact employees' career development. These mechanisms are shaped by the nature and structure of the organizations themselves, which create the work settings in which employees operate. Since the major shift from individual family farms to complex organizations in the 20th century, a significant portion of people's lives has been spent within organizational environments (Dalton, 1998). However, with the rise of remote and hybrid work, the boundaries of these environments have evolved, extending beyond physical workplaces to virtual spaces (Bal & Bulgur, 2023), which further underscores the need to consider the organizational practices' influence on employees' careers. In the 2020s, organizational career support mechanisms take various forms. One example is knowledge-based support, which focuses on leveraging organizational resources to enhance performance and knowledge-sharing (Sepúlveda-Rivillas et al., 2022), while another is career-phase-related support, such as that directed toward early career project managers (Borg & Scott-Young, 2022). In addition to these approaches, there are mechanisms that are increasingly person-oriented, emphasizing the importance of employee thriving and personal development. For instance, fostering employee strengths and creating supportive, innovative work environments are key strategies for helping employees identify, develop, and utilize their strengths (Guan & Frenkel, 2020). Emotion-related organizational support promotes young construction professionals' resilience, and thus many internal protective factors (Turner & Holdsworth, 2023). Job crafting, in turn, is a modern career support mechanism aimed at addressing dynamic changes in working life and promoting meaningful work experiences (Miao et al., 2023). These person-centered approaches are crucial for employees' sense of agency and fulfillment (Guan & Frenkel, 2020; Miao et al., 2023). Furthermore, organizational support can be examined from an ethical leadership perspective, where leaders focus on creating a positive ethical environment that enhances employee wellbeing (Cheng et al., 2022). These examples reflect the growing trend toward person-oriented support mechanisms, aimed at fostering personalized support and meaningful engagement in career development.

Given the current trends in the construction sector, such as employees increasingly managing their own careers, the need for continuous learning, and the growth of on-the-job training, formal or informal mentor-structures are seen crucial (Nkomo et al., 2018; Son & Kim, 2013). Mentors traditionally provide career development and psychosocial support, offering advice and feedback to assist with personal growth, identity, and self-worth (Kram, 1985). Formal mentoring here means that the favorable outcomes of mentoring relationships have led many companies to implement structured mentoring programs (Nkomo et al., 2018). The informal mentoring relationships, in turn, are such that they develop naturally (Ragins et al., 2000). Thus, mentoring plays a key role in employee development.

Supported by various theories of employee growth, it is widely recognized as a vital tool for facilitating learning and is recommended as essential for human resource development (Nkomo et al., 2018; see also Son & Kim, 2013).

Support mechanisms may also be company-specific, such as career programs, designed for employee development. Human resource management plays an important role in keeping employees employed and motivated (Dainty et al., 2008). Contemporary emphasis is placed on the role of human resource management in improving organizational performance, and leaders are encouraged to design human resource systems that are both mature and integrated with the overall objectives of the organization (Botelho et al., 2023). Organizations need to meet their employees' expectations in terms of the formal aspects of employment contracts, but also in terms of less formal expectations related to the employment relationship, for example called psychological contracts (Dainty et al., 2008; see also Aitio, 2024). Thus, companies can positively affect employee retention via good career management practices (Hlanganipai & Mazanai, 2014). Supervisors and leaders therefore play a significant role in the successful implementation of career support practices. In construction companies, human resource managers may design career programs to match employees' capabilities and interests with organizational requirements and opportunities (Ismail et al., 2014). Here, by career programs I refer to employees' complete work experience in organizations (Ismail et al., 2014; Roongrerngsuke & Liefoghe, 2013). When these programs are properly designed and implemented, it can steadily promote the career advancement of employees in organizations (Ismail et al., 2013, see also Baruch, 2004) and affect the previously confirmed concern that construction companies nowadays face challenges regarding voluntary employee turnover (Chagadama et al., 2022). Smaller companies may not have official or strategic career programs (e.g., Chagadama et al., 2022; Perrenoud, 2020) but career support may still be included in company values, leadership practices, and efforts to strengthen employee competence or practical needs, which then provide the structure for support.

2.3.4 Attitudes and Opportunities for Continuous Learning

Currently, people and work communities are increasingly dealing with the concept of *continuous learning* (see Zaitouni et al., 2020) which affects careers and career research, too. The requirements and trends of continuous learning also characterize career development and success at work in the construction field, concerning both individuals and organizations. The concept precedes many other terms appropriate to the time, by which learning across school-work transitions was discussed (see Centeno, 2011; Siirilä et al., 2021). However, I use the concept of continuous learning, which refers to the ongoing broadening of skills and skill sets through learning and knowledge acquisition (Määttä & Uusiautti, 2023). In work and organizational contexts, Siirilä et al. (2021) describe continuous learning to be

positioned outside formal education and thus being less goal oriented. This can be interpreted to mean that what has been learned as a result of the learning process becomes less visible in organizations because learning outcomes are not measured in the same way as in formal education. Instead, continuous learning is woven into the maintenance and development of competences in the workplace as an operational process (Siirilä et al., 2021).

There is a recognizable *attitude* in the world of work and in research that continuous learning is important for career development and success at work. The career-related learning that takes place in working life and along careers has become a requirement for employees, and employers have a key role in utilizing both formal and informal continuous learning (Rowold & Kauffeld, 2009). Previous studies have shown that work-life has had a growing interest in strengthening thriving, the psychological state in which individuals experience both a sense of vitality and learning (e.g., Paterson, et al., 2014; Porath et al., 2012; Uusiautti & Määttä, 2015). Internationally, megatrends (Wang et al., 2022) and features characteristic of 21st century work affect careers and leadership practices, causing a need to continuously learn (Zaitouni et al., 2020, see also Lappalainen, 2015). These features were presented in Chapter 2.1 (Introduction to Modern Careers) in more detail, being identified as artificial intelligence and machine learning (Frey & Osborne, 2023), technological development, globalization, dynamic economic and structural changes, rapid obsolescence of knowledge, employment prospects and career redefinition, human needs and the purpose of work, and the implications of education in the world of work (Burns, 2020). Thus, the development of materials, use of sophisticated technologies, increased customer demands, and the growing competition among construction companies set a requirement of a high degree of specialization. Continuous learning is essential for construction managers to enhance the key competencies—knowledge, skills, and attitudes—necessary for project success (Nuwan et al., 2021). Nuwan et al. (2021) highlight the importance of proper training methods and approaches in developing these competencies, identifying key elements that contribute to their effectiveness in the field. The importance of communication skills and the significance of providing timely feedback and evaluations for engineers and construction professionals are also highlighted, emphasizing that these skills are equally as important to develop as technical abilities (Becker et al., 2014; see also Lappalainen; 2015). Within the new demands of ever-changing work life, success at work requires an active willingness for continuing development and learning (Uusiautti, 2016).

Opportunities for continuous learning arise throughout a career, for example, in the form of self-training for employees and as diverse learning opportunities offered by organizations. Active participation in in-service training and other career-related learning opportunities provides the grounds for successful development in managerial positions (Kuznia et al., 2010). Generally, in the careers of today's leaders, it seems to be crucial for development that leaders have the ability, willingness, and desire

to seize opportunities for learning and self-development (Fleming, 2001; Karima, 2023; Niles et al., 2011). In the construction field, learning a profession through hands-on work, master-apprentice-style learning (see Billett, 2016), and mentoring (Hoffmeister et al., 2011) have traditionally been opportunities to develop along careers. Personal networks have also been shown to be a common source of learning, as has shared learning (Wasif et al., 2012).

Career development in the construction field is shaped by both individual and external factors. With the unpredictability of careers and the high need to adapt to a changing industry, continuous learning plays a crucial role in contemporary times. However, continuous learning should not be an end in itself. Instead, it is important to reflect (also critically) on why one should learn continuously in the first place. Sterling (2011) divides human and community learning into three levels: cognitive, metacognitive, and epistemic (transformative) learning. The latter, transformative learning, is particularly well suited to the attitudes and opportunities presented in this chapter. It does not refer to model-based learning but rather to more reflective, reflexive, and questioning learning (Sterling, 2011). This type of learning changes people's fundamental understandings of humanity and their relationship with the world around them, aiming to create learning communities and networks that make new sustainable ways of living a reality (O'Sullivan et al., 2002; Sterling, 2011).

The need for individual, shared, and organizational learning has long been recognized (e.g., Wasif et al., 2012). However, the role of continuous learning in career development in the construction field appears only scarcely researched. Having now summarized the viewpoints concerning continuous learning, it is noticeable that it concerns individual and organizational parties of topical working life, regardless of workers' educational backgrounds or positions (see also Määttä & Uusiautti, 2023) or the type of the organizations.

3 Research Questions

Careers in the construction field are changing and new perspectives of career development and support are needed. The purpose of this thesis is to examine the perceptions and experiences related to career development and success in the construction industry, particularly in and around construction sites. From an academic perspective, I aim to highlight the experiential aspects of career development and, at the same time, strengthen career research in the construction sector by integrating approaches from positive psychology and continuous learning. On a practical level, I seek to find answers that could be applied in construction education and workplaces to support successful careers, enabling as many people as possible to experience success in their work. I also seek to find answers to the shortage of experienced supervisors in the sector at the time of the study.

In order to meet these objectives, I have designed a research project consisting of three studies, which together answer the main question of the dissertation.

The main research question is:

How are career development and success at work experienced and supported in the construction field?

The main research question was answered through three studies that each had their own specific research questions.

Study I focused on site managers' perceptions of success:

- (1) How do site managers perceive success at work from their different subject positions?
- (2) What are the subject-position-related preconditions to success at work according to their descriptions?

Study II analyzed construction site managers' career narratives:

- (1) How do managers of construction sites with different professional backgrounds describe their careers?
- (2) What kinds of similarities and differences appear in their career narratives?

Study III investigated career support perceptions:

How do supervisors perceive the employees' career support in construction companies?

4 Implementation of the Research

In this chapter, I cover the philosophical and methodological foundations of the research, presenting data collection, participants' information and methods of analysis. Finally, I discuss the reliability and ethical issues of the research.

4.1 Worldview and Methodological Choices

I will briefly discuss the ontological and epistemological viewpoints before moving on to conceptual viewpoints and scientific traditions in more detail. In order to present and justify my methodological choices, I first clarify that from a methodological viewpoint, the core concepts of my research are *experience* and *perceptions*. I examined them in the conceptual contexts of career development, success at work, and career support.

I lean on the worldview that reality can be simultaneously socially and individually constructed. Thus, drawing on the dual lens of social constructionism and constructivism (Young & Collin, 2004, see also Hughes et al., 2022), I applied the qualitative methods – narrative and phenomenographic – from both psychological and educational approaches when implementing this doctoral thesis. In *social constructionism*, a great deal of human life exists as it does due to social and interpersonal influences (Gergen, 1985). Social practices and relationships have cultural implications, and so social constructionism, with its focus on relationships, is applicable to understanding the environment of work and career as in this thesis. Relationships construct cultures and recursively, cultures construct relationships. Meanings differ across cultures and contexts, and no word or thought is an expression of a reality that reflects nature, but they are considered socially and culturally constructed (Stead 2004, p. 391). Stead (2004) also points out that social constructionism highlights how the core constructs of career psychology, such as personality and vocational interests, are not necessarily universal but unexamined cultural constructions. Thus, as Young and Collin (2004, p. 375) state, it emphasizes that the social and psychological worlds are made real (constructed) through social processes and interaction. Thus, the constructionist side emphasizes here that individual careers are not made in a vacuum, but within a social, cultural and institutional framework. Careers can thus be seen as a socially constructed reality where meanings are constructed and negotiated through interactions with others, such as mentors, supervisors, peers and societal expectations.

Constructivism, in turn, asserts that an individual's construction of reality is "from the inside out" through the individual's own thinking and processing (Patton & McMahon, 2014), proposing that each individual mentally constructs the world of experience through cognitive processes (Young & Collin, 2004, p. 374). As stated among researchers of culture and career psychology (e.g., Stead, 2004; Young & Collin, 2004; Cohen et al., 2004), social constructivism accepts that there are many 'truths' which are perspectival and situated in relationships. This ontological viewpoint was common in early psychology (and is still linked to individual, non-verbal experiencing), as I will describe later in this chapter. Thus, this perspective is also relevant in this thesis due to shedding light on individual experiences about successful careers and thus, the aim of creating collective understanding about the multiple ways to strengthen and support them. In this research, the approach emphasizes self-reflection, personal meaning-making, and the subjective experiences of career development. The focus is on understanding how individuals interpret their career journeys, set goals, and make choices based on their personal histories and aspirations.

As the aim of experience research is not to provide objective information or explanations, but to understand the *experiences* of those being studied (Perttula & Latomaa, 2005); the narrative methods I utilized allowed me to explore careers through individual experiences. Research of experience avoids starting from theories that structure the studied phenomenon so as to maintain the sensitivity to listen to the subjects' own articulations, seeking to bring out the perspectives of the participants (e.g., Perttula & Latomaa, 2005). Historically, the concept of individual experience is relatively new, having only become common in the 1800s to emphasize the holistic nature of human experience and individual variability as a reaction to the assumption that humans were essentially rational beings that could be explained universally by natural science (Tökkäri, 2018, pp. 64-65; see also Gadamer, 1981). Narrative research underlines the linguistic and narrative nature of experience and from this perspective, experiences are constructed both individually and socially (Tökkäri, 2018, p. 65). While narrative- oriented research does not necessarily assume that the interviewee is telling the truth about personal experiences, it does inevitably assume that the narratives have some connection to the experiences (Tökkäri, 2018, p. 69). In positive psychology, Csíkszentmihályi (2008) uses the term *optimal experience* when describing individuals feeling a sense of exhilaration, a deep sense of enjoyment, which people tend to cherish for a long time and that becomes a landmark in their lives. These moments, Csíkszentmihályi (2008) continues, are often not passive, receptive relaxing times. Instead, they tend to occur when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something that is difficult or worthwhile. My approach and interpretations about career experiences also concentrate on the optimal sides of the career experiences.

While exploring *perceptions* of career support, I drew on adult learning research traditions. In the fields of educational and developmental psychology, perceptions can be linked to learning and thus studied phenomenographically (see e.g., Aitio, 2024; Karima, 2023). Following phenomenographic thinking, perception means giving meaning to a phenomenon and has a deeper and broader meaning than opinion (Niikko, 2003, p. 27). It is formed as a constructive activity whereby new perceptions are built on previous perceptions as people reflect on their experiences (Niikko, 2003, p. 27). Additionally, the developmental approaches of psychology argue that the (working) world can be improved not only by reversing malignant conditions, but also by developing the character and strengths of individuals and different types of communities (Seligman, 2013). Furthermore, Seligman (2013) states that, according to positive psychological principles, positive features as strengths can be trained and learning can take place around them. Thus, I base my research formation on the idea that uncovering individual perceptions of success and career support enables learning and development on these topics.

Ontological premises in the psychological sciences are traditionally diverse. The perspective of the subject and the relationship between humans and the environment have been challenged throughout the history of psychology, with the most common viewpoint being to consider humans and the environment as two separate entities (Suorsa, 2018, pp. 85-87). However, in topical applied psychology, such as educational, developmental, or positive psychology, there is no need to separate the individual from the environment, but rather allows the subjective experiences and perceptions and their intertwining with the environment to be highlighted (see e.g., Seligman, 2013; Roth & Jornet, 2017; Suorsa, 2018). This is how I assume these parties interact, develop, and seamlessly learn in work contexts. Furthermore, in the modern discussion of educational psychology, a certain consensus can be identified that, in order to understand learning, an individual-cognitive, as well as a situational, perspective are both necessary (Greeno, 2015; Roth & Jornet, 2017; Suorsa, 2018). However, the individual and the environment should be seen as an intertwined, dynamic, and evolving whole, without confusing them or reducing this dialectic to interaction (Roth & Jornet, 2017; Suorsa, 2018).

This doctoral thesis consists of three qualitative studies and resembles multi-method research, meaning that it uses several qualitative research methods but the same paradigm (e.g., Tashakkori & Teddlie, 2010; Uusiautti, 2008). The constructivist-constructionist paradigm on which this thesis is based represents a comprehensive framework for understanding the complex and relational nature of career development, recognizing both the agency of the individual and the influence of social structures. It represents a nuanced understanding of how careers are both personally meaningful and socially situated, and offers insights into how individuals create their careers within a complex set of social expectations, cultural narratives and institutional structures. The first and second studies apply a narrative research

approach, the third study's research approach is phenomenographic. According to Darbyshire et al. (2005, p. 417), a multi-method research approach is also a valuable approach to research as its use offers alternative perspectives and insights into research problems that might be difficult to discover using only one research method.

By applying multiple methods, I aimed to create a systematic research design which approaches the research problem from several angles, with each study forming its own investigation of the phenomenon under study (Morse 1994, pp. 220-234). Thus, I was able to produce a comprehensive, qualitative description of careers and success in the construction field. On one hand, I reached individual, narrative aspects of the career experiencers and on the other, I was able to strengthen the research dynamics by looking at company representatives' perceptions of career support in construction companies from a phenomenographic perspective.

Telling one's own story is an ancient and universal tradition. As Hartung (2013, p. 33) presents, "Human life lives in a story. Everyone has a story to tell and most of us want desperately to tell it". In Studies I and II, I sought to investigate individual perspectives of career development and success in the construction industry by applying a narrative research approach. Thus, the research material is based on the narratives of people working in managerial positions in and around construction sites.

The narrative research approach provided a suitable framework for collecting the stories of the research subjects and allowed careers and success at work to be addressed through the individuals' own life experiences and the narrator's own reflection (Polkinghorne, 1995). As Polkinghorne (1988) presents, "narrative is a scheme by means of which human beings give meaning to their experience of temporality and personal actions. Narrative meaning functions to give form to the understanding of a purpose to life and to join everyday actions and events into episodic units. It provides a framework for understanding the past events of one's life and for planning future actions" (p. 11). Thus, the method was suitable for research with a multidisciplinary theoretical background (and constructivist worldview), as individual career stories tend to be multilayered (e.g., Bujold, 2004). I was interested in how individuals articulate their views and experiences in response to the research questions. Narrative research, after all, seeks to describe the many dimensions of experience and to understand how experience plays a part in the story being told (Perttula & Latomaa, 2005). As in narrative research in general, the narrator's own reflection was desirable in these studies (e.g., Lieblich et al., 1998; Riessman, 2007). Through narrative research, I was able to explore the meanings of human actions and phenomena as constructed in the narratives of the participating construction professionals. I focused on the stories concerning careers and success at work, thus providing a portrait of the story in culture and society that represents the phenomenon in question.

In Study III, the research approach is phenomenographic and aims to explore managers' perceptions of support for success in the construction industry. The context of the research is the construction companies and, to some extent, the opportunities they offer for support. Interviewees were also asked about their own ways of supporting employees in their careers. Phenomenographic research is based on the idea that people have different perceptions of the issue under study, in this context, supporting employees' strengths and success at work. The aim is to gather these different perceptions of the phenomenon and to examine how the meaning of the phenomenon is shaped by these different perceptions (e.g., Sin, 2010).

Using phenomenographic methodology, the study brings together the descriptions, perceptions, and conceptualizations of the participating managers on the subject under study. It is hoped that the results will lead to new or different ways of perceiving the phenomenon than those that the researcher has done before (see Uutela, 2019). In phenomenography, there is also no one right method of data collection, although various empirical thematic and open-ended interviews are common, but the research method also enables other ways of collecting data. I strived to discover supervisors' diverse, even contradictory, perceptions of *employees' career support* in construction companies and to generate new insights into the phenomenon (e.g., Harris, 2011; Marton & Pong, 2007; Sin, 2010). Thus, this methodological approach suited Study III.

Marton describes phenomenography as a method "adopted for mapping the qualitatively different ways in which people experience, conceptualize, perceive, and understand various aspects of, and phenomena in, the world around them" (Marton, 1986, p. 31). Being established and used in education for decades (Marton & Booth, 1997), it is also extensively applied in other disciplines on the topic of workplace studies (Sandberg, 2000; Teeter & Sandberg, 2016). The content of the perceptions and the relationship between the perceptions (e.g., Marton & Pong, 2007) were of particular interest to me. The concepts arise through the how-and-what aspect: how do the interviewees understand the theme and what elements are included (see Harris, 2011). Simply, how they see the world around them determines what they will see. Even though every interviewee represented their own interpretation of the phenomenon, conceptions are not studied at the level of individuals, but as the whole set of meanings; the qualitatively different perceptions that are, at least to some extent, socially accepted and shared among a certain group (Marton, 1986).

Table 2. Summary of publications

	Article name and publication channel	Research questions	Method and data	Analysis
Study I	Success at Work and Its Preconditions in Construction Site Managers' Career Stories. Published: Rautio, K. (2022) In Hyvärinen, S., Äärelä, T., & Uusiautti, S. (Eds.) (2022) Positive Education and Work: Less Struggling, More Flourishing. University of Cambridge: Cambridge Scholars Publishing. 121–148.	How do site managers perceive success at work from their different subject positions? What are the subject-position-related preconditions to success at work according to their descriptions?	Method: Narrative Data: Semi-structured interviews of 21 interviewees (male N=19, female N=2).	Analysis of narratives, participant role analysis.
Study II	Career development to construction site managerial positions in the construction field. Published: Rautio, K., Uusiautti, S., & Hyvärinen, S. (2023). Journal of Professional and Vocational Education 25(2).	How do managers of construction sites with different kinds of professional backgrounds describe their careers? What kinds of similarities and differences appear in their career narratives?	Method: Narrative Data: Semi-structured interviews of 21 interviewees (male N=19, female N=2).	Analysis of narratives and narrative analysis.
Study III	New insights into career-related continuous learning in construction companies - supervisor conceptions of career support. Published: Rautio, K. & Uusiautti, S. (2024). Journal of Adult and Continuing Education.	How do supervisors perceive the employees' career support in construction companies?	Method: Phenomenographical Data: Semi-structured interviews of 23 interviewees from five construction companies (male N=21, female N=2).	Phenomenographic analysis.

4.2 Data Collection and Participants

To explore the research questions effectively and comprehensively, I carefully designed the data collection process to capture both individual career experiences and broader organizational perspectives, while maintaining a personal focus. The selected participants represent key voices in the construction industry and offer a wide range of perspectives. In the following subsections, I will present information about the data collection and the participants in the study. I will discuss Studies I and II in the same subsection, as they are both narrative studies, and Study III separately due to the phenomenographic approach.

4.2.1 Studies I-II

In the narrative studies (Study I and II), I applied narrative research interviews which, according to De Fina (2015), can be seen as an interaction in which the interviewer and interviewee construct a narrative. The interviewer influences the interviewee with his or her questions so that the interviewee shapes his or her narrative to fit the

interviewer's context. On the other hand, the interviewee's narrative also reciprocally influences the interviewer's clarifying questions. Narrative interviewing was used to explore the relationship of the research subject (the narrator) to the phenomenon under study (e.g., Riessman, 2007) and thus, produced individual narratives as data (see e.g., Polkinghorne, 1988). In narrative research, an interview can be conducted in a variety of ways and the focus of the interview should be in establishing a climate that allows for storytelling in all its forms (Riessman, 2007, p. 23; see also Mishler, 1999).

To enable a narrative approach and atmosphere in the interviews, I designed semi-structured frameworks for the interviews (Brinkmann, 2018; Ollerenshaw & Creswell, 2002) for two reasons. First, I aimed to pursue informal, confidential, and comfortable interview situations in which both parties (myself as a researcher and the interviewee) would feel free to say or ask for knowledge-producing additional information instead of being tied to questions exactly as worded and not providing further information as would be the case in more structured interviews (Brinkmann, 2018, p. 579). Second, I considered it important to have the possibility of focusing the conversation on the studied issues (see Brinkmann, 2018); therefore, a thematized body of a questionnaire (see Appendix 2) was necessary.

With a diverse range of qualifications, individuals can pursue various positions, particularly in the private sector, beyond just infrastructure or building construction. Thus, the career paths of the research participants do not necessarily consist of jobs *in a specific sector* of the construction industry. Further, many construction firms operate across a broad range of construction activities, for example, a firm may do both civil engineering, demolition, and infrastructure work and a competitive advantage or prerequisite for a company's profitability may be in having the appropriate certifications (e.g., The Confederation of Finnish Construction Industries, 2024). To refine the research objectives, I went through the different actors involved in construction sites aiming to identify the job descriptions that combine managerial and leadership tasks in and around construction sites. It was thus reasonable to assume that these people would have some level of career development experience, having attained their positions through education, work experience, or a combination of both.

In order to find interviewees, I addressed an invitation letter for Studies I and II to those working in construction site managerial positions. This allowed recipients to determine whether they fit the description regardless of their current title. All participants received the same information in advance. Research data was obtained by snowballing: I published the invitation letter on LinkedIn and delivered it to my contacts with forwarding requests via email and WhatsApp. I shared the invitation to parties independent of my contacts, such as construction associations and companies, and I published the invitation in the weekly magazine *Rakennuslehti* (whose target audience deals with the management and supervision of construction

projects) as well as by directly contacting representatives of the target group of the study. Interestingly, none of those who agreed to be interviewed withdrew or postponed their participation.

The aim of Studies I and II was to gather narratives about what success at work means to those in construction management and leadership positions, what individual and external factors they describe as related to success, and what the career narratives of the subjects are. Respondents were asked to reflect on events, people, experiences, and feelings that were important and meaningful to them in relation to their career and the factors that influenced it. The data for Studies I and II were collected simultaneously using a narrative approach, whereby respondents were given the opportunity to produce their own story, either in writing or orally in a personal interview or via a WhatsApp message, for example, whichever method they felt most comfortable with.

The initial research plan aimed to include around 30 interviewees; however, as the interviews progressed, it became reasonable to assume that data saturation was being approached, particularly regarding the various phases of career development and the elements and individuals influencing career trajectories. The material began to show significant repetition, with many similarities emerging across interviews, even before reaching 20 participants. Therefore, 21 interviews seemed to be sufficient. The number of interviewees could have been expanded in terms of age, gender, or cultural diversity but on the other hand, invitations to the interview according to the background variables of the targeted participants could have led to a different focus in the story.

Twenty of the interviews were conducted orally via video link via Teams or by telephone and one interviewee participated in writing. For participation via writing, a written task was carefully designed to address the research question, giving the respondent the freedom to decide what to include and exclude from their narrative, but still guiding them to answer the research question with the same interview questions as the oral interviews. To support the answers, the interview may have provided themes and suggestions that could be addressed or ignored in the answer (see also Salmela & Uusiautti, 2017, p. 46.) To begin the interviews with a narrative approach, I first asked the interviewees to tell their career stories and after that, they were asked about their perceptions of success at work and the factors influencing them. The interviews were conducted in Finnish.

In the initial research plan, I specified that if the data collection revealed that the written or independently dictated data would have been too limited for the study and/or the oral interview data would have been too narrow, the data collection could be supplemented by interviews with independent (written or dictated) respondents. If the narrative research material would have been collected in this two-stage manner, the data collection would also enable the research subjects who have participated in writing to express themselves orally (Salmela & Uusiautti 2017, pp. 45–46). In the

second (in this context complementary) phase of data collection, the participants in the written or dictation phase would thus have had the opportunity to refine and deepen the themes presented in their narratives (see Salmela & Uusiautti 2017, p. 46). However, this was not the case as the interviews were conducted orally and only one response was written, again very detailed rather than concise.

The research material of Studies I and II comprised 21 oral (N = 20) and written (N = 1) interviews. Nineteen of the interviewees were men, and two were women. The ages varied between 25 and 74 years (< 30 N = 2, 30 – 39 N = 7, 40 – 49 N = 2, 50 – 59 N = 4, 60 > N = 5, 70 > N = 1). Educational backgrounds varied, and in cases where the completed degree “construction technician” no longer exists, the corresponding degree (which is, according to the interviewed technicians, *master builder*) is reported. (*Until the 1990s, the construction technicians’ degree was a college-level degree that was below the level of an engineering degree.*) For clarity, the letters after degrees refer to the Finnish education system. There are two types of higher education institutions in Finland: universities and universities of applied sciences (UAS). The UASs confer both bachelor’s and master’s degrees, of which engineers’ degrees refer to the bachelor-level. Master-level UAS degrees can be enrolled in after some years of work experience or direct study in *a university* (Finnish National Agency for Education, 2024). The educational backgrounds of the interviewees were as follows: undergraduate degree in construction (N = 1), master builder UAS (N = 10), master builder UAS and engineer UAS (N = 1), engineer UAS (N = 5), engineer UAS and master’s degree in construction UAS (N = 1) and engineer (N = 3). One had updated a former technician’s degree to master builder, though this is reported just once.

The job titles of the participants were foreman (N = 5), site manager and responsible site manager (N = 8), construction manager (N = 3), construction engineer (N = 1), chief executive manager (N = 1), technical manager (N = 1), business director (N = 1), and retired from a responsible site manager’s position (N = 1). In some relatively small firms, it is possible that there are few middle managerial positions, and even chief executive managers participate in leading the work at times. For clarity, I refer to the research participants in Study I as “site managers” because, despite their titles, the managerial tasks on construction sites unify them in this research. The work experience gained in the field varied from 3 – 42 years: 3 – 9 (N = 3), 10 – 19 (N = 6), 20 – 29 (N = 2), 30 – 39 (N = 4), 40 – 49 (N = 6). All interviewees were Finnish. The sub-areas of industry the interviewees represented were mining, infrastructure, building construction and or renovation, energy construction, and civil engineering.

The duration of the interviews’ recorded part varied from 20 minutes to almost two hours of rich reflection, with most interviews lasting between 30 and 40 minutes. I transcribed recordings and written interview material anonymizing the names, exact localities, and information relating to physical health. The transcription was verbatim according to spoken language and word order, excluding broken

syllables, single pronunciations, and repeated filler words. For readability, dialectal *forms of words* were transcribed in common language. In addition, speech that was clearly out of context or consisted of irrelevant detailed reflection was deliberately left out and replaced with my notes. Emotional expressions I spelled out, except in cases where leaving them out would have significantly changed the message (Cope, 2020) and I found it important to mention them for the analysis. The length of the transcriptions was approximately 150 pages (*including background information and researcher's questions, font Calibri 12, line spacing 1.0*). The interview excerpts in this article have been translated from Finnish into English.

4.2.2 Study III

As often in qualitative research, in my studies, theoretical links and previous research were used when designing both the interview questions and the frames of the analysis in accordance with the research topic (see Galletta, 2012). When gathering the research data, I also applied semi-structured interviews in Study III but because the methodological approach was phenomenographic, and thus different from the previous narrative approaches, I present here the methodological approach to conducting the interviews.

Despite the variation and common practice of using semi-structured interviews, there are common features, such as a theme with some fluidity and flexibility, a dialogue between interviewer and interviewee, and a situated and context-bound perspective on knowledge, focusing on relevant contexts to facilitate the meaning and understanding of co-constructed or reconstructed exchanges (Mason, 2006; Mohd-Ali et al., 2016). Thus, phenomenographic interviewing adopts the qualitative interview paradigm similarly to any other qualitative interviewing. However, the difference lies in the focus of the interview being to obtain data from the perspectives and voices of the research participants and not through the researcher (Mason, 2006). As investigating conceptions is the focus of phenomenographic research, interviewing is commonly used as a tool to access people's conceptions and to study the phenomenon through the lens of the participants. Hence, there is a high reliance on data from the interviews (Bowden, 2005) and interviewing, "as the central premise of phenomenographic study is engaging participants through reflection and dialogue about their experience and integrates practices that encourage participants to articulate their assumptions on which they base their actions" (Mohd-Ali et al., 2016, p. 185). Therefore, I had to exercise caution when carrying out the interviews to keep the data credible and reflective of the voice of the participants (Mohd-Ali et al., 2016; see also Bowden, 2005).

I merged the interviews with the path recommended for phenomenographic research, i.e., the three practices of relationality phenomenographic approach (Bowden, 2005, p. 12): 1) a similar opening scenario for every interviewee, 2) the interviewer's minimal participation in speech, and 3) the only evidence used in

developing categories of description was that contained within the transcripts. The three practices outlined were implemented as follows. The content of the opening scenario was the same for all participants, but to ensure a relaxed and confidential interview atmosphere, I also asked if the interviewee wanted to ask any questions. If they did, this admittedly changed the structure of the opening. I still avoided giving any broader terminology concerning the interview topic (career support) to avoid guiding the interviewees' understanding and conceptions more than the interview questions already did. The second practice, minimal involvement of the interviewer, I applied by not interrupting or commenting on the content of the speech but supporting the flow and continuation by nodding, smiling, and finally thanking the person for answering the question before moving on. However, I did respond if the interviewee wanted to clarify something or asked if they had answered the question. The third practice took place once I had transcribed the interview material and moved on to its analysis.

In Study III, I sought the participation of five construction companies operating in Finland. The gender distribution of recruits was expected to be male-dominated, as the construction sector is still generally male-dominated in Finland and internationally (see Chapter 1). However, the study did not specifically focus on gender perspectives, so I did not specifically try to influence the gender distribution of the interviewees. To reach the target of five construction companies, I compiled a list of over 40 companies operating in Finland through online searches and the *Rakennuslehti* [Construction Magazine] issues from spring and summer 2022. Based on company websites, those who considered employees' career development were chosen to be contacted. An invitation letter was sent to a smaller group of companies at a time by e-mail and to get a response, some were also called by telephone. Finally, 5 of about 15 companies contacted participated. I requested the interviewees to be company supervisors in some sense, because I assumed that they would have first-hand experience of the phenomenon under study.

The participating companies were either Finnish (N=2) or Finland was one of their areas of operation (N=3) and the number of employees in Finland in 2022 varied as follows: 650+ (N=2), 300-650 (N=1), 50-299 (N=1), less than 50 employees (N=1). For confidentiality, the number of employees of the largest companies is deliberately reported to be anything above 650. The companies were informed that 3-4 voluntary supervisors should be interviewed. Interestingly, two of the companies directed more people to the interview, thus 3-8 supervisors from each company participated. The companies decided themselves which business areas of construction the interviewees represented.

The data consists of 23 oral interviews (21 men, two women, aged 31–61, avg. 42) conducted via video call on Teams or by phone. The interviews of the supervisors were conducted in Finnish. The participants' job titles were production manager (N=1), human resource director (N=1), region manager (N=1), financial manager (N=1),

head of unit (N=2), project development manager (N=1), construction manager (N=4), project director (N=2), responsible site manager (N=3), site engineer (N=1), operational manager (N=1), CEO (N=1), foreman (N=1), and site manager (N=3). The duration of the interviews ranged from about 15 to 45 minutes. A few interviewees said that they did not have direct subordinates. They all were, however, recommended for the interviews by their company's management and were thus seen as contributing to supporting the career development of employees. Therefore, and for clarity, I refer to the interviewees as *supervisors*, which, according to the Cambridge dictionary means *a person who is in charge of a group of people or an area of work and who makes sure that the work is done correctly and according to the rules*.

Having outlined how I collected the data for Studies I-III, I will next present the narrative and phenomenographic analyses carried out in this study.

4.3 Data Analysis

In the following subchapters, I will present the methodological starting points and the practical implementation of the analyses conducted in Studies I-III. The analyses are different in each study: in Studies I and II, I applied analysis of narratives, in Study II narrative analysis, and Study III was phenomenographic, which are thus presented in their own subchapters.

4.3.1 Analysis of Narratives

In the analysis of narratives, the aim is to categorize the data with various metaphors and categories (Polkinghorne, 1995). Instead of focusing on how the narratives would fulfill the traditional features thereof, researchers abide by data collection situations, letting them mold the criteria of narrative data (see De Fina, 2015; Salmela & Uusiautti, 2017, Squire et al., 2014). The categorical approach is useful when the researcher's main focus is on a phenomenon common to a group of people (Kaasila, 2008). Each narrative is divided into parts and the fragments produced by different narrators belonging to a particular category are brought together (Kaasila, 2008; Lieblich et al., 1998). Often, the division of a narrative into parts is done according to the central themes they contain and by systematically comparing fragments of data, the aim is to find more general conceptual manifestations among the narratives (Kaasila, 2008). In this way, the categorical approach can be used to analyze narratives (see also Polkinghorne, 1988).

The approaches I used to analyze narratives in Study I and the first phase of Study II can be described as categorical (see Lieblich et al., 1998). Next, I will discuss the progression of narrative analysis in the two studies in more detail.

When conducting data driven analysis in Study I, I recognized that the interviewees approached *success at work* by settling into certain positions or roles. I

searched for an approach to narrative analysis that would guide me to identify the varying roles in narratives from which perceptions of success are portrayed. Different roles, identities, and narrator positions are often explored in *narrative analysis* (e.g., Holstein & Gubrium, 2012; Polkinghorne, 1988), which differs from the analysis of narratives (Polkinghorne, 1988, see also Chapter 4.3.2, Narrative Analysis). In Study I, I applied *subject position analysis* (Törrönen, 2013) to the analysis of narratives. Subsequently, identifying subject positions appeared to offer an attractive method in this specific study design. Participant roles are often related to semantics (see Primus, 2016) but as I see narratives as verbal material that people produce from their own personal understanding and meanings (e.g. Kaasila, 2008), I found this analysis method suitable. The language itself was not the subject of my research (in some participant role analyses the approach is linguistic, see Primus, 2016), but the analysis method served as a tool for directly and explicitly interpreting the narratives to find the central perceptions and meanings that were directly apparent in the narratives (Polkinghorne, 1995; Riessman, 2007). There are multiple ways to refine subject position analysis, one of which is focusing on *participant roles* (Törrönen, 2013), which I applied. In the analysis of how ‘us’ and ‘them’ boundary lines are constructed in narratives and how they are embedded in specific kinds of participant roles, the focus can be, on one hand, on the story level of the data, with the level referring to the content plane of communication, to events represented, characters, accidents, acts, actions, and settings (Törrönen, 2013, p. 83). I focused on examining how site managers perceive success through various roles and to which kind of acting cultures subjects position themselves when speaking about success at work (see Törrönen, 2013).

The initial processing of the data was done by descriptively coding (e.g., Miles & Huberman, 1994) the excerpts concerning success and its prerequisites in separate tables. In the coding process, I handled data excerpts such as “*Success at work, that can be seen in many ways.*” (T). An example of the role of a site manager was: “*Well, the first thing that comes to my mind is that, as a site manager in this industry, you can’t succeed on your own.*” (T). An example of the role of a specialist was: “*they can be counted in tens only, for example, those enterprises or people who have similar jobs. You feel you belong to that rare group (---)*” (B).

I continued to identify the participant roles the interviewees performed in each initial category and worked on identifying the roles by naming and viewing them based on their *acting environments* (Törrönen, 2013). The acting environments in this context were social environments in which the interviewees positioned themselves in their narratives and the ones they directly or indirectly describe participating in. This way, I found six roles, i.e., subject positions, from which the interviewees approached success at work: I) site managers, II) members of the community of construction industry, III) specialists, IV) representatives of certain stages of career, V) individuals, and VI) societal roles. In every role, the ‘us and them’ dichotomy (see

Törrönen, 2013) could be recognized as interviewees distinguished themselves as site managers (e.g., from office workers), as members of the construction field from other fields of occupations.

In Study II, the first phase of data analysis involved analysis of narratives. After carefully searching and marking the repetitive and exceptional elements of the stories, it was noticeable that career stories were reproduced through the phases of career by mirroring (or reflecting with relation) to more or less experienced or to older or younger stories. I implemented the analysis of narratives by categorizing the career stages through which the interviewees told their stories. Thus, the analysis did not focus on predetermined categories, instead, it concentrated on themes that emerged from the site managers' narratives. This can be justified with the conception of the forms of narrative knowledge (Barkhuizen, 2015; Salmela & Uusiautti, 2017). According to the identifications presented below, I formed categories for further analysis of the results. The interviewees referred to themselves or each other in the following way:

"[---] now I can draw on all the experience I have accumulated so far. It is now possible to be a mentor for young people at different stages of their careers." (B)

"...no longer a beginner but something between a professional and a beginner." (T)

I thus based the formation of the categories on the interviewees' descriptions of their current career stages and on the duration of their work experiences. In defining the terms, I relied on the Cambridge Dictionary (Feb. 2022): a veteran refers to a *'person who has had a lot of experience of a particular activity'*, a professional *'someone who has worked hard in the same type of job for a long time, and has a lot of skill and knowledge'*, and a novice *'a person who does not have much experience in a particular job or situation.'*

I pursued the individuality of narratives (e.g., Riessman, 2007) and the analyzed narratives are thus presented according to the division of experts, professionals, and novices, and here, it became evident that the stories are individual and *complete* regardless of career stage. The length of the interviews can be similar, regardless of whether the interviewee is a veteran or a novice. The accumulation of experience, for example, then does not necessarily lengthen the story – everyone's attention is focused on the points that are relevant to them in the narrative. The reflections of experts may also have been as detailed as those with less experience or, on the contrary, both may have been able to perceive the whole in their stories. For this reason, I also wanted to *avoid concentrating* on a life-cycle approach to career stories, which would have led to the idea of incompleteness or careers having 'finishing points'.

In the research data, the veterans' work experience in the construction field, in general, varied among interviewees from 30 to 42+ years (N=11), the professionals'

from 10 to 20+ years (N=7) and the novices' from 3 to 8 years (N=3) (+ refers to the interviewees' own assessment of the length of their career). Based on the analysis of the narratives, I produced the grouping *veterans-professionals- novices*. I described the repetitive and exceptional elements of the careers by referring to the group which the interviewees identified themselves as: novices, professionals, or veterans. The descriptions I used were *career choice and early career path*, *career goals and future prospects*, and *significant factors for career development*. In the data samples presented in Results (Chapter 5.1), interviewees are coded with the capital letters A-U.

After conducting the analysis of narratives in Study II, I carried out a narrative analysis which follows in the next section.

4.3.2 Narrative Analysis

In the analysis of Study II, I utilized analytical methods associated with the narrative approach. According to Polkinghorne (2006, pp. 5-23) narrative inquiry refers to a subset of qualitative research designs in which stories are used to describe human action. When related to narrative inquiry, *narrative* refers to a form of discourse in which events are configured into a temporal unity by means of a plot (Polkinghorne, 2006, see also Riessman, 2007). In narrative analysis, the research data is analyzed using concepts, terms, and perspectives related to narrative and narrative theories. The aim is also to form typologies of narratives based on narrative analysis, which can be used to show general ways of thinking and acting, meanings, and attitudes related to the issues addressed in the narrative (e.g., Salmela & Uusiautti, 2017) here, success in the construction industry. Although narratives, accounts of experiences, are not a direct reflection of reality, in an interview situation, the narrator weaves one's experiences together and conveys in their own speech their own understanding of the community, society, and environment of which they are a member (Holstein & Gubrium, 1995, pp. 8-9; Perttula & Latomaa, 2005, p. 207). Lieblich et al. (1998) present a dual way of reading narrative data, a categorical-content approach and a holistic-form approach. They identify four different approaches to narrative analysis: holistic content analysis, categorical content analysis, holistic form analysis, and categorical form analysis (Lieblich et al., 1998, p. 13). Holistic content analysis concentrates on the narrative as a whole. Holistic form analysis focuses on the plot or structure of the narrative. Categorical content analysis identifies thematic categories that are relevant to the study, which are classified and can also be analyzed quantitatively. Categorical form analysis focuses on the style or linguistic features of the narrative, which are examined at specific points in the narrative (Lieblich et al., 1998).

I applied a holistic perspective for analyzing the career stories and I thus analyzed a single narrative as a whole, and any part of the text was interpreted in the context formed by the other parts. In comparison, the categorical approach is useful when the researcher's main attention is on a phenomenon that is common to a group of people

and can be considered analysis of narratives (Lieblich et al., 1998; Polkinghorne, 1995) (and which I applied when analyzing conceptions of success and career stages). By utilizing the holistic approach, I aimed for thematic meta-narratives that describe career paths to be created as a result (Kaasila, 2008; Lieblich, 1998). The analysis approach could thus also be recognized as *thematic narrative analysis*, where the researcher's interest is not generally in the form of the narrative, only its thematic meanings and point, yet the researcher acknowledges that narratives are constructed interactively with an audience and context (e.g. Riessman, 2007).

The purpose of the narrative analysis was thus to reveal the typologies emerging in the data. I began the analysis by examining which aspects emerge from the content as descriptors, and what kind of typology might emerge in which the narratives would be situated. To organize the career stories into "meta- narratives" (Polkinghorne, 1995), I conducted the narrative analysis (Polkinghorne, 1995; Squire et al., 2014) by describing the specificity of the interviewees' career paths. I discovered that interviewees might have made their career choice by drift, vocation, or determination, but the choice of a career in construction did not necessarily determine the direction of their career. Likewise, educational backgrounds and orientations varied, but the interviews showed that participants did not necessarily consider orientations as relevant to career progression; an orientation might have been chosen simply because of the opportunities available. Additionally, individual and external factors that influenced career paths were described in both general and unique ways and may have influenced a wide range of career paths. Consequently, there were no clear specificities to be found among them from the perspective of narrative analysis.

Instead, in the interviewees' descriptions of their future goals and the importance of the work, the strongest differentiating factor was the degree to which their career was related to actual construction and proximity to construction sites. Thus, I formed the meta-narratives based on the proximity of construction sites based on both career goals and career accomplishments. I coded the narratives by "CS" (construction site), "CS&H" (construction site or higher), and "H" (higher), where CS referred to career goals and achievements related to construction sites, and H referred to career aspirations toward higher leadership positions off-site. All narratives could be placed into the following three categories: a) veterans (N=11), CS=9, and CS&H=2; b) professionals (N=7), H=7; c) novices (N=3), H=2, and CS=1. In the data samples in Results (Chapter 5.2), interviewees are coded with capital letters A-U and labeled with v, p, or n (veteran, professional or novice).

The resulting meta-narratives (Polkinghorne, 1995) were three typical career paths: path 1) devotion to construction site management, path 2) interest in versatile construction projects, and path 3) passion for leadership.

4.3.3 Phenomenographic Analysis

In the analysis of the data in Study III, I applied a phenomenographic approach. According to Marton and Pong (2007, p. 335), the aim of phenomenographic research is to access and compare people's different inferences and interpretations and ways of understanding a given phenomenon. Different ways of understanding or conceptualizing can be categorized and further analyzed.

A conception has "two intertwined aspects: the referential aspect, which denotes the global meaning of the object conceptualized; and the structural aspect, which shows the specific combination of features that have been discerned and focused on", as Marton & Pong (2007, p. 335) argue. They state that the researcher must identify these two dimensions of knowledge when interpreting and drawing conclusions from the data in the analysis phase. In this study, data analysis proceeded by first getting to know the data analysis model presented by Marton (1994) and then conducting it in six phases, following the methodological path of Marton and Pong (2007):

I) Familiarization with the data. In this phase, I aimed to create an understanding of the entire data and to find the expressions that were relevant to the study. From the outset, the analysis focuses on the expressions, not on the research participants who produced them.

II) Selecting the units of meaning (grouping of meaningful expressions) relevant to the research problem, including any of the three critical aspects: objective, subjective, and contextual (see also Zygmunt & Naidoo, 2022). A unit was formed whenever there was sufficient evidence that a particular *conception* had been described; a single sentence in the data could contain several units of meaning. For example, in the original expression "*...on the other hand, there must be a need for the employee in the company, that is, that there would not be the problem that the steps of the pyramid are full and the next step cannot be found.*" (Supervisor 16), I identified two units of meaning: "*demand and need for construction and, with it, certain job descriptions*" and "*career opportunities as a pyramid*".

III) Forming initial subcategories of the data (identification of variations and further thematization of the data): the units were studied in detail to identify the elements of the phenomenon within each unit focused on, and to devise a description of each conception's *structural aspect*. In doing so, I paid attention to the explicit *variations* that the interviewee brought as they focused on a particular element, as well as the *variations* that were implied by that element. For example, a unit of meaning "*Career development potential is: the employee's desired attitude, motivation, desire to learn, interest, asking questions*" I then put into the subcategory "*Supporting employee's work skills as a cumulative entity: knowledge, competence, social and psychological capacities*" and if the unit of meaning was "*Career opportunities as a 'pyramid'*", I then put it into the subcategory "*Supporting hierarchical job title path*" that I formed.

IV) Arranging, grouping, and rearranging subcategories. In this stage, I identified and sorted the ways of understanding and experiencing relevant to the phenomenon under study. According to Marton (1994), segmentation can be done in two ways, either by looking for similarities or by identifying contrasts – different ways of expressing and understanding the phenomenon. Thus, the purpose of phenomenographic research is to blur the boundaries between individuals and focus on the pool of meanings found in the data. I combined subcategories with the same content into descriptive categories, naming the description categories with initial descriptive terms. For example, the subcategories *supporting the development of work tasks* and *supporting the increase of professional competence* were grouped together.

V) Forming descriptive categories, including the category *Supporting employees' professional development*.

Creating a system of descriptive categories and presenting the outcome space. The categories of description and the outcome space are the main results of a phenomenographic study (Marton, 1994). The main characteristics of each group and the features that describe and distinguish them must be identified. The resulting phenomenographic outcome space in this study describes the variety of conceptions emerging in the construction supervisors' descriptions of career support. The descriptive categories were "*the professionally oriented career support*", "*the company oriented support*", "*the individually oriented career support*", "*supporting a hierarchical career path*", "*transformative co-creation*", and "*supporting the employee's continuous learning*", which I arranged to the main categories: 1) professionally-oriented (*development of competences*), 2) company-oriented (*the company's objectives, needs and opportunities*), and 3) individually-oriented (*holistic growth*) perspectives on career support.

Once the grouping and thematization of expressions was completed, the analysis moved on to examine the relationships between the groups. In the final stage of analysis, I identified the relationships between the categories and their positioning relative to each other. While horizontal description categories embody equal perceptions of the phenomenon, vertical description categories embody the order of perceptions, e.g., from the point of view of time, maturity level, change, or degree of generality (Marton & Pong, 2007; Uljens, 1996). I identified the outcome categories as horizontally positioned so that, although clearly distinct from each other, their subcategories connect them by positioning them at the intersection of the main categories. The results of the phenomenographic analysis do not represent the entire perceptions of the individual interviewees, but the results space consists of all the perceptions that emerge from the interviews (Marton & Pong, 2007).

Thus, also in this study, it can be seen that several perceptions can be expressed by interviewees, which are revealed in Results (Chapter 5.3) as I present quotations from the interviews to enrich the study results. In the interview samples, interviewees are coded as *supervisor n* (1-23).

4.4 Reliability

Qualitative research is not conducted to confirm or refute previous findings, but rather to promote ongoing review and enrich our understanding of the experience or form of action under study (Elliott et al., 1999; see also Lincoln, 1995). In my research, the primary purpose in Studies I to III was to *understand* career experiences, success at work, and their support in the construction field. I lean on Guba's (1981) framework for evaluating the reliability and validity of qualitative research and Lincoln and Guba's further work on the quality criteria. Guba (1981) argued that traditional criteria for assessing research reliability, such as internal consistency and test-retest reliability, may not be appropriate for qualitative research. Instead, he proposed four criteria for evaluating the trustworthiness of qualitative research: credibility, transferability, dependability, and confirmability.

According to Lincoln and Guba (1985), *credibility* is a measure of how far the research data characterizes a credible delineation of the findings from the research participants' original feedback. This refers to the correspondence between the perceptions of the subjects and the conceptualizations and interpretations made by the researcher (Guba, 1981). I have pursued research reliability by following the methodological guidelines of narrative and phenomenographic interviewing, analysis, and interpretation and by explicitly describing how I have done my analysis and interpretations, i.e., reporting the processes with examples. For credibility reasons (see Lincoln, 1995), it is worth noting that when pursuing the interviewees for Studies I and II, I aimed to study the career narratives and perspectives about success at work of those who work on or near construction sites and represent some managerial position, as these professionals would have either some, or a lot of, career development experience having already achieved their position through either education or work experience, or both. I dedicated an invitation letter to those *working on site-managerial positions*. The recipients could then decide whether they fit the description regardless of their current title. Fourteen of the interviewees (out of 21) were directly working on sites (one was retired) and three near construction operations (construction managers). Additionally, a construction engineer and three higher managers felt that they fit the description. The reasons being either the companies they worked for were small, and thus the job descriptions were wider or their main work experience, and/or professional identity related to construction site management. In Study I, I still refer to the interviewees as site managers, for clarity, as I explain in the research article (see Study I). Thus, if this study were repeated or further developed, these notions should be considered.

The criterion of *transferability* relates to the extent to which the findings of a study can be applied or generalized to other contexts or settings. Guba (1981) states that researchers should provide rich and detailed descriptions of the research context and participants to enhance transferability. In qualitative research, transferability

is generally challenging, as the research aims to describe a phenomenon rather than statistical generalizations (see Lincoln, 1995), and in this study, too, the transferability of the results must be assessed with caution. The individual narrations characteristic of narrative research and its timebound nature (see e.g., Liebllich et al., 1998) are likely to pose challenges to transferability. This is also the case in this study, where the qualitative and time-bound, and to some extent open-ended nature of the data does not allow for very far-reaching generalizations. However, they do reflect the debate on career development and career support generally recognized in the field, also in the light of previous studies.

Two reliability issues related to the transcriptions in this thesis required particular attention from reliability and validity points of view. Transcribing data changes oral discourse to text and written text differs from oral spoken language structure. Thus, in phenomenographic analysis, transcription may change meanings as they are contextual, and the context of the interview is lost in transcription (Sin, 2010). I addressed the limitations by reflecting the meaning units against their broader textual context and by choosing, at first, longer (rather than shorter) expressions as significant meaning units to preserve their initial meanings as accurately as possible. Translating research data, in these context narratives, also affects transferability (see Riessman, 2007, p. 42). The conversations in all the three studies were initially transcribed in Finnish but the data extracts I presented in the publications (Studies I-III) were translated into English. I checked the terminology with experts in the field, so the translations of the construction vocabulary used are those used by operators in Finland in their international titles or projects. However, application of the generalization of the *findings* is a matter of interpretation.

The criterion of *dependability* refers to the stability and consistency of the findings over time and across different research. Guba (1981) suggested that researchers should provide a clear and transparent account of their research process, including data collection and analysis procedures, to enhance dependability. I have highlighted the factors influencing the research through the research design and by reporting them in this thesis. Thus, I aimed to strengthen the certainty visible to the reader and increase the reproducibility of the study with detailed descriptions of research processes. However, the reproducibility of a study does not necessarily mean that the *results* are reproducible, as another researcher might interpret things differently. Closely related to this is consideration of the researcher's preconceptions. According to Lincoln and Guba (1985), in qualitative research in which researchers, both producers and consumers, actively build trust in events as they unfold, there are a few concrete research practices that not only produce trust but also feel trustworthy when executed. They state that peer debriefing or peer scrutiny are solid communication habits that create trust. In the case of this thesis, all three research articles this dissertation is based on are peer-reviewed, which confirms dependability. Thus, the research process and interpretations or

descriptions of the results have not only been carried out by a novice researcher but verified by several sources. I have described in detail the implementation of the studies, data gathering, and presented descriptions of the participants. The interview invitations and forms are attached to the thesis, and I have also strived to present detailed descriptions of the analysis processes in the articles and in the conclusions. When considering the participants, in both data sets (narrative and phenomenographic studies), the titles of the interviewees varied; presumably uniformity would have provided clarity and transferability from one point of view. On the other hand, since it was not my intention to examine career stories or career support through a specific title, the expressions I used in the interviews could also apply in the future, for replicability. They would produce a different set of participants if assessed through background variables such as age, title, work experience, and educational background.

The fourth criterion, *confirmability*, relates to the objectivity and neutrality of the research findings. Guba (1981) argued that researchers should provide an audit trail, documenting their decision-making process and potential biases, to enhance confirmability. Shenton's (2004) definitions of confirmability clarifies that the results of the research must be based on the studied material and not, for example, the researcher's own views. In Chapters 4.2 and 4.3, I have described the implementation of this research and all the analytical processes, by which I aimed to prove that I have followed the guidelines of narrative and phenomenographic research. The risk of my own views affecting the results was minimized by constantly seeking to examine the impact of them on the interpretation of the data. For example, at the beginning of the phenomenographic analysis, I returned to the data several times to check that I had identified and extracted all the units of meaning in a way that was true to the data and the research task and that I had avoided letting my own preconceptions influence this selection or initial grouping. Further, by relying on valid theoretical frameworks and previous research on the topics handled in this thesis, I have compared the interpretations of the results to previous academic findings and discussed these in the research articles of Studies I-III. As with any qualitative research, the analysis and interpretation are inherently dependent on the researcher. This study is no exception, with both the analytical process and the resulting interpretations reflecting my perspective and approach.

In Study III, I utilized a phenomenographic approach, which Sin (2019) describes to be integral to the overall research, thus being more than a method for gathering and analyzing data and reporting findings. As phenomenography enables genuine qualitative, data-based research, it is thus essential to ensure the reliability of the findings and I aimed to carefully follow the principles of the research method and stay true to the data (see Marton & Booth, 1997; Sin, 2010) when analyzing the data and describing the analytical process. I also sought to set aside possible *preconceptions* by identifying them and making interpretations of the meanings of the data as explicit

as possible throughout the research process (see Sin, 2010). To succeed in this, I had to do the deconstruction and initial arrangement more than once to really feel that I was looking at the individual extracts exactly as they were. Despite careful work, a researcher applying a phenomenographic method has to admit that the results may thus never be the conceptions themselves, as the emphasis is always placed on the reflexive relationship between the phenomenon and participant, the background of social discourses influencing the participant, the relationship between participant and researcher, and the researcher's own relationship to the phenomenon (Bowden, 2005). However, I state that a phenomenographic approach enabled me to view the conceptions of career support identified within the selected group of respondents analytically – the supervisors of construction companies.

Phenomenography was originally a learning theory which states that people can be guided to experience a phenomenon in more powerful ways if they become simultaneously and focally aware of more critical aspects of the phenomenon (concepts) (Marton & Booth, 1997). Therefore, the exposure of perceptions in this study is also important for the development of practical working life. People are more likely to discern such features when they experience variation between and within these features (see Marton & Booth, 1997). The nature of phenomenographic research and the problem of reproducibility are also described as problematic (Sin, 2010). Sin (2010, p. 308) presents that interviews, as are common when investigating conceptions, can also be criticized as also being contextual and not a transparent method to gather data, as there are theoretical and methodological problems (see also Mishler, 1999). The risks are thus to be recognized and noted by the researcher (Hammersley, 2003; Sin, 2010). However, in qualitative research, reproducibility is not the primary intention (Lincoln, 1995). Instead, as in this research, the aim was to reveal the perceptions and experiences of the representatives of construction companies of the issues in question (career development and support) in order for them to be visible and to learn about them. In this sense, I interpret that contextuality is not problematic if I have collected conceptions through similar questions (the terms used to guide the narration) and interview patterns.

Sin (2010) warns that when reporting phenomenographic findings, the intended meanings of the researcher might not be clear to readers and that there is also danger in unreflected and unguarded language use, especially by new researchers, in the verbal representation of the findings. Further, readers, unlike in interviews, cannot clarify the intended meanings of expressions in the report with the researcher (Sin, 2010). I have strived to respond to these risks by recognizing and studying the two frameworks developed by phenomenographers to enhance the study of conceptions. The first framework creates a distinction between what and how aspects, and the second framework creates a distinction between referential and structural aspects, which allows the parts and contexts of the conception to be identified (Harris, 2011). By understanding the roles of these frameworks in the process of phenomenographic

analysis, I assess that I have produced results in line with the phenomenographic research method.

4.5 Ethics and the Researcher's Position

Ethics as moral choices and decisions covers the whole research process, from the choice of the subject to the impact of the research results (Kuula, 2011, p. 11). Thus, in this research process, I followed the ethical principles and guidelines of scientific research in the selection of research subjects and methods, the acquisition and storage of data, the evaluation of the reliability of the data produced, and the effectiveness of the research results, as well as in the treatment of the subjects and preserving their privacy.

As this research concerned human participants, ethical questions arise from the interaction between researcher and research participant (TENK, 2019). The data of Studies I-III consisted of oral (N=43) and written interviews (N=1). When implementing the research, I followed the general ethical principles guiding researchers (Creswell, 2014; TENK, 2019) by respecting the dignity and autonomy of human research participants, respecting material and immaterial cultural heritage and biodiversity, and conducting the research aiming to avoid causing any significant risks, damage, or harm to research participants, communities or other subjects of research. The participants were adults who were, in principle, free to decide whether to participate in the research or not.

This research relates to human sciences and the ethical principles governing the research can be divided into the following dimensions (Kuula, 2011; see also TENK, 2019). *Respect for the subject's autonomy*: i.e., participants have the right to participate voluntarily but also to refuse to participate. According to TENK (2019), it is particularly important to ensure that participation is voluntary if the research participant is, for example, in an employee relationship, in another dependent relationship with the research organization, or if a person other than the participant decides their participation in the research on their behalf. *Avoiding harm*: i.e., that a participant's or participant's family, employer, or other people (including the researcher) would suffer mental, economic, social, or otherwise constructed harm as a result of participating in the research. *Taking care of privacy and data protection*: i.e., protection and confidentiality of research data, storage and destruction of research data, and privacy in research publications (Creswell, 2014; Kuula, 2011; TENK, 2019).

Anonymity and autonomy of the interviewees

The issues above were considered as follows. I informed all the participants beforehand about anonymity and voluntary participation, and at the beginning of

the interviews, I gave a promise of confidentiality, which concerned the anonymity of their participation, a promise to handle the interview data with care and confidence, and a promise not to use anything they say to harm them or other people or companies. To protect the privacy of research participants (Creswell, 2014) in Study III, I made sure that although the employer's contact person knew who had been given permission to be interviewed, I did not separately inform them about who exactly participated. To collect the interview material, I used an iRecorder, from which I transferred the file (via the Internet) to a folder of transcripts and from there to a separate, carefully stored memory stick with a backup. No personal details of the research participants were attached to the audio or transcriptions.

When reflecting on the interviews conducted in Studies I-III and my own position in them, the following citation of deMarrais (2003) works to support the description thereof: Qualitative interviews represent a distinct form of discourse between two individuals, where one participant, the informed learner, seeks to gain insight into the other's experiences, viewpoints, or reactions to specific events or phenomena. Various factors—including researchers' theoretical frameworks, personal life experiences, cultural backgrounds, genders, ages, and physical appearances—affect how they engage in the conversation and interpret the meaning derived from the interview. Both researchers and participants approach each interview through their own unique lenses of experiences, beliefs, and assumptions related to the research topic. In my case, these factors may have included the following. At the time of writing the thesis, I am in my 40s and interpret what I see and hear with my age-appropriate experience of working life. I am a woman, and my research focuses on a male-dominated field outside my working experience, which has influenced my interpretations and understanding of the interviews. The theoretical framework of the research is linked to positive psychology and educational sciences and my educational background is in social sciences, so I have also made interpretations through this lens. Though, having worked for years in career guidance and adult learning development, I had a practical understanding of the topic of careers. The majority of the interviews were conducted via Teams with the cameras on. It is difficult to assess the impact of this but I think it may have contributed to the interviews such that the interviewees also raised sensitive, very personal, and emotional themes. I am Finnish and the participants in the study were Finnish, which probably helped me to understand many societal issues as well as multicultural-related issues appearing in the interviews from the same viewpoint as the interviewees.

When first collecting data (Studies I and II), the position of myself as a researcher was carefully considered. I had networks in the target groups of the study which, on one hand, helped in the delivery and distribution of the interview invitations, but I also had to be aware that this network or familiarity could affect the research results, and this should be acknowledged and assessed as carefully as possible when considering the ethics of the study. If an interviewee knew me, I informed the

interviewee that despite the familiarity or common acquaintances, participation in the study was completely confidential and anonymous, and that at no point would I disclose to an outside party the information collected about the research participants or during the study.

Involvement of companies in the study

Five construction companies participated in Study III and from each, I interviewed 3-8 supervisors. I first approached company representatives, who made a preliminary selection of participants, after which I obtained their contact details and invited them to participate in the study. Participation in the research had to be on a voluntary basis, which I aimed to highlight in the invitation emails, making it possible to refuse to be interviewed. However, it should be noted that it can be difficult to achieve genuine volunteerism when the employer organization recommends participation (see Riessman, 2007; Sin, 2010). Additionally, it is possible that the interviewees may have felt obliged to participate or, for example, to discuss employer company practices in a certain way. Thus, the fact that the supervisors responded as representatives of the employer company presumably affected the interview data, providing interviewees with the primary framework for supporting careers in the company. On the other hand, this was also one purpose of the study. The research questions and objectives were carefully designed so that both the companies and their participants feel confident about participating in the research, although the research had the potential to generate information that the companies would not expect. From my own impressions, people were pleased and willing to participate in the interviews. For any scientific research, it is essential that the research is open and honest and that the results can be verified. Quality and reliability are part of a researcher's professional ethics (e.g., Lincoln, 1995). Therefore, the interview invitations and interview questions used in the study can be found in this dissertation's appendices, and I have aimed to describe the conduct of the study precisely in Chapter 4.

Researcher position and personal networks in the construction field

This research topic interests me for several reasons. I have worked on general career guidance topics for many years. The construction industry, in turn, has always been close to my heart and everyday life for family reasons. One of the researcher's most important tasks in qualitative research is dealing with their own possible biases and to consider the subsequent effects, both positive and negative, on the research (Maxwell, 2013). I thus aimed to consider my preconceptions during the entire research process. In the initial research design and conceptualization phase, I discussed with representatives of the construction industry to create a preliminary understanding of the work done near construction sites on a practical level (see TENK, 2019). I therefore assumed, for example, that the research would provide insights into differences in generational practices. However, I have aimed to identify

my preconceived notions regarding, for example, factors that have influenced careers and minimized and refined my research design and questions so that they do not guide the research more than stimulating interest in the topic and to allow for unanticipated results. However, this did not preclude me from participating in informal discussions about the field and the topic of my dissertation. These discussions were rewarding and the topic aroused interest among actors in the field. However, having the discussions required me, as a researcher, to be able to distance myself from these discussions when doing research and, on the other hand, to be conscious and cautious to see my research data *through the eyes of a researcher* in order to conduct the research objectively.

Expectations of research participants

In the participant recruitment letter, I briefly explained why I am interested in the topic and why the participants might be interested in the study. So, as a researcher, I had already selected these themes to be communicated to the research participants at this stage. The information provided would thus, among the interview questions, influence the story and the perspective that the subjects might want to cover (e.g., Riessman, 2007; Sin, 2010). For example, a participant's idea about *a possibility to participate in developing leadership in the field* or training may have led the researcher to answer questions from a certain emphasized perspective. I chose not to include information about the theoretical perspectives of the research in the letter, which I believed could have guided the participants towards which perspectives the results might be interpreted from.

Solutions to the questions raised above had to be considered when refining the research questions and preparing the interviews, but their impact cannot be ignored when analyzing or presenting the results. My aim was, though, to examine the experiences of employees without employer ties, and to reflect these experiences in comparison with the perceptions of supervisors in companies where career support is, in one way or another, considered in the company's operations. In conclusion, considering the ethical issues (see Kuula, 2011; deMarrais, 2003), I had the power to make decisions. During the research process, I was aware that my decisions could be guided, for example, by my interests, ambitions, and goals in relation to my career, of which doctoral research is very much a part, and I aimed to minimize these effects by the means presented in this chapter.

5 Results

Next, I will present the key results of the three studies and the synthesis compiled from them. The results describe individual accounts of success at work and career paths (studies I and II) and are then contrasted with five construction company's supervisors' perceptions of career support (study III). Together, the results will provide new insights into aspects of career development and success in the construction sector.

5.1 Study I: Perceptions of Success at Work

Rautio, K. (2022). Success at Work and Its Preconditions in Construction Site Managers' Career Stories. In S. Hyvärinen, T. Äärelä & S. Uusiautti (Eds.) *Positive Education and Work: Less Struggling, More Flourishing* (pp. 121–148). Cambridge Scholars Publishing.

In Study I, the purpose was to investigate how success at work is perceived by those working in managerial positions in and around construction sites (N=21). I focused on how site managers perceive success at work from their different subject positions and what the subject-position-related preconditions to success at work according to them are. The results showed that success at work and its preconditions were experienced from six different roles. The interviewees produced the primary roles from which they addressed the phenomenon, speaking not only directly about that role but also through referring *to others* as representatives of that specific role or some counterpart subject position. For example, a person at a certain stage of their career might call themselves a newcomer and refer to others as experts or *old hands*. Success was then understood in terms of that role. As another example, a respondent might talk about success specifically as a supervisor in relation to, say, office workers. Thirdly, the respondent may have talked about their role specifically and as a representative of the wider construction community with others in other occupational sectors, and success was then conceptualized in terms of perceived characteristics of the construction industry, such as meaningful social relationships that helped them to succeed.

As an interesting note, despite not specifically seeking participants who had succeeded at work, 20 out of 21 answered that they had succeeded at work and one reflected that with just a few years of experience in the field, one could not call oneself successful. The interviewees described their perceptions of success at

work from six subject positions: I) site managers, II) members of the community of the construction industry, III) specialists, IV) representatives of certain stages of career, V) individuals, and VI) societal roles. Next, the six subject positions and the preconditions of success related to their subject positions are introduced.

Successful site manager

Success at work, understood as succeeding in site management, appears as good and high-quality performance at work in relation to the expectations, responsibilities, trust, and appreciation of various parties. Success can thus be measured by budget, schedule, and goal achievement as well as a site manager's ability to manage occupational safety, quality of work, fluent teamwork, and good atmosphere on sites. This leads to financial compensation and positive feedback, for example. Succeeding in this role requires strong cooperation skills, the ability to listen to employees and take their experiences and views into account during various work stages. Work experience and know-how related to the construction industry in general are also seen as essential preconditions for successful performance in this position, as is having good supervisors.

“And then again, that they (tasks) are challenging on schedule, financially and technically, so succeeding in such (tasks). It's that same spirit as succeeding in sports teams or succeeding in contract teams, that it (work) is being completed. They're great, that's the thing.” (B)

Succeeding as a member of the community of the construction field

Sense of community and a strong culture of working together in the construction field appears to be significant and the construction industry is described as exceptional in relation to other fields. Success at work can be seen as belonging to the construction community; membership of the field is also perceived as a kind of identity which one improves. Professional networks and mentors outside current employment relationships are essential and may appear as willingness to help and guide others. Good cooperation skills and reciprocal feedback discussions promote succeeding in the community. Success is also, and still, affected by some field-related attitudes and features which relate to gender, ethnicity, and generational differences. Thus, succeeding in the community first requires the ability to understand the work culture that participants describe as traditionally hierarchical and masculine and secondly, the ability to adapt and participate to the obvious ongoing changes in the culture and leadership.

“...that one would have such a (good) reputation spread in certain circles and that (one) would be well known, I think, it is also a bit of a success then.” (H)

Successful construction specialist

Many of the managerial positions in and around construction sites require special competence or qualifications, and some of the interviewees described themselves primarily as specialists. Successful specialists had significant work experience and occupational specialty-related competence and professionalism, which gave them access to certain networks in the field. Positive reputation and acknowledgments were seen as important indications of success, as were strong professional self-esteem and professional identity. The desire and motivation to develop and challenge oneself appeared as a base for becoming a successful specialist, as did education and work experience.

“Well, I personally believe that success has come simply through life experience and iron-strong professionalism. That, for real, the know-how is certainly so strong that let me be thrown almost anywhere, I will somehow survive it.” (I)

Recognition and a reputation for expertise precede success, which leads to situations where specialists are requested for demanding positions; jobs are often simply offered instead of there being an application process. This is also a matter of belonging to specialist networks and the interviews seemed to indicate that in the circles of construction specialists, actors know each other. The accumulation of special skills and the development of expertise were also explained to require great investment during leisure time.

“I’ve been successful, and then have gained appreciation, not hype and decorations, though, but those of professional friends and acquaintances, I feel that they appreciate me.” (N)

Success by career stage

Success at work was also perceived through mutable and time-bound phases of careers, which then affected views on career goals, achievements, and success at work. An experienced interviewee might say title, money, or hierarchical position were not that important, though this would not have been the case early in the career having not achieved and experienced it yet.

“...someone sees success at work in a way that title and salary increase continuously, but I’ve come to think of it so, that success at work is such that it is nice to be at work and, it certainly maintains (you) economically and so forth, but in a way that work doesn’t strain the rest of the life too much.” (O)

Success in various career phases was related to performance, goals, and experience. To succeed in different phases of a career, self-knowledge was seen as an important

promoter, as were intergenerational collaboration, learning, and experience sharing as well as a humble attitude towards learning.

“...I would not have thought at a young age that I would get to a job like this, not at all. And, well, for me the job of a site manager was, at the time, such a dream when I was young. I took it seriously, the work.” (S)

Success in an individual role

Success at work, from an individual concern, related to holistic personal development and well-being. In the accounts, the empowering personal experiences, high motivation, and passion towards work, satisfaction, as well as the possibility to fulfill personal life- and career-goals through work, described success in this role.

“In a way, advancing in your own work and in the direction you want. Not in the direction that - if you think about career and life in general, then somehow that being successful in life or successful in your career - no one else can define it.” (J)

Work itself, despite being heavy and energy-consuming, was described to offer a great amount of personal satisfaction and opportunities to realize oneself professionally and develop as a person. The effect of personal traits was recognized to have an impact on what was experienced as success, which type of work was found characteristic of oneself, and how balance in every aspect of life was viewed. Performance in all areas of life in a self-proportionate way and accepting that one area, such as work, is emphasized more than others were highlighted as important preconditions for personal success and well-being. The interviewees also discussed the nature of work in the construction industry, such as the challenging conditions of out-of-town work, long working hours, and absence from home, as well as limited or no opportunities to pursue hobbies. Still, work or career was repeatedly *chosen* even at the expense of other aspects of life. The preconditions for succeeding as an individual were commitment to career and work and strong self-knowledge, and a prerequisite for success seems to be a positive attitude towards the construction field and work in general.

“Success at work has brought me pleasure, a lot of good long-term friends, a number of accolades, economic well-being, and I have remained healthy.” (U)

Success from a societal standpoint

Successful performance in a societal role is related to social status, which relates to hierarchical and comparable metrics such as salary, title, assets, and purchasing power. Many accounts considered the construction sector as sensitive to economic fluctuations and the socio-economic and employment situation in the field affects

success in the societal role. Some interviewees revealed the effects of the recession of the 1990s or economic downturn of 2008 and, for example, the supply of labor abroad during those times. Construction booms preceding the recessions, in turn, are remembered in terms of easy access to employment. Responsibility for a household and fear of losing their job had driven the interviewees to work at the expense of their health.

“After all, the livelihood is, of course, that you maintain yourself and your family and are able to buy a little something, that’s important.” (S)

The subject position analysis revealed the complexity of experienced success; one may feel more successful in one role but less in the other. However, it seemed to be a matter of priorities, entity, and balance – instead of aiming to achieve the best *in every role*, the interviewees primarily approached success from balance and satisfaction in the roles. The results showed that perceptions of success vary at different stages of a career, and that collaborative leadership skills, the accumulation of knowledge and experience, a dedicated attitude to work, and optimism in the face of challenges are crucial to success. In addition, certain characteristics commonly associated with the construction industry, such as a traditional and masculine work culture, long-distance assignments, project-based work, and diverse team configurations contribute to the success of site managers.

5.2 Study II: Career Paths to Managerial Positions

Rautio, K., Uusiautti, S., & Hyvärinen, S. (2023). Career Development to Construction Site Managerial Positions in the Construction Field. *Journal of Professional and Vocational Education*, 25(2), 20–33. <https://doi.org/10.54329/akakk.130984>

In Study II, I examined the career narratives of those working in managerial positions near construction operations (N=21). The purpose was to investigate how managers in and around construction sites with different professional backgrounds describe their careers and what similarities and differences appear in their career stories. The results were formed through a two-phase analysis. In the first phase, I categorized the narratives by the career stages through which the interviewees told their stories. The repetitive and exceptional elements of the careers were reported by referring to the group the interviewees identified themselves with: *novices*, *professionals*, or *veterans*. Second, as a result of the narrative analysis, three typical managerial career paths were identified: I) devotion to construction site management, II) interest in versatile construction projects, and III) passion for leadership. Below, I illustrate the career narratives by first describing the pre-career

and early career periods and then presenting the three typical career narratives that were identified in this research.

The beginning of three management paths

The dominant three career narratives leading to managerial positions depicted paths where the actors had congruent construction-related experiences in their youth and family members in the construction field. Career development for management positions started in childhood and youth by getting to know the field early on with (mostly male) relatives. Young people had gained work experience at construction sites, and they chose the field at the latest when they decided where to study. Construction was, in itself, interesting to applicants of such studies at university.

“I started with my father, grandfather, and uncle. Then vocational school, technical school, and working life. – I had no other option in mind.” (vL)

During their studies, actors started expanding their networks and became familiar with various construction-related jobs. Managers-to-be familiarized themselves with out-of-town work. Work experience before and during studies was useful and valued later in working life. While these managerial pathways were markedly different, unique, and affected by various specific features, a commonality that could be identified among all interviewees was the significance of social relationships, networks, and the environment.

“Social skills, I have a lot of acquaintances and friends with whom I talk and get first-hand information about big projects.” (pD)

Path 1: Devotion to Construction Site Management

Construction site managers have a passion for both building and management and a sense of doing substantial work yet being in a managerial position and having their “boots in the clay”. Site managers and responsible site managers like project-based work, value social relationships on construction sites, and feel that they are producing solid work results at the crossroads of many construction-related parties. The actors need to learn to take over multicultural work environments and specialized construction areas.

“In a way, you have to have a certain passion for building. You can’t just work at it, you have to like it in a certain way, it’s a love-hate relationship I have with this industry.” (vM)

Instead of taking on a particular job title, career development is measured by the demands of construction sites, one’s own specialization and development, work

experience, and success in completing projects. At the end of their career, the actors on this career path have a great deal of construction expertise and many stories of memorable occurrences at work.

*“In -94 it was very quiet in Finland so – a good friend lured me to a Russian project...”
(vL)*

Path 2: Interest in Versatile Construction Projects

On this path, the actors partly experienced construction site work firsthand, but their work consisted of the development and management of entities and was mostly office-based. Depending on the size of the employer, these positions could be, for example, a construction manager or project manager. From these management positions, one can move to site management or other managerial positions, and an experienced responsible site manager, for example in special construction sites, often follows this path. Moving to the position of responsible site manager did not feel like a career demotion but, rather, like accepting more challenging projects. However, the many dimensions of management and an interest in staying near construction sites are important to those following this career path.

“I’ve held diverse positions from – responsible site manager, construction manager, production manager, to CEO...” (vB)

Path 3: Passion for Leadership

Higher management positions are desirable and thus advanced to early on; those aiming for these positions aim for developmental and managerial tasks in general. When choosing their occupation, they had a strong interest in the construction industry. New challenges interest these actors, and they see them in various management positions. Usually, their career has progressed quickly in terms of job titles and areas of responsibility. Since there are relatively few higher management positions, the actors take advantage of opportunities to advance in their career and opportunities may come by chance and through favorable events. Work takes place in an office, and career development is measured through job title and salary development, along with the development of leadership skills.

“I’m interested in management in general, that’s for sure. But then there is also a certain commerciality, that I love financial indicators, I love to analyze balance sheets, results and cash flow.” (pJ)

The results of Study 2 are presented here to illustrate key aspects of the career stories and factors that have influenced the career paths of those in managerial positions in and around construction sites. The results indicated that societal and

economic changes either challenged or boosted the careers or could even cause them to change direction. Career goals might not be achieved if external factors, such as organizational, economic, societal, or location-related issues or favorable coincidences, did not enable them. However, favorable options and solutions for career development could be found by drawing on psychological and social resources. Social capital, in the form of social networks, had a strong impact on the interviewees' career choice and paths. Psychological capital appeared as optimism, perseverance, and the ability to recognize one's calling (e.g., desire to work on-site). It also seemed to support well-being, facilitate self-appreciation of career decisions, and strengthen the ability to withstand business challenges and economic uncertainty.

Note: For Path 1 and Path 3, I presented two quotations (vM and pJ) that do not appear in the published research report (Study II). In the article, the presented managerial career paths do not contain any quotations from the data but are *type stories* of results preceded by a presentation of the results according to a breakdown of career development, career goals and future prospects, and significant factors for career development and quotations are only found in those sections. Due to constraints, the text had to be presented concisely.

5.3 Study III: Supervisor's Perceptions About Career Support in Construction Companies

Rautio, K. & Uusiautti, S. (2024). New Insights into Career-Related Continuous Learning in Construction Companies - Supervisor Conceptions of Career Support. *Journal of Adult and Continuing Education* (in Press).

In the third study, the aim was to understand how construction company supervisors (N=23) understand career support. The results of Study III are presented below so that they illustrate, in key respects, the perceptions of managers in construction companies about supporting employees' careers. As the results indicate, the conceptions of support were based on the interviewees' perceptions about the shape of careers in the construction industry. The perceptions could be roughly divided into three categories: 1) professionally oriented (*development of competences*), 2) company oriented (*the company's objectives, needs and opportunities*), and 3) individually oriented (*holistic growth*) perspectives on career support. In addition, *supporting a hierarchical career, support as transformative co-creation of the employee and employer needs* and *supporting the employee's continuous learning* were identified as concepts that combine two or more of the three orientations. Next, I explain these support orientations by describing the results (outcome space) and enrich the main categories with interview excerpts.

Professionally oriented career support

Career support that is professionally oriented focuses on professional development and advancement, measurable work achievements, education, evaluation, and supporting the employees on predetermined structured career paths with established (yet transformative) competence requirements. If the company is unable to offer opportunities for professional development, a supervisor may refer an employee to another company or another type of position for professional development. The priority is that support is focused on professional development.

"I always try to place [employees] on projects where something different happens [---] so that they learn [specific] tasks and get [specific] qualifications." (Supervisor 4)

Company-oriented support

Career support that is company oriented considers the needs and opportunities of the company as a priority, for example, the size of a company or a specific construction industry determine the career opportunities available. If the company is small, careers may be supported in the sense of "everyone does everything" or "it's like running your own business" which may lead to a wide variety of career development. This orientation can also be a dominant form of career support operations in bigger companies, e.g., when the economy is tight, demand for construction is scarce, there is a lack of employees, or the career paths of the company are otherwise very structured or predetermined.

"...Areas of expertise we have a shortage of. For example, young site engineers with economic skills, or concrete work supervisors [---]. I should [---] guide people to these areas." (Supervisor 4)

Individually oriented career support

Career support that is individually oriented primarily values open discussions, shows humanity, and takes into account the individual as a whole, considering career stages and employees values, reconciliation of work, family and flexible education, and work solutions that inspire the worker. From the point of view of continuous learning, psychological dimensions such as emotional intelligence are emphasized. Different career options are recognized in terms of supporting individual success.

"The younger ones [---], because it's a growth story, [---] they still have a hunger for growth to advance." (Supervisor 1)

Supporting a hierarchical career path

Career support that aims to support hierarchical paths can be both an individual goal and a journey understood as professional development and thus, can be placed

at the intersection of individual and professional areas. The majority of supervisors regarded their support as a means to help employees advance their careers hierarchically from internship to managerial positions. This was how the structured career paths were also often described. Support entailed analyzing employee efficiency, supporting advancement on a hierarchical career path with training, and rewarding employees by promoting them into more demanding supervision or managerial roles. Hierarchical advancement was often described as supported with various coaching, testing, and training solutions.

“... It’s very typical [...] that you advance from one expert position to another and then you’re traditionally rewarded with a supervisor’s role...” (Supervisor 19)

Transformative co-creation

Career support based primarily on transformative co-creation of the employer and employee needs could be placed either at the intersection between individual holistic views and company needs, or between professional and company needs. If career development was seen as a joint construct between the company and the employee, the emphasis of support was on open interaction, discussion, and listening to employees and taking into account individual perceptions. The emphasis here was on both presenting opportunities and what the company has to offer, communicating opening possibilities and recommending employees to senior managers (to enable progression), and on listening to the employees themselves. An employee could aim for something other than what the company’s representatives had in mind. The support here could include using personalized means, utilizing organizational structures, demands, and opportunities. Support required the mutual identification of skills and strengths as well as new ways of thinking about career development and competition between companies for skilled workers.

“... I wanted to keep him in the house, so I told my supervisor that I’d like to make this guy a construction manager. (---) I supported him in his growth in that changing environment...” (Supervisor 18)

Supporting the employee’s continuous learning

Career support for employees’ continuous learning was recognized as a uniting point of view in all categories. Continuous learning could be seen in a more multidimensional way in these categories, as a combination of holistic or professional and company-driven themes. The interviewees approached career support by reflecting the need for continuous learning (based on a holistic view of the skills, livelihoods, training provision, and labor needs of people of working age) characteristic to the construction field; gender and ethnicity as promoters or preventers, demands for

and trends of construction, competition between companies, economic cycles, career development trends, and employment situations.

Career development requires learning, which can be supported, for example, by learning-friendly management and a good working atmosphere. Employee learning could also be enhanced by encouraging employees to actively seek out learning opportunities they might need. To support and develop an atmosphere of continuous learning, an interviewee presented a proposal to develop career support as a common mission of continuous learning in the whole sector. Instead of competence competition between companies, everyone benefits if employees gain experience in different organizations and bring new insights and ways of working.

Based on the results, continuous learning in this context shall firstly be understood as an activity, learning, where the learners are construction workers, companies, and education providers. Secondly, continuous learning shall be understood as a phenomenon influenced by various social factors (see Chapter 1) where, in addition to active learning, the actors themselves create the environment and themes of continuous learning that are considered important now and in the future. Thus, alongside reactive learning, learners can also proactively produce and develop the themes of, and need for, continuous learning. Supporting employees' continuous learning covers occupational, work environment, and holistic growth aspects. Continuous learning objectives are thus not only occupational know-how, but also have career adaptability dimensions: considering occupational future and activities, supporting curiosity towards possible future work scenarios, and confidence in pursuing vocational aspirations and implementing career choices (see also Savickas & Porfeli, 2012). As the results show, the needs of the environment may otherwise guide the employees' demand for continuous learning.

Cross-category views were recognized in the interviews as something that challenged leadership and characterized the working environment in the field, i.e., formed the field-specific needs for continuous learning. Regardless of how the supervisor understood career support, an employee's own skills and competencies, goals, and social skills were highlighted as something that can promote or prevent career development.

6 Discussion

In this chapter, I summarize and discuss the main findings of the study and critically examine their implications for the wider field. The aim of this discussion is to shed light on the rich interplay between the results and existing research knowledge, and to address how these results challenge or confirm previous research findings. I also evaluate the overall implementation and contribution of the study.

6.1 Summary and Synthesis of Results

This thesis describes career paths and success at work in the construction field. The research bases on the narratives, perceptions, and experiences of both individuals in their careers and company supervisors. The main research question—how career development and success at work are experienced and supported in the construction field—is examined from three perspectives: the perceptions of success at work, descriptions of career stories of those working in managerial positions in and around construction sites, and supervisors' perceptions of career support in five construction companies. The research design enables an exploration of successful career development, individual experiences, and the conceptions and methods of career support in construction companies. The findings are intended to support individual success at work and offer valuable insights for education and professional practice.

To concisely present the answers to the research questions from the three studies and assist the reader in following the discussion and synthesis, I will summarize the key results in Table 3.

Table 3. Results of Studies I-III

	Study I: Success at work and its preconditions in construction site managers' career stories	Study II: Career development to construction site managerial positions in the construction field	Study III: New insights into career- related continuous learning in construction companies - Supervisor conceptions of career support.
Research questions	How do site managers perceive success at work from their different subject positions? What are the subject-position-related preconditions to success at work according to their descriptions?	How do managers of construction sites with different kinds of professional backgrounds describe their careers? What kinds of similarities and differences appear in their career narratives?	How do supervisors perceive employee career support in construction companies?
Key contribution	Success at work is perceived through six roles, which can be related to work, society, or individual aspects.	Managerial career paths in construction seem to involve either strong primary interest in construction, versatile projects, or management.	Career support is understood through perceptions of various definitions of career. The conceptions are professionally-, individually- or company-oriented, interwoven by support for continuous learning.
Key results	Success at work was understood through six roles: I) a site manager II) a member of the community in the construction field III) a specialist IV) a representative of a certain career phase V) an individual VI) through a societal role Preconditions: - social capital such as wide networks, active interaction, and good social skills - psychological capital such as resilience, perseverance, and optimism - coincidences and favorable changes through economic fluctuations, for example	Three typical managerial career paths in and around construction sites: Path 1: Devotion to construction site management Path 2: Interest in versatile construction projects Path 3: Passion for leadership Similarities and differences relate to: - individuals' own interests - family and field-related social networks - employer needs and career opportunities - societal effects, demands, and possibilities	Professionally-, individually- or company-oriented career support appeared as supporting: 1) employees' professional development 2) transformative co-creation of company and employee goals 3) careers in the direction of the company's needs. 4) employees' holistic growth 5) employees' hierarchical pathway of titles 6) employees' continuous learning

Next, I will describe the synthesis of the research findings. The synthesis and its highlights are produced by examining the dimensions and elements in the results of Studies I-III, thus reflecting the perspectives of career practitioners and career supporters. My aim is to “produce new knowledge by making explicit connections and tensions between individual study reports that were not visible before” (Suri, 2011, p. 63). The synthesis highlights the ways in which the research findings can be combined, revealing and conceptualizing support, career development, and success at work in the leadership positions in the construction field.

Successful, employee-centered careers can be supported and managed by career experiencers and supporters by discussing and defining two fundamental issues. First, what are the experiencer’s primary career types or interests that would help them to thrive in their career, i.e., devotion to construction site management, interest in versatile construction projects, or passion for leadership. Second, from which role(s) do the experiencers perceive their success at work, i.e., professional, individual, societal and/or career phase-related roles. These definitions will then assist in identifying and designing ways and means to support employees’ successful careers and continuous learning. Further, these supportive means can be divided according to their orientation based on the individual, the professional, and the needs of the employer. Contrary to what I initially assumed, an employee’s holistic growth, for example, seems to connect both the career narratives and the perceptions of the supervisors. From a development perspective, companies can address employees’ careers through the individual’s own experiences of success and thus their perceptions of career development. What is done depends on how broadly career development can be understood and how it can be supported from different career-building perspectives in a way that helps the individual to feel pride in their work and in achieving their goals. On the other hand, companies can also contribute to broadening perceptions of success. This result can be further utilized in construction education and companies and by individuals reflecting and managing their own career directions and conceptions about success at work. In the next section, I will provide a more in- depth discussion of the results.

6.2 Discussion of the Findings

The unifying and divergent aspects of the research results can be viewed through social perspectives, individual, i.e., psychological dimensions, and continuous learning, and how these three perspectives relate to successful career development.

Social aspects and leadership in successful career development

This thesis presents that career development can be seen first through the three managerial career paths: devotion to construction site management, interest

in versatile construction projects, and passion for leadership. Thus, for people working in and around construction sites, a higher leader position is not always the only indicator of career development or the goal for career development, but there are several individual directions of career development and success. The goals and meaning of work vary according to career stage and work experience. This is important in terms of labor needs. Construction is a huge business both in Finland and globally and shows no signs of slowing down (e.g. ILO, 2024; Jackson, 2020). Construction sites are becoming increasingly complex, thus there is a huge need for qualified construction workers and plenty of opportunities for those interested in the work (Jackson, 2020). Second, narrative Studies I-II also showed that the objective of progressing in titles was seen as a natural one and it had to be explained if one wanted to build a career in a role and deepen one's skills in that role. However, according to Study III, this would also be in the interest of companies, so that employees would have the courage to develop their skills over a longer period in one job and there would be enough experienced people to fill all positions. A sense of community appeared strong in all of the three studies, and in this regard, the construction field was described as exceptional in relation to other fields. Löwstedt & Räisänen (2014) suggested that the use of a social identity lens could help increase understanding of relationships, cooperation and change initiatives in the construction industry. This study supports this suggestion. From the results of Study I, one significant dimension of success was related to belonging to the social community in the industry, thus reflecting the importance of social identity. Social capital (Luthans et al., 2004) also appeared as key for succeeding in the community.

In Study II, there is a quote from a novice interviewee about how the development discussion question *where you want to be in your career in 5 years* feels like there is no peace to do as one likes. The interviewee described that the current work tasks would be interesting and that a certain peace of mind for what one does is desirable. I interpret this example to show that while companies would appreciate patience from employees for career development and pride in what they do (see Study III), the companies' own practices, on the other hand, also strengthen the sense of urgency to advance from one title or task to another. Alternatively, those who do not feel their career is developing or meaningful can change their position. Based on the results of this thesis, I conclude that to support a sense of progression in a career—whether hierarchical, horizontal (e.g., Amundson, 2005; Uusiautti & Määttä, 2015), or task-based—it is recommended to collectively value all types of career goals in education, at the societal level, and within companies, including those that aim to retain employees in specific titles while developing their skills.

When looking at the results of Studies I and II (individual success conceptions and career narratives) and comparing them to the results of Study III (company supervisors' perspectives), I found that individual stories emphasized social relationships, networks, and informal mentor-relationships as meaningful effectors

that were not dependent on the organization in their careers. The interviewees had heard about job opportunities through networks and followed them. The influence of social relationships on career and success at work was very strong. From the company's point of view, networks outside the organization were hardly brought up, and supporting career development was mainly a matter for the company's internal actors and external trainers, who were, however, commissioned by the company. The positive effects of interpersonal and cross-organizational relationships in the construction field have been recognized in construction-related research. Qian et al. (2019) state that interpersonal and organizational relationships influence innovative behavior positively. It is therefore relevant to consider whether companies could benefit from cross-organizational employee networks and how to support broad networking in a way that does not automatically create a competitive advantage but is also in everyone's interest.

Various structured career paths in construction companies provide multiple ways to develop one's career, as the results of Study III imply. In Studies I and II, the descriptions of individual career stories and experiences show that *careers independent of companies* are built on a variety of projects in different types of work teams, possibly abroad, and the lessons learnt are often manifold. When comparing these results with the support conceptions the company supervisors presented, it is relevant to note that some of the diversity in the "self-made" career development was not reflected by the supervisors (perhaps the interview questions did not cover this perspective). This relates to the fostering of diverse career paths and to the recognition and promotion of diversity in the workforce. It is therefore important to consider new ways of incorporating, exploiting, recognizing and rewarding the relationships or multiple experiences of employees in companies.

The individual career stories, on the other hand, described a truly diverse group of people who have influenced their career paths. Childhood family (mainly close male relatives) and role models, neighbors, friends, colleagues, and supervisors had a significant role in success at work, as had societal aspects such as supply of, or access to, education and economic fluctuations. Education might thus have a role in strengthening and teaching construction leadership departments to facilitate student learning and interactions that simultaneously develop not only technical and leadership, but also communication and people skills (see also Lappalainen, 2017; Love, 2020).

Based on the results of this thesis, employee turnover could be seen as a conventional part of working life (as a joint learning and knowledge-sharing opportunity in the industry) and supported with training that everyone benefits from. It was also revealed that success in a career is largely supported by parties that cross the boundaries of organizations; many have personal networks, formal and informal mentors (see also Ragins et al., 2000) or are asked for advice and support. These are often long-term relationships, independent from employer enterprises.

Social belonging was also found to be important alongside the desire and motivation to develop.

The results of Study III indicate that social progress and new ways of understanding continuous learning in the construction sector deserve to be promoted and supported. Raemy et al. (2023) state that the concept of social advancement is closely related to social inclusion and justice, which implies the need to treat all people equally and ensure the same rights to participate in social processes and thus, be equally included in society (Raemy et al., 2023; see also Ebert, 2016; Kuhlmann et al., 2018). For example, successful apprenticeships at the beginning of careers contribute to positive performance appraisals, career identification, and job satisfaction, fostering career efforts (Raemy et al., 2023, see also Hofmann et al., 2022).

Supporting success-promoting leadership practices in the construction field may thus affect well-being, productivity, and meaningful careers. This research provides valuable information and contributes to the development of activities in the construction sector, particularly in terms of success at work and the development of work communities.

Finally, from a social and leadership-related point of view, the results of Studies I-III open new perspectives on the promotion of individual success at work and encourage further research to focus on and deepen positive psychology approaches in work in the field of construction. For future research, it is essential to react to the possibilities and pressures the dynamic development of the industry is creating for managers in and around construction sites. The role of site managers as maintainers or developers of social relations on construction sites could be examined in further research through the lenses of positive psychology.

Education psychological aspects to successful career development

Based on the results of Studies I and II, work was perceived as an important part of life and people were devoted to it, even at the expense of family life. Work in construction site managerial positions also offered many experiences of fulfillment and well-being on a personal level. Psychological dimensions in some perceptions had common features with Study III; for example, the strengthening of professional pride was emphasized as one way to support careers. The six roles of success in Study I show that, although the salary itself or other externally visible indicators of career development are also motivating (e.g., societal role), the experiences of success at work emphasized in other roles could serve as one way to support, understand, and commonly *discuss* definitions of success at work.

Within the six success roles and their preconditions, I raise the point that preconditions for success in the roles of a site manager and an individual seemed to epitomize the first-order positive psychological resources: hope, efficacy, resilience, and optimism, which affect site manager's attitudes, behaviors, performance, and well-being (see Luthans & Youssef-Morgan, 2017). Positive attitude, optimism

(Carver & Scheier, 2009; Luthans et al., 2004), and the acceptance of necessary choices concerning life and work contributed to the experience of success, as did the adaptation and participation in developing the masculine culture of the construction field and moving away from its traditional practices. Work engagement and happiness at work were likely predictors of job performance, which seemed to positively affect other aspects of life for the interviewees. Intrinsic motivation and how to support it also seemed to be identified in all the studies (Studies I to III), being something that links success at work, career development towards personal goals, and empowering supervisors to support genuine career development (see Deci, 1971; Deci & Ryan, 2008). This can be linked to the aim to strengthen professional pride and commitment to one's career choices and stages.

Continuous learning and successful career development

Several dimensions of continuous learning were brought up in all three studies. Learning was part of the descriptions of success at work in several roles; it was present in career paths and was one of the main results in the predecessors' perceptions of the means of supporting careers. Opportunities for continuous learning in a field that was perceived as one's own and in a subject passionate to learn in were perceived as very important in Studies I and II. Looking at the results, it can be noted that a genuine interest in continuous learning was often related to career development. This relates to the findings of Wasif et al. (2012), stating that learning can be understood differently among construction professionals, and some may relate it only to courses and overlook everyday work as an area for learning. They identified five learning styles in construction projects: learning through personal networks, learning through organizing, learning through experimenting, learning through reading, and learning through attending courses and industry seminars. The networks and organizing can thus be seen as learning possibilities and ways to increase construction project learning possibilities (Wasif et al., 2012). Nuwan et al. (2021) identified 20 key elements of knowledge, skills, and attitudes essential for construction managers, along with the training methods and approaches that effectively deliver these competencies. Notably, learning by doing and private training within the workplace were found to be the most favorable methods for acquiring these critical competencies. This confirms the findings of this study stating that individualized learning and support opportunities are essential.

Continuous learning in organizations is often supported and enabled through in-service education and degree-oriented training, continuous learning (Siirilä et al., 2021). However, Siirilä et al. (2021) point out that somewhat contradictorily, career path solutions and individual guidance are not central. In the context of the construction industry, Turner and Holdsworth (2023) state that both task- and emotion-related organizational support are important in facilitating the development of internal protective factors, such as emotional resilience and

reflection. These factors they describe are essential for young professionals to navigate the challenges of the demanding construction industry. However, they note that despite the importance of these supports, formal organizational support is often lacking in companies in this regard. This highlights the importance of the findings of this study and confirms that the aspects of continuous learning are insightful and utilizable when formulating learning opportunities in organizations and measuring their multidimensional impact. If a company's career support and possibilities for continuous learning are divided into the three sections: company-, professional- and individually oriented, then the orientation and effectiveness of the support may be easier to recognize and utilize. This division may also help tackle the challenges of attracting construction workers to skill development and training programs (Johari & Jha, 2020).

Research shows that workforce planning in the construction industry often focuses too much on company objectives, such as maximizing productivity at the expense of the career developmental needs of construction workers, even though this approach results in sub-optimal performance (Shahbazi et al., 2019). One solution is connecting the symbiotic relationship between employee and employer objectives with a multi-objective model that allows managers to optimize the relationship between these interdependent corporate priorities and to move towards socially responsible workforce planning models that optimize both employee and employer goals (Shahbazi et al., 2019). Fostering the development of individuals and their performance can be seen as a broad societal goal that grossed educational, workplace and civic sectors (e.g. Radu, 2023). The career narratives of those working in managerial positions include many different places and opportunities for continuous learning: social networks, personnel training or other education provided by the employer, and self-sponsored supplementary or further education. For example, if the demand for productivity or overly hectic job descriptions discourages people from working in the construction field, the jobs cannot be sustained. Therefore, the mobility of the workforce in pursuit of work that rewards and supports one's own values in itself produces the kind of collective, continuous learning that works as a force for change in working life guided by values other than human interest; work that supports well-being, usually the life that people would be interested in living.

The results of Studies I and II also showed that the opportunities offered by supervisors or companies had perhaps not been the most significant factors influencing career, but that the career involved interesting opportunities working for various employers. Indeed, in a project-based sector, one key measure of career development is expanding employer companies' views on the types of career paths they support, and consequently, their perceptions of career support and continuous learning, as noted by one company representative in Study III. This collective shift contributes to the overall development of the sector.

To achieve desired development, it is essential to approach the dimensions of continuous learning in and around construction sites in a way that considers the multidimensional career development demonstrated in this study. Based on the findings, improvements to learning structures can be made by combining the dimensions of positive psychology to the perspectives of continuous learning. Learning takes place in employees' spare time, work-related situations and training, and intersections thereof. Yet, personal networks are the most common source of learning for all professions in the projects, which offer common learning situations and thus opportunities for shared learning (Wasif et al., 2012). Experimenting and organizing for learning appear to be underutilized strategies, thus Wasif et al (2012) conclude that attempts to increase learning have to address the differences in learning behaviors of the various groups. Further, focus on experimenting and organizing for learning has the possibility to change learning behavior as a consequence of problems for future improvement (Wasif, et al., 2012; Zaitouni et al., 2020). Thus, both this research and the aforementioned studies complement each other. Continuous learning in education or companies only in accordance with the requirements of the environment fails to recognize the individual's success and learning factors for which they might have a passion. If considering individual strengths and interests in working life, continuous learning does not necessarily lead to a working life guided by productivity requirements and only certain trends. A working life that takes into account individual strengths and interests also develops in directions that serve the well-being of individuals (see e.g., Paterson, et al., 2014; Porath et al., 2012; Määttä & Uusiautti, 2023).

When reflecting on the above in the field of construction work and the challenges the field is experiencing, it is noticeable that individual values should be considered in the support of successful careers and continuous learning. From the perspective of continuous learning, the results indicate that if people follow a so-called given menu from which the individual chooses what to learn to respond to the needs of the work-life (albeit utilizing or following their strengths when learning), this may not be a sustainable path (see e.g., Snyder et al., 2021; Luthans & Youssef-Morgan, 2021). People themselves create the social structures, the way individuals work, and the world people live in from a future perspective. If careers develop in a direction that does not support overall well-being, it may eventually lead to a situation where change is inevitable. People will not continue the working life to which development has led but will change direction. Seligman (2013, pp. 104-105), reflecting on people's unfavorable behavior (*which in this context could mean rapid turnover or impatience in careers*), states that people should focus their attention *on the situations* that lead to unfavorable behavior rather than on personality traits: "the cause is not in the person but in the situation. Progressive science must isolate the situations that shape [...] failure etc. so that the situations can be corrected." In terms of support for successful careers, this could mean

identifying, producing, and enabling the structures for development and success that enable people to thrive in their careers.

As Määttä and Uusiautti (2023) state on finding the best possible ways of benefiting from the opportunities of continuous learning, it is essential for people to be able to find their place in society and the motivation to develop their own areas of expertise. The results showed that career development in the construction sector is perceived and understood as diverse and that understanding this diversity requires transformative learning from all actors – a critical examination of what kind of development is valued and what kind of continuous learning mechanisms are used to support it. Thus, in the construction industry, supporting what employees feel is meaningful to them is important. With a commonly recognized diversity in the definitions of career development and success, anyone who is comfortable in any position can have the opportunity to flourish.

6.3 Evaluation of the Research

For this study, I set the goal to find out how career development and success at work are perceived and supported in the construction industry. I approached the topic through three studies, exploring the perceptions of success at work (Study I) and career paths (Study II) of those working in and around construction sites and by examining career support from the perspective of supervisors in construction companies (Study III). I define this thesis as a study of successful careers and a study of adult development in the context of work and thus, I evaluate it from these standpoints. The theoretical basis of my research was formed by career theories and the premises of developmental psychology for success at work. The participants were university graduates, with one exception (see Appendix 6), which affects the perceptions and experiences presented in the study as, in principle, it can be assumed that a somewhat progressive career development is the goal of such participants.

First, I justify why I think these research topics and their theoretical frameworks have been successfully applied. Qualitative research has the potential to restore respect for ontological integrity and the capacity to replace esoterica with relevance (Steiner, 2002). “Qualitative leadership studies, when conducted with the same degree of rigor and concern for validity and quality, have several distinct advantages over quantitative approaches by offering more opportunities to explore leadership phenomena in significant depth” (Klenke, 2008, p. 5). Research, as this in question, is characterized by a set of distinguishing features that sets this tradition apart from quantitative approaches; first, it is predominantly inductive and conducted in natural settings, and second, the strategies, logic, and purposes of sampling clearly differentiate qualitative and quantitative methods (Klenke, 2008, p. 10). Further, qualitative inquiry aims to understand and represent the experiences and actions

of people as they encounter, engage, and live through situations. Researchers then attempt to develop understandings of the phenomena under study based on the perspective of those being studied as much as possible, and they also accept that it is impossible to set aside one's own perspective totally (and do not claim to) (Elliott et al., 1999, p. 216).

In light of the arguments outlined above and the research purpose, I declare that this qualitative research design, when considered broadly, achieved the objectives I had set. Namely, to produce a high-quality, knowledge-generating inquiry on careers in the construction field, the results of which are recognizable and practically usable. As Sin (2010) summarizes, research validity basically means the internal consistency of the object of study, data, and findings.

However, I will now examine the methodological choices and their suitability for this study in more detail and critically assess the reliability of the research. The methodological framework fits into a constructivist and constructionist worldview (Young & Collin, 2004, see also Hughes et al., 2022), as the ontological and epistemological premises emphasize the holistic treatment of phenomena, valuing context (Klenke, 2008). I used narrative and phenomenographical approaches and collected the data with interviews, which allowed the experiences studied to be examined in a way that, on one hand, the psychological elements were individual, as were the perceptions, and on the other, allowed the understanding that reality is also constructed collectively (e.g., Guba & Lincoln, 1994). In research, the research text also produces a certain description of reality, which is influenced by the researcher and the subject.

The multi-method research design allowed for a unique set of studies, the results of which are summarized by an interesting cross-fertilization of empirical studies and their findings. As Steiner (2002) stated, the diversity or complexity of the real context of qualitative research is the basis that should be achieved if cross-pollination is applied to the research design. When it comes to interviews, the information received is interaction between the researcher and interviewer. The researcher does not find narratives but participates in constructing them (Riessman, 2007). The interview questions thus guide the formation of a certain set of perceptions. During this research process, I found the interview questions and methods purposeful for the inquiry. However, I realize that each question was meaningful and the data would be different if the questions had been asked in a different order; the interviewee's reflection could have been built around different observations and reflections.

This research, with its multi-methodological approach (Tashakkori & Teddlie, 2010) produced enlightening outcomes in terms of supporting successful careers in the construction industry, outcomes that would not have been achieved with a more restricted research design. Since the approach was not only multi-methodological but also interdisciplinary, it leaned theoretically into a wide field of studies, posing challenges for conceptual and theoretical clarification and harmonization. Then

again, career- related research is traditionally interdisciplinary (Arthur et al., 1989) and I find that the theoretical choices followed my own understanding of exploring the career phenomenon. As Erik Allardt stated in 1997, research traditions are a blessing, but if they are followed for too long, they do not in themselves support scientific progress, which is why interdisciplinary research like this is also a source of new ideas and knowledge (see Allardt, 1997). I assess that through the qualitative interviews and their narrative and phenomenographic analysis, I met the requirements for qualitative research. This research provides access to authentic experiences and perceptions of career development and success at work and how to support them.

7 Conclusion

In this chapter, I present the conclusion drawn from the main findings of the studies and assess the social and educational relevance of the research findings regarding theoretical and practical contribution and their implications. Finally, I will suggest some ideas for further research topics related to the studies in this dissertation.

7.1 Theoretical Contribution

From a theoretical point of view, this study adds to the existing body of knowledge about successful career development by examining the perceptions of construction site managers of success and career support and shedding light on the phenomenon from the perspective of positive psychology and continuous, transformative learning. In addition, this research has discussed the perspectives of both career experiencers and supporters and shown that success and support at work are influenced by social and psychological capital, both from an individual and organizational point of view, offering a unique contribution to research in the field. Another contribution is the documentation of the perceptions of construction industry operators.

I suggest that experiences and support of successful managerial careers in the construction field can be understood and examined in the light of *intelligent career theory* (DeFillippi & Arthur, 1996; Parker et al., 2009), supplemented with *positive psychological capital* (Luthans et al., 2004) and transformative learning (Sterling, 2011) as an approach to continuous learning throughout careers. Intelligent career theory is described by its dimensions from the perspective of the organization (Beigi et al., 2018), yet from the same viewpoints (*which in this case can also refer to the communities in the field*), the psychological dimensions seem to deserve their own place in this theoretical angle. Consequently, I continue by showing how elements of intelligent career theory appear in the results and how this thesis adds to this theoretical perspective.

When examining the results of this thesis in light of the theoretical perspectives concerning careers (see Chapter 2), the elements found appear to be reviewable considering intelligent career theory, which was originally created to respond to the growing trend of developing intelligent organizations. DeFillippi and Arthur (1996) highlighted that career building in boundaryless contexts implies that the acquisition of career skills is the responsibility of the individual. This career idea might also be explored in careers requiring higher education, such as the construction

industry, where the skills required of workers are very broad. Intelligent career theory is based on the intelligent career framework (DeFillippi & Arthur, 1996; Parker et al., 2009). The intelligent career theory approaches careers from the points of view of enterprises, presenting that there are three core competencies of intelligent enterprises: the company's 'knowing-how', social network, and organizational culture that requires employees to develop their career capital (Beigi et al., 2018). This capital is divided into 'knowing-how' career capital, 'knowing- whom' career capital, and 'knowing-why' career capital" (Beigi et al., 2018).

In the results of Studies I and II, the knowing-whom capital arose as an important predictor of succeeding in a career. It was presented that especially the employer-independent careers were largely built on the support of social networks and career-relevant contacts. For example, team-building and strong cooperation skills were found to be essential when it came to success at work and successful careers. If equated here with social capital in the form of who people know and what kinds of social networks they have (Luthans et al., 2004), it was recognized to have a strong impact on the interviewees' career choice and paths in Studies I and II. The interviewees had ended up in the construction field through personal interest and because of family members (see also MacDonald & Durdyev, 2021), and career development was supported by a large number of social and psychological factors. *Knowing- how* capital was then recognized in professional dimensions of career, as capacities and skills related to work. This capital was undeniably and strongly present in all the studies, since those under study were careers for graduates which require strong professional skills. It was also identified as a fundamental factor for success at work, both in terms of acquired skills and continuous, transformative learning. Following Sterling's (2011) idea that transformative learning renews people's fundamental understandings of humanity and relationships to reality (see also O'Sullivan et al., 2002), in the context of career development and success at work, this means reflecting on and questioning the prevailing ways of understanding these phenomena. In order to build sustainable careers where everyone can find their place and to improve the, sometimes unsustainable, development structures created by modern mindsets (e.g., competitive society, paradigm of continuous economic growth), transformative learning is needed (Laininen, 2018). It helps to see that it is possible to make choices between several different conceptions (Sterling, 2019) and thus contribute to favorable development in work-life. I interpret the elements of *knowing-whom* career capital to be related to in the context of social capital, which was also found to be one of the key predictors in successful careers – social relationships being those related to career and other aspects of life. Finally, *knowing-why* originally involved themes of individual motivation, the construction of personal meaning, and identification (Parker, 2002) and to which this thesis relates positive psychological capital.

Adding positive psychological capital to intelligent career theory describes the construction careers I have examined. Perspectives of psychological capital were

undoubtedly present in the career narratives, for example, in the supervisors' perceptions and preconditions to success in various roles. The results revealed that both employees' and supervisors' positive psychological capital were described to positively affect career development and career support (see also Avey et al., 2008). Psychological capital appeared as optimism, perseverance, and the ability to recognize one's calling (e.g., desire to work on-site) (see Luthans et al., 2004). It also seemed to support well-being, facilitate self-appreciating career decisions (e.g., Luthans & Youssef-Morgan, 2017), and strengthen the ability to withstand business challenges and economic uncertainty (Luthans et al., 2004; see also Elsafty et al., 2020). Psychological capital seemed to have a positive correlation with desired employee attitudes, behaviors, and performance, as well as work performance, well-being, and other aspects of life, as are stated to be in wider work contexts (e.g., Avey et al., 2008).

In this section, I set out how my findings fit into the theoretical fields of career theory, positive psychology, and continuous learning. My research demonstrates the ways in which individual experiences and perceptions can be theoretically linked to organizational career support and the learning that this requires from different actors. Next, I will present practical suggestions based on the research.

7.2 Practical Implications

Drawn from the results, this dissertation produces detailed individual-level descriptions of success and careers in the construction industry in Finland, providing to education and work-life empirically useful ideas for the development of career guidance, leadership, and support for the strengths and potential of employees in companies. Insights into the conceptions of career support, and thus continuous learning, offer new perspectives on collective understanding and discussing dimensions of career possibilities in the field. Additionally, in response to the shortage of experienced site managers on construction sites, this study suggests practical ways to ensure experienced professionals in various roles in and around construction sites.

With this dissertation, I suggest that construction education should emphasize the *collective professional pride of the employees* in managerial positions in and around construction sites. This could be done first by familiarizing students with various development options and supporting their reflection on their own measures of success, and second, by highlighting the appreciation of all the aspects of multidirectional career development (including development *in the tasks and expertise*, not just to various leadership positions) to strengthen the commitment to construction work. A potentially new way of looking at career paths in terms of what is considered success at work on an individual level and where one's passion

lies, drawing on the roles of success at work, could be worth testing and further developing. The role-based approach to success at work might fit on an educational level as a contribution to career planning and at an organizational level, as a new viewpoint considered when developing career management practices.

Considering the effect and potential of cross-organizational relationships and networks of the employees, career support in construction companies could be further innovatively developed. In construction firms, it is crucial to pay attention to the role of the various positions and titles. As shown in this research, not everyone aims for a higher managerial position or wants to leave behind work on construction sites. On the contrary, on-site work should be appreciated and branded in a new way, namely, how to become a skilled leader who is familiar with construction processes and able to lead on-site work. Finding meaning in on-site work arises from the ability to accumulate psychological and social capital; if the career goal is more hierarchical, these capitals remain equally valuable. Furthermore, the construction industry labor market is highly gender-segregated, which neither enhances the sector's attractiveness nor supports employee retention or career development. Therefore, it is crucial to improve the appeal of the industry by embracing gender diversity. By fostering diversity, companies can enhance decision-making processes, stimulate innovation, and create more robust career support systems, ultimately leading to improved productivity and long-term career success for employees.

The results can also be further used, for example, to support social debate and to develop opportunities for continuous learning. This thesis provides insights into how the debate on different perceptions of career development and the identification of opportunities for people's values and aspirations could be framed in terms of continuous learning. In education and work in the construction field, career development could be supported through the idea of continuous learning, covering occupational, environmental, and holistic growth aspects. Continuous learning in the context of this research is seen as an activity, transformative learning, where the learners are construction workers, companies, and education providers and as a phenomenon influenced by social factors, trends, and the aforementioned actors. Alongside reactive learning, learners can also proactively produce, develop, and support flourishing careers. Construction companies already have multiple supporting and encouraging practices to support successful career development and enhance professional pride. To support the sustainability of construction professionals' careers, career development variety should be commonly considered in working life, along with the multiple aspects thereof and the diversity of career paths. According to my suggestions, this would generally lead to diverse, and thus more systematic, methods of career support. Below, I will make some practical suggestions on how the results of this study can be discussed and used in the day-to-day practice of workplaces.

Practical tools that HR professionals and / or supervisors could conduct:

Career path mapping interviews involve conducting career development discussions with employees to explore various career paths and identify opportunities for growth based on their expertise and experience, even without changing job titles. Supervisors can use structured career discussions to understand individual aspirations and perceptions of success at work, and tailor development plans accordingly.

Diversity-focused recruitment and training involve implementing recruitment initiatives that prioritize gender diversity. This includes collaborating with educational institutions to offer construction-related workshops designed to attract a broader demographic, including women and underrepresented groups. Additionally, diversity training for supervisors may be provided to foster more inclusive workplaces.

On-site leadership development involves creating career development frameworks that emphasize leadership roles within construction sites, demonstrating that leadership skills can be cultivated without leaving the work environment. HR professionals and supervisors can design development programs focused on team leadership, project management, and site process management, leading to a dual career system encompassing both technical and managerial paths.

Dialogue tools for career discussions involve developing and implementing resources such as career planning models, role-play scenarios, and self-assessment questionnaires to guide multi-directional career development conversations. These tools are designed to facilitate discussions on individual perceptions of success at work, personal strengths, and passion-based roles, helping to design career development strategies to everyone's unique aspirations and experiences.

Mentoring and cross-organizational networking involve encouraging cross-organizational or cross-departmental mentoring programs that create opportunities for employees to learn from each other and broaden their career perspectives. Organizing workshops and informal networking events can help build strong support systems, enhance career resilience and promote continuous learning.

Developing psychological and social capital involves educating leaders and then introducing support mechanisms to help employees build these assets, such as workshops on resilience, stress management, and communication skills. Recognizing these competencies as valuable strengths in both technical and managerial/leadership careers can contribute to a more holistic approach to career development.

Continuous learning programs involve launching initiatives in collaboration with educational institutions to provide employees with ongoing access to professional development opportunities. These programs could cover topics such as sustainability in construction, digital tools, leadership development, and positive psychology approaches to meaningful career planning, with a focus on preparing workers for the evolving world of work.

Integrating career support into company culture involves embedding it into performance appraisals, setting long-term personal and professional growth goals, and recognizing various career achievements, such as role or task management, peer leadership, mentoring, and positive customer feedback. HR professionals and supervisors can incorporate career support discussions into regular team meetings to reinforce their importance and encourage ongoing development.

These practical tools provide a tangible framework for enhancing career development in construction workplaces. Integrating them into daily operations can foster more sustainable, fulfilling career paths, benefiting both individuals and the industry. By continually reflecting and adapting, organizations can improve support for the success, well-being, and professional pride of construction professionals, which in turn boosts company productivity. Their application may also inspire advancements in career support strategies across sectors.

7.3 Future Research

During the research process, ideas emerged on how this research could be used to focus and broaden the perspective of qualitative and mixed-method research on careers and success at work in the construction sector, and, more broadly, what dimensions of these careers could be examined in the context of education and working life. I will now present some ideas for how the research could be taken forward.

Narrative approach to construction human resources and career support development

A narrative approach to career research in the construction sector: this study provided new insights into how a narrative approach can be applied in a field that relies heavily on quantitative analysis and measurement. The career stories and perceptions of success and the conditions for success of those in managerial positions highlighted the diversity of success and careers. Research on how companies guide career development showed that career development should be seen in a more holistic way in terms of work-life sustainability, not just as a progression through job titles and different managerial or leadership positions. It would also be valuable to study leadership development in the construction professionals' career narratives from the perspective of continuous learning. Changes in both gender structures and leadership attitudes in the sector bring interesting dimensions to the development of leadership for those currently working in the field.

Phenomenographic approach to construction careers

Based on the findings of this dissertation, the phenomenographic research approach has proven useful in identifying dimensions related to work practices. Applying

phenomenography to other practices affecting all employees, such as continuous learning, could deepen understanding of how individuals conceptualize the needs and goals of continuous learning. This approach would provide research evidence from a paradigmatic perspective on the topic. Similarly, further exploration of career paths through phenomenography, as briefly addressed in Study III, could offer additional insights. Moreover, examining the concept of success at work using a phenomenographic approach would complement the narrative-based analysis conducted in this dissertation.

Positive psychology in the research of construction careers

The findings of this research open new perspectives on the promotion of individual success at work and encourage further research to focus and deepen positive psychology approaches concerning work in the construction field. In the field, positive psychology approaches have scarcely been used when examining careers. As this research provided multidimensional analyses of the experiences and narratives of people working in the construction field, the analysis could be complemented by a survey of further information about the experiences of success, career aspirations, and transformative learning among construction site managers. Statistical analyses would provide further insights into the mediating and moderating factors affecting career development. Furthermore, as the findings highlight aspects such as employee well-being, recognition, and personal growth, it also provides elements for identifying a positive workplace culture. This suggests the potential for further research into positive workplace culture within the sector. Such research could emphasize practices like gratitude, recognition, dialogical practices and strengths-based approaches that foster a more positive and satisfying work experience for employees, leading to more productive companies.

This dissertation sheds new light on success at work and career development in the construction industry. It complements the research on careers in the sector by including dimensions of positive psychology. It also provides a unique perspective on continuous learning in the construction sector that can be used in training and the development of career support practices in companies. For future research, it is essential to react to the possibilities and pressures the dynamic development of the industry is creating for managers in and around construction sites. Additionally, the role of a supervisor as a maintainer and developer of social relations on construction sites emerged strongly in my research and deserves further research attention.

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Appendices

Appendix 1 / Studies I-II, Interview invitation

Dear representative of construction site managerial position,

I am approaching my PhD in the construction industry. I am doing a multidisciplinary PhD at the University of Lapland, Faculty of Education. I am investigating what people who work in management positions on construction sites think about their careers and success at work.

I collect my research data by interviewing people whose job description includes management tasks on construction sites. It is your experiences and views that are important and I am very interested in hearing them. By taking part in my research, you will be able to share knowledge based on your experiences, which can be used in your field, for example, to improve management and training. The results will also shed new light on individual ways of developing at work and progressing in your career. Your experiences will certainly also be useful for future professionals in the field.

Participation in this research is voluntary. All data will be treated anonymously and in strict confidence. The data will be stored and used for research purposes only.

I am interested in this research topic for a number of reasons. I have worked for several years in career development in the field of career planning. The construction industry has always been close to my heart and my everyday life for family reasons. It also has some interesting characteristics, such as its project-based nature, the age structure of the work communities and the potential for highly individual careers.

I hope you can find the time to participate in my research. We can arrange a time and interview schedule to suit you. The interview can be arranged face-to-face, remotely, in writing or via WhatsApp.

You can contact me either by phone or email, preferably by 30 June 2020. Thank you for your time, I look forward to hearing from you!

Best regards,

Krista Rautio

PhD Student, University of Lapland [email]

[phone number]

Hei työmaiden johtotehtävissä toimiva,

Lähestyn rakennusalaan koskevan väitöstutkimukseni merkeissä. Teen monitieteistä väitöstutkimusta Lapin yliopistossa, kasvatustieteiden tiedekunnassa. Tutkin, mitä työmaiden johtotehtävissä työskentelevät ajattelevat työurastaan ja menestyksestään työssä.

Kerään tutkimusaineistoni haastattelemalla henkilöitä, joiden työnkuvaan kuuluu työmaiden johtotehtäviä. Juuri sinun kokemuksesi ja näkemyksesi ovat tärkeitä ja olen erittäin kiinnostunut kuulemaan niistä. Osallistumalla tutkimukseeni pääset jakamaan kokemuksiasi perustuvaa tietoa, jota voidaan hyödyntää alallasi esimerkiksi johtamisen ja koulutuksen kehittämisessä. Tutkimustulokset valottavat uudella tavalla myös yksilöllisiä tapoja kehittyä työssä ja edistyä omalla uralla. Kokemuksistasi on varmasti hyötyä myös tuleville alan ammattilaisille.

Tutkimukseen osallistuminen on vapaaehtoista. Kaikki aineisto käsitellään anonymisti ja ehdottoman luottamuksellisesti. Aineisto tallennetaan ja sitä käytetään vain tutkimustarkoitukseen.

Tutkimusaihe kiinnostaa minua monesta syystä. Olen työssäni toiminut useita vuosia urasuunnitteluun liittyvissä kehittämissä tehtävissä. Rakennusala puolestaan on ollut minulle perhesyistä aina lähellä arkea ja sydäntä. Lisäksi alaan liittyy kiinnostavia erityispiirteitä, kuten projektiluonteisuus, työyhteisöjen ikärakenne sekä mahdollisuudet hyvin yksilöllisiin työuriin.

Toivottavasti löytäisit aikaa tutkimukseeni osallistumiseen. Voimme sopia sinulle sopivan ajan ja haastattelutavan. Haastattelu voidaan järjestää kasvokkain, etäyhteyksin, kirjallisesti tai WhatsApp- saneluna.

Voit ottaa minuun yhteyttä joko puhelimitse tai sähköpostitse, pyydän ilmoitukset mielellään 30.6.2020 mennessä.

Kiitos ajastasi, jään odottamaan yhteydenottoasi! Parhain terveisin,

Krista Rautio

Väitöstutkija, Lapin yliopisto [sähköpostiosoite] [puhelinnumero]

Appendix 2 / Studies I-II, Frame of the interviews

[Same information as in the invitation letter, with a little more detail about the research, including information on when and where the participant will find information of the completion of the study. Place of publication University of Lapland, research articles and/or parts based on them to be published also in international and national scientific journals and, for example, in the publication channels of professional associations.]

I. Background information on the interviewee

Gender, Age, Education or profession in the field, Job title, Years of work experience in the construction sector, Sector of the construction industry, Region/location of work

II. Career

Could you please tell how you got into the construction industry and how your career has gone?

For example, you can tell about your relevant study and work experiences.

Where are you now in your career in terms of past and future?

You can think about this in terms of career peaks or goals, for example.

Do you feel that any events, people or coincidences have influenced or are influencing the course of your career?

If yes, which ones? In what way have they influenced your career?

Do you feel that any of your personal characteristics influence or have influenced the course of your career?

If yes, which ones? In what way have they influenced / are they influencing you?

How your career is going to continue: let's imagine that we meet in 10 years. Could you tell me where you would hope to be in your career then and how you got to that point?

III. Success at work

What is meaningful/important to you at work?

You can also reflect if the meaningfulness varies or has varied at different stages of your career.

What goals do you have for your career?

You have / have not mentioned success at work in the interview. When talking about success at work, what exactly does it bring to mind for you?

What does success at work mean for you?

Do you feel that you are or have been successful at work?

If so, how?

What has been or is required for you to be successful at work?

Tutkijan ja tutkimuksen lyhyt esittely

[Samat tiedot kuin kirjeessä, tutkimuksesta vähän tarkemmin. Myös tieto, milloin ja mistä tutkimukseen osallistuva saa tietoa tutkimuksen valmistumisesta. Julkaisupaikka Lapin yliopisto, tutkimusartikkelit ja / tai niihin perustuvia osia tarkoitus julkaista myös kansainvälisissä ja kansallisissa tieteellisissä julkaisuissa sekä esimerkiksi alan liittojen julkaisukanavissa.]

I) Haastateltavan taustatiedot

Sukupuoli, Ikä, Alaan liittyvä koulutus tai ammatti, Työnimike, Työkokemus rakennusalalla vuosina, Rakennusteollisuuden toimiala, Työskentelyalue / paikka

II) Uratarina

Kertoisitko, miten päädyit rakennusalalle ja miten urasi on kulkenut?

Voit kertoa esimerkiksi itsellesi merkityksellisten opiskelu- ja työkokemusten kautta.

Missä vaiheessa urasi on nyt, jos ajattelet sitä menneen ja tulevan osalta?

Voit miettiä tätä esimerkiksi urahuippujen tai -tavoitteiden suhteen.

Koetko joidenkin tapahtumien, henkilöiden tai sattumien vaikuttaneen tai vaikuttavan urasi kulkuun?

Jos kyllä, niin minkä? Millä tavalla ne / he ovat vaikuttaneet uraasi?

Koetko, että jotkin henkilökohtaiset ominaisuutesi vaikuttavat tai ovat vaikuttaneet urasi kulkuun?

Jos kyllä, niin mitkä? Millä tavalla ne ovat vaikuttaneet / vaikuttavat?

Miten urasi jatkuu: Kuvitellaan, että tapaamme 10 vuoden kuluttua. Kertoisitko minulle, missä toivoisit silloin olevasi urasi suhteen ja miten päädyit siihen pisteeseen?

III) Menestyminen työssä

Mikä on sinulle merkityksellistä / tärkeää työssä?

Voit myös kertoa, vaihteleeeko tai onko merkityksellisyys vaihdellut eri vaiheissa uraasi?

Millaisia tavoitteita sinulla on urasi suhteen?

Olet / et ole maininnut haastattelussa *työssä menestymistä*. Kun puhutaan työssä menestymisestä, mitä se tarkemmin ottaen tuo sinulle mieleen?

Mitä menestyminen työssä tarkoittaa sinun kohdallasi?

Koetko itse menestyneesi tai menestyväsi työssä?

Jos kyllä, niin miten?

Mitä menestyminen työssä sinun kohdallasi on edellyttänyt tai edellyttää?

Brief introduction of the researcher and the study

Appendix 3 / Study III, Participation invitation to companies

INVITATION TO A STUDY ON THE CONSTRUCTION SECTOR 3/2022

Dear construction company!

Do your employees have the opportunity for a career path or job development and skills orientation in your company? In my doctoral thesis, I am investigating success at work and career in the construction sector and I am looking for companies to participate in my research. Career development in the construction sector is a little studied topic, despite the growing interest in improving the attractiveness of career choices and job retention.

I would like to hear the experiences and views of your company's supervisors (3-4 interviewees) on career development and competence orientation practices and how they work. Practical experience is valuable for improving construction training and success in construction jobs. The results of my research also shed light on new ways to support construction workers in their careers - and thus the success of the companies.

Participation in this research is voluntary. All data will be treated anonymously and in strict confidence. The study does not identify which companies have participated in the research. The data will be stored and used for research purposes only.

If you wish, I will provide you with a research article and an executive summary of the study, with an abstract, once the research article has been published. And if there are needs or ideas arising from the results in your company, we can also discuss the possibilities of using the results in your company.

ps: As a researcher, I am interested in this topic for many reasons. The construction sector has some interesting characteristics, such as its cyclical nature, the project nature of the work, the age structure and diversity of the work communities and the potential for highly individualised careers. In my work at the University of Lapland, I have been involved in career development tasks related to career planning for several years. In addition, the construction sector has always been close to my heart and my everyday life for family reasons.

I hope you will be interested in participating! I would be happy to call you to discuss the topic and to elaborate on the practices and objectives of the study, after which you can decide whether or not to participate. Cooperation and interviews will take place at a time convenient for you during spring 2022.

Best regards, Krista Rautio

A doctoral student University of Lapland

[Contact information: phone number, e-mail address, LinkedIn profile]

Rakennusalan yritys!

Onko työntekijöillänne mahdollisuus urapolkuun tai työssä kehittymiseen ja osaamisen suuntaamiseen yrityksessänne? Tutkin väitöstutkimuksessani työssä ja uralla menestymistä rakennusosalalla ja haen yrityksiä mukaan tutkimukseeni. Urakehitys rakennusosalalla on vähän tutkittu aihe, vaikka siihen halutaan kiinnittää yhä enemmän huomiota uravalinnan houkuttelevuuden ja työhön sitoutumisen parantamiseksi.

Haluaisin kuulla yrityksenne esihenkilöiden (3-4 hlöä) kokemuksia ja näkemyksiä henkilöstön urakehityksen ja osaamisen suuntaamisen käytännöistä sekä niiden toimivuudesta. Käytännön kokemustieto on arvokasta, kun halutaan kehittää rakennusalan koulutusta ja rakennusalan töissä menestymistä. Tutkimukseni tulokset valottavat myös uusia tapoja tukea rakennusalan työntekijöitä urallaan - ja siten myös yritysten menestymistä.

Tutkimukseen osallistuminen on vapaaehtoista. Kaikki aineisto käsitellään anonymisti ja ehdottoman luottamuksellisesti. Tutkimuksessa ei tuoda esille, mitkä yritykset ovat osallistuneet tutkimukseen. Aineisto tallennetaan ja sitä käytetään vain tutkimustarkoitukseen.

Halutessanne toimitan teille tutkimuksesta tuotettavan tutkimusartikkelin ja tiivistelmän nostoineen, kun tutkimusartikkeli on julkaistu. Ja mikäli tuloksista syntyy tarpeita tai ideoita yrityksessänne, voimme keskustella myös tulosten hyödyntämismahdollisuuksista yrityksessänne.

ps: Tutkijana olen kiinnostunut aiheesta monesta syystä. Rakennusalaan liittyy kiinnostavia erityispiirteitä, kuten suhdanneherkkyys, työn projektiluonteisuus, työyhteisöjen ikärakenne ja moninaisuus sekä mahdollisuudet hyvin yksilöllisiin työuriin. Olen työssäni Lapin yliopistossa toiminut useita vuosia urasuunnitteluun liittyvissä kehittämistehtävissä. Lisäksi rakennusala on ollut minulle perhesystä aina lähellä arkea ja sydäntä.

Toivottavasti kiinnostuitte osallistumaan! Voisin soittaa aiheesta ja tarkentaa tutkimukseen liittyviä käytänteitä ja tavoitteita, jonka jälkeen voitte vielä rauhassa päättää mukaantulostanne. Yhteistyö ja haastattelut tapahtuvat teille sopivina ajankohtina kevään 2022 aikana.

Parhain terveisin, Krista Rautio Väitöstutkija Lapin yliopisto
[yhteystiedot: puhelinnumero, sähköpostiosoite, LinkedIn-profiili]

Appendix 4 / Study III, Interview invitation

Example of an email cover letter

Hello,

I am writing from the University of Lapland, I heard from [name of company] [name of person] that I could possibly interview you for my PhD thesis on competence management. Great, if this suits you! The interview is relaxed and confidential, and does not require any pre-arrangement. At the beginning of the interview, I will explain the confidentiality issues. I will then ask you questions and you will answer them informally, based on your own experience and views.

The interview will take place either via Teams or by telephone, according to your choice. You can allow about 45 minutes, although we may be able to complete the interview sooner. What would be the best time for an interview? Below are a few dates for next week, but you can also suggest other times that suit you.

Mon x.x. at xx.xx

Wed x.x. at xx.xx

Fri x.x. at xx.xx

In addition to these, there is flexibility after 5 pm and at weekends.

How do you find this proposal?

Sincerely, Krista

Krista Rautio

PhD student | University of Lapland tel [xxx xxx xxx xxxx]

LinkedIn

Esimerkki sähköpostin saatteesta

Hei,

kirjoitan Lapin yliopistosta, kuulin [yrityksen nimi] [henkilön nimi], että voisit mahdollisesti haastatella sinua osaamisen johtamista koskevaan väitöstudiumukseeni. Hienoa, jos tämä sopii sinulle!

Haastattelu on rento ja luottamuksellinen, eikä vaadi ennakkovalmistautumista. Kerron haastattelun alussa vielä luottamuksellisuuteen liittyvät seikat. Sen jälkeen esitän kysymyksiä ja niihin vastataan vapaamuotoisesti, oman kokemuksen ja näkemyksen perusteella.

Pidetään haastattelu valintasi mukaan joko Teamsin välityksellä tai puhelimitse. Aikaa voi varata n. 45 min, vaikka saatamme selvittää nopeamminkin.

Mikä olisi paras aika haastattelulle? Alla muutama ajankohta ensi viikolta, näiden lisäksi voit tinki esittää sinulle sopivia saumoja.

ma x.x. klo xx.xx

pe x.x. klo xx.xx

ke x.x. klo xx.xx

Näiden lisäksi käy joustavasti klo 17 jälkeen ja viikonloppuisin.

Miltä ehdotus vaikuttaa?

ystävällisesti, Krista

Krista Rautio

Väitöstudiumkija | University of Lapland tel [xxx xxx xxxx]

LinkedIn

Appendix 5 / Study III, Frame of the interviews

Background information on the interviewee:

Title, Education, Gender, Age, Work experience in the construction sector in years

I) Overall picture of career development opportunities for employees in the company

Does the company have a programme for the development, identification and management of skills?

For example, a career path or mentoring programme or similar?

Could you please describe the career and development opportunities for employees in your company? How are these opportunities reflected in practice?

E.g. length of career with the same employer, changes in job responsibilities?

Would you like to share any other opportunities or values that your company offers in relation to the career development of your employees?

II) The tools and means of the interviewee to support the career development of employees

Do you feel that your role includes supporting employees in their career development?

Is this task linked to your role as a manager or to another role (e.g. mentor, etc.)?

How do you identify the employee's skills and development potential? How do you provide concrete support for career development?

Could you give practical examples of situations where you have supported an employee's career development?

Which tools and instruments are relevant?

What skills or competencies do you yourself need to support career development?

III) Views on the factors influencing career development in the construction sector

In your experience, how important is the role of the manager in supporting the employee's work or career development?

What other factors do you think a) contribute to and b) hinder or slow down the career development of employees?

How do you think career development support could be improved in the construction sector?

Extra question: earlier I did not mention the term 'success' in the questions, but I would like to ask in conclusion: how do you think you know that a construction worker has been successful in his/her career?

Haastateltavan taustatiedot:

Nimike, Koulutus, Sukupuoli, Ikä, Työkokemus rakennusalalta vuosina

I) Yleiskuva työntekijöiden mahdollisuuksista kehittyä urallaan yrityksessä

Onko yrityksessä käytössä jokin osaamisen kehittymiseen, tunnistamiseen ja johtamiseen liittyvä ohjelma?

Esim. urapolku- tai mentorointiohjelma tai muu vastaava?

Kertoisitko, millaisia ura- ja kehittymismahdollisuuksia työntekijöillä on yrityksessänne? Miten mahdollisuudet näkyvät käytännössä?

Esim. urien pituudet samalla työnantajalla, työtehtävien muutokset?

Haluatko kertoa muista yrityksen tarjoamista mahdollisuuksista tai arvoista työntekijöiden urakehitykseen liittyen?

II) Haastateltavan työkalut ja keinot tukea työntekijöiden urakehitystä

Koetko, että tehtäviisi kuuluu tukea työntekijöitä uralla kehittämisessä?

Kytkeytykö tehtävä rooliisi esimiehenä vai johonkin muuhun rooliin (esim. mentori tms.)

Millä tavoin tunnistat työntekijän osaamista ja kehittymispotentiaalia?

Miten tuet konkreettisesti uralla kehittymistä?

Kertoisitko käytännön esimerkkejä tilanteista, joissa olet tukenut työntekijän työssä kehittymistä? Mitkä keinot ja välineet ovat olennaisia?

Mitä osaamista tai valmiuksia urakehityksen tukeminen sinulta itseltäsi edellyttää?

III) Näkemykset uralla kehittymiseen vaikuttavista tekijöistä rakennusalalla

Miten merkittävä on kokemuksesi mukaan esimiehen rooli työntekijän työssä tai uralla kehittymisen tukemisessa?

Mitkä muut seikat mielestäsi a) edistävät ja b) estävät tai hidastavat työntekijöiden uralla kehittymistä?

Miten uralla kehittymisen tukemista voisi mielestäsi kehittää rakennusalalla?

Ekstrakysymys: aiemmin en maininnut kysymyksissä *menestymisen* termiä, mutta haluaisin kysyä lopuksi: Mistä mielestäsi tietää, että rakennusalan työntekijä on menestynyt urallaan?

Appendix 6 / Studies I-III, Participants' demographic information

Study I and Study II		Study III	
Number of participants	21	Number of participants	23
Sex		Sex	
Male	19	Male	21
Female	2	Female	2
Other / Prefer not to say	-	Other /	-
Age		Age	
<30 years	2	<30 years	-
30-39 years	7	30-39 years	8
40-49 years	2	40-49 years	7
50-59 years	4	50-59 years	7
60-69 years	5	60-69 years	1
>70 years	1		
Education		Education	
Master builder UAS*	10	Construction engineer	7
Engineer UAS	5	Master of science in technology	6
Engineer	3	Master builder	4
Master builder UAS & engineer UAS	1	Automation engineer	1
Engineer UAS & master's degree in construction UAS	1	Master of business administration	1
Undergraduate degree in construction	1	Construction engineer & civil engineer	1
		Construction engineer & surveying engineer	1
		Construction and civil technician	1
		Bachelor of business administration	1
Title		Title	
Foreman	5	Production manager	1
Site manager / responsible site manager	8	Human resource director	1
Construction manager	3	Region manager	1
Construction engineer	1	Financial manager	1
Chief executive manager	1	Head of unit	2
Technical manager	1	Project development manager	1
Business director	1	Construction manager	4
Retired from responsible site manager's position	1	Project director	2
		Responsible site manager	3
		Site engineer	1
		Operational manager	1
		Chief executive officer	1
		Foreman	1
		Site manager	3
Total work experience in the construction field		Total work experience in the construction field	
3-9 years	3	6-9 years	3
10-19 years	6	10-19 years	8
20-29 years	2	20-29 years	6
30-39 years	4	30-39 years	6
40-49 years	6	40-49 years	-
*UAS refers to Universities of Applied Sciences. In the Finnish education system, these are higher education institutions (along with universities) and they confer both bachelor's and master's degrees, in which engineers' degree refers to bachelor-level. Master-level degrees in a UAS are possible to enroll in after a few years of work experience or alternatively studying the subject directly in a <i>university</i> .			

Appendix 7 / Studies I–III, Original publications

- I) Rautio, K. (2022). Success at Work and Its Preconditions in Construction Site Managers' Career Stories. In S. Hyvärinen, T. Äärelä & S. Uusiautti (Eds.) *Positive Education and Work: Less Struggling, More Flourishing* (pp. 121–148). Cambridge Scholars Publishing.

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CHAPTER 7

SUCCESS AT WORK AND ITS PRECONDITIONS IN CONSTRUCTION SITE MANAGERS' CAREER STORIES

KRISTA RAUTIO

Abstract

This chapter explores narratives about work success in the construction industry. First, it investigates how site managers perceive success at work in different subject positions. Secondly, it examines subject-position-related preconditions to success at work according to their descriptions. The data were obtained from 21 site managers through semi-structured interviews. Results confirmed that the experiences under study comprise successful performances as: I) site managers; II) members of the construction industry community; III) specialists; IV) representatives of certain career stages; V) individuals; and VI) in societal roles. The subject-position analysis revealed the complexity of experienced success. For example, one can be successful in one role but less so in another. The results indicated that perceptions of success change during different career phases and that the key preconditions for success are cooperative leadership skills, accumulation of knowledge and experience, a committed attitude towards work, and optimism when facing adversity. Additionally, the features described as characteristics of the construction field, such as traditional and masculine working culture, out-of-town jobs, project-type work, and diverse teams, affect site managers' success.

Keywords: success at work, construction industry as social environment, positive (career) psychology, subject positions.

Introduction

This research explores views on and experiences of success at work in the construction industry. Although career success has been extensively studied in several disciplines over the past few decades, this study and its

multidimensional focus on site manager's experiences aims to supplement the discussion.

Careers and work in the construction industry have been shown to have various sector-specific characteristics. Productivity research in the field (Pekuri et al., 2011; Pekuri, 2015) suggests that the biggest challenges in managing productivity are related to the slow and difficult measurability of productivity regarding proactive and operational development. Studies of the occupational and psychological wellbeing of supervisors in the construction industry indicate that employees' work and wellbeing stressors are characterized by a high workload, long working days, and insufficient time spent with family (see Dainty et al., 2007; Sang et al., 2004). Dainty et al. (2007) described the field as among the largest, most complex and most people-intensive sectors. Sector-specific features are, for example, structural fragmentation, diversity of work practices, and rapidly changing projects. People with specific competences and from various companies are brought in to work in such frameworks, where they quickly need to create co-operative working conditions. Additionally, the construction industry is passing through a time of great upheaval: new technology, digitalization, internationalization, new types of business models, and climate change are changing operations (Fitz, 2020). This not only poses remarkable challenges but also major chances for leadership, career development, and success. This makes studying the construction industry an interesting research field, thereby justifying the need for topical research in this area.

This study focuses on narratives of work success and, in particular: (1) How site managers perceive success at work from their different subject positions; and (2) The subject-position-related preconditions to success at work according to their descriptions.

There are two reasons for studying these site managers. First, they work near the actual construction and therefore face the sectoral characteristics of the working environment mentioned above. Secondly, they work in positions for which it is required to have either higher education or at least remarkable experience in the field; whichever is the case, it can be assumed they have already formed some personal views in their career and experienced successful performance.

The results reveal that site managers perceive success at work from six subject positions, extensively disclosing their views on both success and its preconditions. The findings may not cumulate to produce constructional change but may have consequences beyond specific social transactions. The primary purpose for studying and discussing themes among site construction managers is to transform their success stories into experiences. Based on the results, the stories can become instructions about the sources of success.

Theoretical Framework

Positive (Career) Psychology

By career I refer, in short, to a unique combination of education and work experience. Career-related experiences, narratives, and goals are therefore linked to each individual situation (e.g., Baruch and Bozionelos, 2011; Cohen, Duberley and Mallon, 2004; Lähteenmäki, 1995). When drafting the initial research plan, I got inspired by positive psychology, which offers scientific approaches for exploring people's performance in education and work through personal strengths and elements supporting overall wellbeing (e.g., Lopez and Snyder, 2009). The study of positive psychology relates successful performance and an individual experience of success to strengths (Seligman 2011) and psychological capital (e.g., Luthans, 2004; 2007). For example, Carver et al. (2009) showed that optimists and pessimists differ in the manner—and the success—with which they withstand adversity. This study did not investigate whether the interviewees were optimistic or pessimistic, but approached the study design, the material, and the results leaning multidimensionally on previous research and experts in the field. Positive psychology aims to increase understanding of human behavior, which includes a deep knowledge of strengths and human development (Lopez and Snyder, 2009). Since the theory's goal is to increase flourishing (Seligman 2011, 13), the results of this research can contribute to the ability to flourish at work in the construction industry.

Career performance is also widely studied in development psychology, and these studies revealed, for example, that educational and occupational attainment are highly prized (e.g., Roisman et al., 2004), but that occupational attainment and its important correlate—income—are not as critical for happiness as empirically often assumed (Myers, 2000; Uusiautti and Määttä, 2015). Nonetheless, educational and occupational attainment are associated with greater access to many resources that can improve quality of life with greater social capital (Bradley and Corwyn, 2002; Conger and Donnellan, 2007). The greater income resulting from high educational and occupational attainment may also enable individuals to maintain strong life satisfaction when faced with difficult life circumstances (Johnson and Krueger, 2006).

Success at Work

The primary assumptions when formulating the interview questions (see Methods section) and the “theoretical lenses” used when analyzing the

research data are closely connected to prior research on success at work and in education in the field of positive psychology (see Achor, 2010; Hyvärinen et al., 2014, 2015a, 2015b; Linley et al., 2013; Seligman, 2011; Uusiautti, 2008; Uusiautti and Määttä, 2015; Uusiautti, 2019). In previous studies, success at work has been determined, for example, as a combination of an individual's wellbeing, self-satisfaction, and self-fulfillment (Uusiautti, 2015; 2019, 109). Individual experiences of success at work are approached by interdisciplinary insights into the theme, mainly leaning on success studies in the field of psychology (e.g., Gilman et al., 2009; Lopez and Snyder, 2009; Seligman, 2013; Uusiautti and Määttä, 2015) and management (e.g., Hyvärinen, 2016; Pekuri, 2015). Also, the connection between personality traits and career attainment has been studied in psychology and wellbeing studies, and it has been stated that personality matters for different life outcomes (e.g., Roberts et al., 2007). What is common in studies of success is that it is often suggested to be related to various aspects of an individual's lives, and it can be experienced and defined in multiple ways; it may refer to happiness and satisfaction, good and successful work results, to mastery and visible achievements, where "people try to achieve just for winning's own sake" (Seligman, 2013) and also to high income and work-related awards (Harrison and Jepsen, 2015). These divisions and fragmentations are also found in the results of this study.

Implementation of the Study

Research Approach

The methodology follows a narrative approach. The narrative is understood by leaning on Wells's (2011, 106) formulation, a story of a broad condition, career, and success that unfolds over time and with consequence within a specific social cultural milieu. Since the study revealed personal work success in the construction industry, the narrative approach offered a relevant and practical method for gathering data. It forms a fairly loose research framework, which is suitable for research with a multidisciplinary theoretical background, aiming to understand individuals' perspectives on the phenomenon being studied (Perttula and Latomaa, 2005, 196-202). The paradigm of this study is social constructivism. As stated among researchers working around culture and career psychology (e.g., Stead, 2004; Young and Collin, 2004; Cohen et al., 2004), social constructivism accepts that there are many "truths" that are perspectival and situated in relationships (see also Bauman, 1999). Social constructivism proposes that each individual mentally constructs the world of experience through cognitive processes (Young and

Collin, 2004, 374). Social conventions and interpersonal relationships have cultural implications, and hence social constructionism, with its focus on relationships, is befitting to understanding culture in the career domain, as in this study. Social constructionism also highlights how the core constructs of career psychology, such as personality and vocational interests, are not necessarily universal but unexamined cultural constructions (Stead, 2004). Cultures in this research refer to various communication or acting cultures in which the interviewees are involved and talk about, such as those related to the construction industry.

Selecting and Collecting Research Data

When defining research objects, I went through the various actors involved in the operation of construction sites, aiming to identify the jobs in which close work on construction sites and managerial positions are combined. I stated, alongside discussions with the research supervisors and an email discussion with the construction unit *Rakennusinsinöörit ja -arkkitehdit RIA*, that the job description of a “työmaiden toimihenkilö” (this does not have a corresponding English translation but it refers to those working in managerial positions on sites) includes the desired elements. It was reasonable to assume that site managers have a certain amount of career advancement experience by having already achieved their positions through either education or work experience, or both. To pursue potential interviewees, a letter of invitation was sent to those working on site-managerial positions. This meant the recipients could define whether or not they fitted the description, regardless of their current title. All participants received this same information beforehand. Research material was acquired using the snowball method through the researcher’s own networks, by contacting construction associations and companies, by publishing the invitation in a weekly magazine (*Rakennuslehti*, which targets those managing and supervising construction projects), and finally, by directly contacting a site manager who featured in a blog about the foreman’s job in a particular company. Interestingly, none of those who pledged to be interviewed withdrew or postponed participation.

Interview Method

The research interviews were conducted using a semi-structured interview method (Brinkmann, 2018; Ollerenshaw and Creswell, 2002) for two reasons. First, I aimed to pursue informal interview situations in which both involved would feel able to speak reasonably freely or ask for some

knowledge-producing additional information, rather than keeping strictly to pre-read questions, exactly as worded, with no information beyond this ever coming to light, as might be the case in more structured interviews (Brinkmann, 2018, 579). Secondly, I considered it important to maximise the possibility of focusing the conversation on the issues being studied (see Brinkmann, 2018). A thematized questionnaire was therefore necessary. A semi-structured interview method allows the interviewer to guide the interviewee in case participants do not know what or how much to say or where to begin. Hence, I could refer to previously raised issues or skip a question if the interviewee had already answered it. This also contributed to the natural atmosphere during the interviews.

Course and Themes of the Interviews

The interviews comprised an introduction and a specific “researcher’s confidentiality promise,” the actual recorded interview (including standard background questions), and an informal feedback conversation. The written interview was preceded by a phone call that included the introduction described above. The interviews stressed three themes: 1) career story; 2) management; and 3) success at work. This study is part of wider research particularly focusing on the third theme. Finally, the study material comprises 21 interviews conducted face-to-face, over the phone, on the video-call system “Teams,” or via e-mail. The interviewees were allowed to choose the most pleasant way for them to participate. Another option was via the WhatsApp recorder, but this was not chosen. All the interviews were recorded using an iPhone recorder. When asked to talk about their thoughts on success, the interviewees had already been reflecting on their careers, their performance as managers, and the factors affecting them. When it came to success, the interviews revolved around the following questions: What does success at work bring to mind? What does success at work mean to you personally (if I had not already been told this during the first question)? Do you feel that you have succeeded at work? What does or did it require to succeed at work: was it you or your environment? What does or did it require in general to succeed in the construction industry?

Data and Analysis

The research material comprised 21 verbal (N = 20) and written (N = 1) interviews. Nineteen of the interviewees were men; two were women. The age range varied between 25 and 74 years (< 30 N = 2, 30 – 39 N = 7, 40 – 49 N = 2, 50 – 59 N = 4, 60 > N = 5, 70 > N = 1). Educational backgrounds

varied, and in cases where the completed degree of “construction technician” no longer exists, the corresponding degree (which, according to the interviewed technicians, is “master builder”) is reported. Until the 1990s, the construction technicians’ degree was a college-level degree that ranked below the level of an engineering degree. For clarity, the letters after degrees refer to the Finnish education system. There are two types of higher-education institutions in Finland: universities and universities of applied sciences (UAS). The UASs confer both bachelor’s and master’s degrees, of which engineers’ degrees refer to bachelor-level. It is possible to complete a master’s degree at a UAS after some years of work experience or study it directly at a university (Finnish National Agency for Education, 2021). The educational backgrounds of the interviewees were as follows: undergraduate degree in construction (N = 1); master builder UAS (N = 10); master builder UAS and engineer UAS (N = 1); engineer UAS (N = 5); engineer UAS and master’s degree in construction UAS (N = 1); and engineer (N = 3). One had updated the former technician’s degree to master builders’, though this is reported just once.

The job titles of the participants were: foremans (N = 5); site managers and responsible site managers (N = 8); construction managers (N = 3); construction engineers (N = 1); chief executive managers (N = 1); technical managers (N = 1); business directors (N = 1); and those retired from responsible site manager’s positions (N = 1). In some relatively small firms, it is possible that there are few middle-managerial positions, and even chief executive managers participate in leading the work at times. For clarity, I refer to the research objects in this chapter as “site managers” because, despite their titles, the managerial tasks at construction sites unify them in this research. The work experience gained in the field varied from 3 – 42 years: 3 – 9 (N = 3); 10 – 19 (N = 6); 20 – 29 (N = 2); 30 – 39 (N = 4); 40 – 49 (N = 6). All interviewees were Finnish. The industry’s sub-areas that the interviewees represented were mining, infrastructure, building construction and/or renovation, energy construction, and civil engineering.

The duration of a single interview (recorded) varied from 20 minutes to almost two hours of rich reflection, the approximate duration being between 30 to 40 minutes. I transcribed recordings and the written interview material anonymizing the names, exact localities, and information relating to physical health. The transcription was verbatim according to spoken language and word order (Halcomb and Davidson, 2006, 38), excluding broken syllables, single pronunciations and repeated filler words. For readability, dialectal forms of words were transcribed in common language. Also, speech that was clearly out of context or consisted of irrelevant detailed reflection was deliberately left out and replaced with researchers’ notes. I

spelled out emotional expressions except in cases where leaving them out would have significantly changed the message (Cope, 2020) and I found it important to mention them for the analysis. The scope of the transcriptions was approximately 150 pages (incl. background information and researcher's questions, in Calibri font 12pt., with line spacing at 1.0). The interview excerpts in this chapter have been translated from Finnish to English.

Analyzing Subject Positions

When selecting an analysis method, it appeared inviting to look at the perspectives from which the narrators approached the issue. On the subject of success, one interviewee stated:

Success at work, after all, can be seen in many ways. (D)

Analysis of subject positions appeared to offer the most attractive method to apply to this specific study design. There are four listed ways (Törrönen, 2013) to further refine subject-position analysis, one focusing on participant roles, which is the core of the analysis in this research. In analyzing how “us” and “them” boundary lines are constructed in the data and how they are embedded in specific kinds of participant roles, the focus can be on the ideational, mimetic, or story level of the data. These levels refer to the content plane of communication, to events represented, characters, accidents, acts, actions, settings, etc. (Törrönen, 2013, 83). This research focused on recognizing the participant roles that could be identified in the data and examining how site managers perceive success through these roles. In other words, the roles were used to categorize and relate actors to certain acting environments and to indicate processes of success at work regarding construction management. Participant roles also refer to temporal aspects of subject positions, which determine their meaning for action (Törrönen, 2013). This specific definition of subject positions appears in the results in such a way that all the resulting roles can be seen as more or less mutable and time-bound.

The initial processing of the data was done by descriptively coding (e.g., Miles and Huberman, 1994) the excerpts concerning success and its prerequisites in separate tables. I continued identifying the roles of the interviewees in each initial category, and worked on identifying roles by naming and viewing them with reference to their acting environments (Törrönen, 2013). The acting environments in this context are the social environments in which the interviewees positioned themselves in their

narratives; and the ones they directly or indirectly described as participating in. This was the way I ended up finding six different roles regarding success at work. In every role, the “us and them” dichotomy can be recognized, as interviewees distinguish themselves as site managers (e.g., as distinct from office workers), or as members of the construction field distinct from other fields or occupations, etc.

Results

The interviewees described their perceptions of success at work from six subject positions: I) site managers; II) members of the construction industry community; III) specialists; IV) representatives of certain career stages; V) individuals; and VI) societal roles. Next, the six subject positions and the preconditions of success related to subject positions are introduced.

I. Role of Site Manager

I a. Success.

Success as a site manager is seen in terms of good and high-quality performance at work regarding the expectations, responsibilities, trust, and appreciation of various parties (e.g., employer, subordinates, work-mates, clients, contractors, supervisors). Successful construction sites are measured by budget, schedule, goal achievement, and site managers' ability to manage occupational safety and quality of work; fluent teamwork with multiple operators and good atmosphere at sites; positive feedback and satisfied clients; and financial compensation:

It appears in a way that [I] get more responsibility from the employer, and trust. [I am] being trusted to get things done. (A)

And then again, that they [the tasks] are challenging in terms of schedule, and financially and technically, so that succeeding in such [tasks]... it's that same spirit as succeeding in sports teams or succeeding in contract teams, that it [work] is being completed. They're great, that's the thing. (B)

...how big a performance bonus you got from the site was a measure of success. (K)

...maybe an individual can't take the credit for any success, like the glory of it, but a construction site is always a construction site and [you] have to go forward there as a team. (D)

Well, succeeding at work means that construction sites are doing well. That's one thing. When you're working for an employer, the employer expects you to take care of the chores. (N)

1b. Preconditions

Good skills in multidirectional cooperation and the ability to listen to employees and take their experiences and views into account during various work stages are considered to be essential preconditions for success in this role. Work experience and know-how related to the construction industry in general are also seen as essential preconditions for successful performance in this position, as well as for good supervisors. Succeeding as a site manager requires taking care of occupational safety and risk management:

...cooperation with the customer, constructor, and within the construction site. (E)

Also, in Finland, there is quite a lot of regional difference in our construction sites. For example, we have an insane number of foreigners on the construction site. It requires a certain attitude from the foreman. (T)

My success has certainly been influenced by the good and liked supervisors... (U)

Many of the stories reveal that succeeding and developing in site managerial positions requires a readiness and ability to work in out-of-town jobs, and to have family members who support their career or make it possible for them to work away from home. A 35-year-old interviewee voluntarily sent their CV as background material for the interview, and it comprised jobs done in 11 locations in three different countries:

It's been necessary for my family and my wife to be flexible when I've been working out-of-town a lot and I've had to leave. Even when I was in [participant's hometown], there were a few construction sites nearby [in the town], but mostly I've been out-of-town. (Q)

... [my] career has meant that I have a bit of a bad relationship with my kids. [The interviewee bursts into tears.] That I've been on the road so much does cause certain bad things in life. (I)

Well in my case, it has demanded terrible sacrifices because I've been working out-of-town. In my hometown, I could've never succeeded in these jobs, and I wouldn't have been able to move forward. I had to work out-of-town and I didn't sacrifice the family, but it was, and the kids were weeks

with their mom and grew up like that. Luckily there were grandmas and grandpas and so on, so dad got to work. (N)

Success-promoting attitudes are described, such as engagement in work and aim to work with quality. Other personal strengths or attitudes the interviewees describe are pressure resistance, resilience, self-management, courage, and determination, alongside optimism, self-efficacy, and faith in success:

...although I may have sometimes failed somewhere, and I have, it's been a momentary failure and every time I've been able to move forward. There hasn't been the kind of... like somebody falls apart in those situations, but I've been able to continue operating. (A)

It requires that you are open to new things and strive to improve efficiency when the construction field is sometimes very traditional and people like to do things in the way they've always been done. Turning the heads of old bull-heads takes quite a lot of time, if there's something that, in your opinion, is definitely worth doing in a certain way. (F)

II. A Community Member of the Construction Industry

II a. Success.

The sense of community among those involved in the construction field appears strong in the stories and the construction industry is described as exceptional compared to other fields. A strong culture of working together, telling sports-related stories and anecdotes, and saying "we cannot succeed alone in the construction industry" recurs in the data. Being a member of the construction industry is also perceived as an identity into which one grows and creates life-long social relationships:

...that one would have such a [good] reputation in certain circles and be well known is, I think, also a bit of success then. (H)

I've had the pleasure, as I said before, of being kind of kicking forward the careers of so many guys, and it's awesome to see how they get ahead. [---] At least I get great satisfaction from it. And they will become eternal acquaintances and friends. (N)

My strength in construction is that I've begun and risen little by little from the grassroots level; it can be said that I have grown up in that field. (I)

IIf. Preconditions.

Professional networks and mentors outside the work community are essential; one interviewee mentioned the will to help and guide others to the right contacts; others talked about contacts and mentors who have guided themselves. Good skills in cooperation and reciprocal feedback discussions promote success in the field's community. Special field-related features affect the community and success in it—interviewees discussed gender, ethnicity, and generational differences and their effects on career advancement. Thus, success requires the ability to understand the work culture that participants describe as traditionally hierarchical and masculine, and concurrently to adapt to and participate in the obvious ongoing changes in culture and leadership:

...I also have the task of helping guys who call and ask for opinions and everything. That makes me feel good. And maybe it will then be reciprocated with you, in some form always. It is like a mirror—work and life and everything. (S)

Networking. Even a little too much today. In my opinion, it's gone a bit to the point that if you're well networked, then you don't need to be that professional. [---] But then again, if you want to advance through your own work, then it is usually noticed. If someone is qualified and willing to advance, then one does get a chance. (D)

I'd be so happy to see in this field more, well, firstly women and secondly people from different ethnic groups as foremen. (T)

Most don't even admit thinking that way, but it can be seen, for example, in situations like who is wanted for presenting things on the executive team. Somehow it is regarded that men are more plausible in this matter. [---] We have improved this to some extent, since at the [names of two departments] there are women as heads. It opens up opportunities for the rest of us, too. However, I think it depends on yourself. You need to know these backgrounds, and you can't think of it [advancing] happening like in some more equal workplaces. But when you know it, you'll survive. (C)

And, of course, Finns take a lot of saunas and, if there are any such evenings, you will never be there in the men's sauna. They go through a lot of such project-related things there... (C)

III. Role of Specialist

III a. Success.

For some of the responsible site manager's positions, special competence or qualifications are required, and some of the interviewees described themselves as specialists. Successful specialists have significant work experience, occupational speciality-related competence, and a professionalism which enables them to be included in certain networks and to know insiders in the field. Positive reputations and acknowledgments are seen as important indications of success, as are strong professional self-esteem and professional identity:

Succeeding at work has brought about a certain kind of acknowledgement. It probably wasn't that intended but [---] when being acknowledged, then of course, you are worthy of acknowledgement, that is, you strive to do your best, to bear that acknowledgement with pride. (P)

...for example, those companies or those people who are in similar jobs, they can be counted in tens only. Feels like belonging to a rare group... (B)

Well, I personally believe that success has come simply through life experience and iron-strong professionalism. That, for real, the know-how is certainly so strong that let me to be thrown almost anywhere and I will somehow survive it. (I)

I've been successful, and then have gained appreciation, not hype and decorations, though, but those of professional friends and acquaintances. I feel that they appreciate me. (N)

III. b. Preconditions.

The desire and motivation to develop and challenge oneself is a basis for becoming a successful specialist, as is education and work experience. Recognition and a reputation for expertise predict success, and that leads to situations where specialists are requested for demanding positions; jobs are often offered instead of having to apply for them. This is also a matter of belonging to specialist networks and indicates the message of the interviews, that in construction-specialist circles, actors know each other. The accumulation of special skills and the development of expertise are also described as requiring great investment during leisure time:

Regarding the environment, it is that you have been asked to do such tasks. (B)

Well, it's probably that use of time and the fact that even in my spare time, inevitably, not necessarily in a negative sense, the work revolves around in my mind, somehow thoughts revolve and in a way I do that thinking during my spare-time. (F)

...OK, if I'm eight hours at the site, but then after that, especially if I worked out of town, in my spare time I studied the substance itself, whether it was a bridge [construction] or concrete [construction], I used to read one university study per week, at least [when working] at bridge constructions. [---] It has accumulated know-how. (A)

IV. Representative of Certain Phases of Career

IV a. Success.

The participants perceived success as representative of certain phases of their careers, such as being a beginner, an ascendant, someone more experienced or at the top, and those who could be regarded as downshifters, career finishers, career coolers, or retired (the interviewees' descriptions). These roles are mutable and time-bound, and they affect views of career goals, achievements, and success. An experienced and successful interviewee may say title, money, or hierarchical position are not that important, although it is not the case in the earlier phase of a career when one has not yet achieved and experienced these aspects. Thus, success in various phases of a career is related to performance, goals, and experience:

That, success, is somehow such a big word. And somehow you could think of using the word yourself at the age of 60. (C)

...I would not have thought at a young age that I would get to do a job like this, not at all. And, well, for me, the job of a site manager was, at the time, such a dream when I was young. I took it seriously, the work. (S)

...someone sees success at work in a way that title and salary increase continuously, but I've come to think of it so that success at work is such that it is nice to be at work and, it certainly maintains [you] economically and so forth, but in a way that work doesn't strain the rest of life too much. (O)

...I don't think it can be called success yet, it's more about gaining work experience. When I've done several projects from the beginning to the end [---] I could honestly say that I know these things. I'd have that certain know-how and experience, so I could say that I've now succeeded in these jobs. (G)

IV b. Preconditions.

To succeed during different phases of a career, self-knowledge is seen as an important promoter: to know and pursue one's own goals and understand that with life and work experience, perceptions of success change. In the stories, the interviewees highlight the importance of inter-generational collaboration, learning, sharing experiences, and a humble attitude towards learning:

To bring the future and success to this industry, young people need to be taken into the right [social] circle when they go to their first site. That they have good supervisors out there; for that they get self-confidence and the joy of success. (S)

Well, maybe it has required that I have realized that, like, speed is not an asset in this field. While schedules are tough and there is a lot to do in a short time, it won't carry far at any point. Maybe I've learned some composure myself. (D)

For example, in Central Europe, such as in Germany, there is this master-apprentice system. As in my case, a co-worker was learning from me under the master-apprentice system. I taught this wonderful world of frame-building, and I asked him about certain things he knew how to use better than I did. (M)

V. An Individual

V a. Success.

Interviewees approached success from individual perspectives, such as personal development and wellbeing. In the stories, empowering personal experiences, high levels of motivation and passion for work, satisfaction, the possibility of a fulfilling personal life, and career goals through work are mentioned several times. Personal traits are described as having an impact on what is experienced as success (e.g., the level of self-criticism). The possibility to do work characteristic of oneself (e.g., a tendency to identify oneself as a practical "hands-on" worker or a project worker) and balance every aspect of life are significant, although what is described as balance varies. Work is often emphasized at the expense of other aspects of life:

That curiosity and the fact that, for me, it's not that someone from outside brings it, but what comes from myself [---] And yet, project-type work. I

would not be at my best in, for example, official positions or purely business managerial positions. (B)

...I've got to do this job that I've wanted—I've been able to do it and I get to do it even more. (Q)

In a way, advance in your own work and in the direction you want. Not in the direction that—if you think about career and life in general, then somehow that being successful in life or successful in your career—no one else can define it. (J)

... you get something done. It is important to me that there are visible results. I don't underestimate paperwork, I do it all the time and it's increasing all the time, but it's nice to see when there's something at the construction site that can be touched by hand. (S)

Success at work has brought me pleasure, a lot of good long-term friends, some accolades, and economic well-being, and I have remained healthy. (U)

V b. Preconditions.

Performing in all areas of life in a self-proportionate way and accepting that an area, such as work, is emphasized more than others, is highlighted in the stories as an important precondition for personal success and wellbeing. The interviewees discussed the nature of work in the construction industry, such as the challenging conditions of out-of-town working, long working-hours, absence from home, and limited or no opportunities to pursue hobbies. It is noticeable that some of the participants chose the career repeatedly, even at the expense of other aspects of life. The job itself, even being heavy and consuming, is also described as offering a great amount of personal satisfaction and opportunities to professionally realize oneself and develop as a person. Preconditions for succeeding as an individual are commitment to career and work and strong self-knowledge. Additionally, a prerequisite for success seems to be a positive attitude towards the construction field and work in general:

It maybe requires a kind of self-knowledge, knowing your own goals and what you want to do. (H)

One has to and gets to go all in, and that feeling of success then, that's the thing. (B)

Personally, I mainly strive for perfection in my duties, that it must be better than good. [---] I don't do it consciously, but it shows, for example, in texts, in concrete-work plans, that it becomes kind of better than good. (M)

Well, that has required a powerful commitment to the work tasks I have done. Like I talked about spending time with customers and things like that, that those times have been out of the family, then. That is, the work has been, and still is, a big thing in [my] life. (O)

VI. Societal Role

VI a. Success.

Successful performance in a societal role is related to social status which, in turn, relates to hierarchical and comparable metrics, such as salary, title, assets, and purchasing power:

After all, the livelihood is, of course, that you maintain yourself and your family and are able to buy a little something, that's important. (S)

To succeed at work, in my opinion, does not necessarily include happiness or things like that. In my opinion, success in work is strongly associated with salary and title. (R)

Success at work? Well, of course, it brings oneself a good livelihood... (Q)

I think it's a pretty good indicator, money. That although by [name of a company] there was a construction site that went fine in my own opinion, there was not as much money left as there should have been, but the schedules kept up, the quality was good, and everyone was satisfied. Of course, I was happy that I had done a good job, but it remained a little annoying that I didn't get paid [bonuses] for the job. (K)

VI b. Preconditions.

Many of the stories consider the construction industry a sector sensitive to economic fluctuations. The socioeconomic and employment situation in the field affects one's ability to succeed in a societal role. Some interviewees revealed the effects of the recession of the 1990s and the economic downturn of 2008 as well as, for example, the supply of labor abroad during these periods. Construction booms preceding the recession were remembered in terms of easy access to employment. Responsibility for household income and the fear of losing one's job had driven the interviewees to work at the expense of their health:

It has, of course, strained my own health a bit that I have taken on too much responsibility and tried... like there was this [name of a project] which was

a ridiculously tight construction site. I was alone in it and it was a difficult one. I worked long days and then I got [certain health problems] for the first time, there. Then I had to calm down a bit. Although I still didn't stay away on sick leave, I did lie down at the health center... (K)

The kind of responsibility or something like that, I guess that's the biggest thing there, in the background. (B)

Interestingly, despite not deliberately searching for participants who had succeeded in their careers, 20 out of 21 answered they had succeeded at work, and one reflected that with just a few years of experience in the field, one should not yet call oneself successful.

Conclusion

Figure 7-1 presents the research results. The individual and societal roles are placed on the left and the occupation-related roles are on the right. The role related to career phases is positioned in between. The colored ribbon depicts descriptions of the success of construction-site managers. The role-related preconditions are described below.

The complexity of experiencing success at work can be revealed through the different participant roles. For example, one may feel more successful in one role than in another. Certain circumstances around projects may cause disharmony, and the subject's experience of success may not always correspond to the expectations of the other parties. Yet, it seems to be a matter of prioritization, entity, and balance—the interviewees do not discuss the aim to achieve their best in every role but merely a balance, satisfaction and well-being (Uusiautti, 2013, 2015) in the roles from which they primarily approach success. Alongside praise and goodwill, career success is associated with downsides such as adversity, failure, and choices that lack a single correct solution. The ability to cope with adversity appears significant (see Maddux, 2009; Niles et al., 2011; Uusiautti et al., 2012). The stories indicate that commitment to work and the accumulation of knowledge and experience from the grassroots level (e.g., Hyvärinen, 2016) are strongly linked to success, as are personality traits (see Soto, 2019). The impact of personality traits is particularly emphasized in the roles of an individual, a site manager, and a member of the community. This confirms the statements of Roberts et al. (2007) that personal traits influence diverse career outcomes, determine whether one experiences the possibility of self-realization in one's work, affect task effectiveness, and may directly affect other aspects of work performance, such as interpersonal interactions. The latter seems to be significant in the stories of this research. Also, preconditions

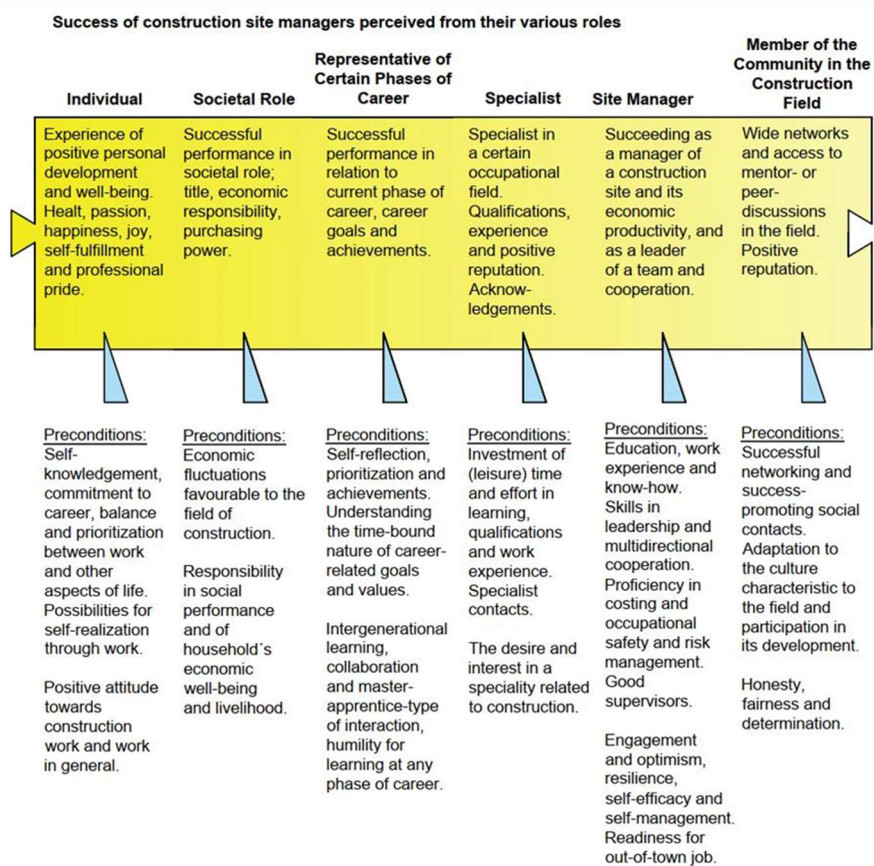


Figure 7-1: Success of construction-site managers perceived from their various roles.

for success in the roles of a site manager and an individual seem to epitomize first-order positive psychological resources, which are hope, efficacy, resilience, and optimism. These four factors impact attitudes, behaviors, performance, and wellbeing (Luthans and Youssef-Morgan, 2017). A role representative of a certain career phase (e.g., Harrison and Jepsen, 2015; Super and Hall, 1978) affected the experience of success to a remarkable degree. It is important to recognize the effects of the different stages when studying success.

Most interviewees experienced professional proficiency (e.g., Uusiautti, 2008; Uusiautti and Määttä, 2015) as both a precondition and indication of

career success. To some, succeeding at work brought a certain amount of acknowledgment, and the impact of this (see also Harrison and Jepsen, 2015) was described as a self-feeding positive spiral, where one aims to be worthy of the acknowledgment obtained. Membership of the construction community includes networks and mentor–actor relationships (see Higgins, 2001; Kram and Higgins, 2009), usually outside of the current working communities, and interviewees described these as important career promoters. A sense of community appears strong in the stories and, in this regard, the field is described as exceptional compared to other fields. Thus, social capital (Luthans et al., 2004) appears to be a key promoter for succeeding in the community. Success in the site manager’s role appears manifold, being linked to good leadership skills (e.g., Hyvärinen, 2016; Perttula and Syväjärvi, 2012) and field-related productivity and performance management (Pekuri et al., 2011), emphasizing the need for multicultural and multidimensional cooperation skills, as well as strong self-management.

A positive attitude appears to be among the key factors when reflecting the success of site managers. Optimism (Carver et al., 2009) and accepting necessary choices concerning life and work contribute to the experience of success, as does adaptation, and participation in the “call to change and modernize the masculine culture of the construction profession and working practice away from the existing rather outdated traditional structure” (Naoum et al., 2019). Work engagement and happiness at work are likely predictors of job performance (Backer and Oerlemans, 2010), which seems to positively affect other aspects of life, according to the interviewees.

Discussion and Contribution

Critical Notes

Parts of the interviews were presumably influenced by the information the interviewees received in the invitation letter (that participation is a chance to influence the development of education and management in the field). The subjects may have selectively told the stories from a particular perspective and highlighted, for example, views about differences between generations or opinions about management and education in the field. Also, familiarity with interviewees presumably influenced what they included and excluded in the story. Admittedly, the impact of choice is difficult to assess because, while familiarity could have increased and inspired confidence, it could also have decreased it. Further, to achieve fuller potential regarding subject-position analysis would have required a deeper review on, for instance, how the various roles that emerge from the interviews appear as

“us” rather than “them” (see Hall, 1999; Törrönen, 2013). However, it offered a practical tool for generating a unique approach to studying the success of construction-site managers.

Contribution

This study explores discussions about the career performance and wellbeing of construction-site managers. Previous research has introduced informative and operational elements of site management and success-promoting factors, such as good management skills, developed knowledge management processes, and systematic cooperation (e.g., Fikri and Anumba, 2006; Pekuri et al., 2011). Fraser (2010) stated that the most important personal characteristics affecting site managers' career progression are the ones that can be related to effectiveness (involvement in continuing professional development, number of firms worked for, use of addictive substances, education level, membership of professional bodies, job satisfaction, motivation level, career aspiration, stress levels, leadership style, and the need to work). In this research, the site managers considered career success and personal traits from a wider perspective, yet the results confirm the findings of Fraser (2010). Further, even if the use of addictive substances was not mentioned, the subject was sidelined in the stories concerning out-of-town jobs, for example, and the need for strong self-management and self-discipline.

Dresnen et al. (1986) stated that an emphasis on relationships in site managers' leader orientations is more likely to enhance project performance than an emphasis on tasks. Also, Tennant et al. (2011) showed that even if teams and performance are inextricably linked, obstacles to teamwork are caused by management indifference towards substantive team building, organizational barriers to communication, and the absence of team rewards. The results of this research strengthen the claims, revealed by, for example, critique of the described trend of leadership moving towards project-management being less people-orientated, or site managers' comments about how success is created by a team rather than an individual. However, according to Toor and Ofori (2008), authentic project leaders possess positive values, lead from the heart, set the highest levels of ethics and morality, and go beyond their personal interests for the wellbeing of those with whom they work. They capitalize on the environment of trust and can motivate people and accomplish challenging tasks, which is the direction towards which the younger site managers in this research aspired. This research adds to Raiden's (2016) findings about gendered strategies of

project management in the construction field and proves that experiences of such a masculine working culture still exist in the field.

Prior studies of the occupational and psychological wellbeing of supervisors in the construction industry (e.g., Haynes and Love, 2004; Sang et al., 2004) reveal that employees' work and wellbeing stressors are characterized by a high workload, long working days and insufficient time spent with family, which they compensate for with certain psychological coping strategies. The results found in this study correlate with these, while also showing that some of the stressors may not be stressors at all, but merely represent the character inherent in the project-type work that the interviewees in the roles of individuals or site managers pursue.

For the novelty value of this study, it can be considered that the success of site managers has not been studied in such a multidimensional way. Previous studies present practical prerequisites for success, and often success manifests as the efficiency of a construction site. Research concerning employee's wellbeing is mostly linked to management, occupational safety, and pay. Little attention has been paid to site managers' personal experiences of success. Thus, the results can be used to help develop education, management, and work communities in the field. The research opens up a new perspective on promoting individual career success and encourages further research on positive psychology approaches to work in the construction industry. For future research, it is essential to react to the possibilities and pressures that the dynamic development of the industry (see Introduction) is setting for its site managers. Based on this study, useful future research would include ways to strengthen the sense of community as construction sites become more international; and the role of a supervisor as maintainer or developer of social relations on construction sites.

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Career development to construction site managerial positions in the construction field

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Abstract

This research explores career development in the construction industry. By showcasing the career narratives of managers of construction sites (N=21), the research unfolds which elements are significant in influencing career development and aims to increase the possibilities for construction workers to flourish in their careers and help make such careers more attractive. The career narratives were analyzed in two phases. First, the analysis of narratives showed that except for the various career experiences, the proximity of construction sites in the interviewees' managerial career goals differentiated the narratives. Second, as a result of narrative analysis, three construction managerial career paths were identified: I) devotion to construction site management, II) interest in versatile construction projects, and III) passion for leadership. Career development could be viewed from the perspective of

various capitals which emerge in the narratives. The interviewees brought up societal and economic changes that challenged or boosted their careers or even caused them to change direction. Career goals might not have been achieved as such if they were not enabled by external factors, such as organizational, economic, societal, or location-related issues or favorable coincidences. The participants found favorable options and solutions for career development by drawing on their social and psychological resources. Social capital supported career choice and career development, whereas psychological capital appeared as, for example, optimism, perseverance, and an ability to follow one's calling.

Keywords: *career path, construction management, narrative research, positive psychology, psychological capital, social capital*

Introduction

The construction sector forms a multidimensional context of career research as it provides its workers with a very people-intensive and complex work environment characterized by structural fragmentation, diversity of work practices, and rapidly changing projects (Dainty et al., 2007). The “construction industry” is, in itself, subject to several different boundary definitions (Dainty et al., 2007), but the uniqueness of the industry, in terms of its multidimensionality, is commonly acknowledged in academic books and journals (Hillebrandt, 2000; Dainty et al., 2007; Opoku & Fortune, 2011; Toor & Ofori, 2008).

This research showcases career narratives of managers of construction sites with different kinds of professional backgrounds, unfolding the significant elements which have influenced their career development. From a historical perspective, construction work appears to be a physically demanding job that has favored men. Social stereotypes and norms still play a large role in reinforcing a gendered workforce (Naoum et al., 2020; Styhre, 2011), and gendered management strategies are still experienced in the field (Naoum et al., 2020; Raiden, 2016; Rautio, 2022). One purpose of this research is to discover which elements make a construction career attractive and how to enhance engagement in the field from the perspective of personal career experiences. First, this is a topical concern because there is currently a serious lack of construction

site managers (Ministry of Economic Affairs and Employment, 2022). Second, by making these career stories visible, we hope to improve the development of education and leadership in the construction industry (see Borg & Scott-Young, 2022). Drawing on the aforementioned two objectives, we also wish to increase possibilities for construction workers to flourish in their careers and help make these careers more attractive.

Career Development in the Construction Field

In this research, career narratives are understood as individual experiences intertwined with contexts and environments (Baruch & Bozionelos, 2011; Cohen et al., 2004). Today's psychological approaches to careers show that work that provides a sense of purpose, challenge, and self-fulfillment, along with rewarding income, becomes a positive source of identity, creativity, and life challenge as well as status and access to social networking (Baruch, 2004; Uusiautti & Määttä, 2015). This study leans on the positive psychological idea of increasing flourishing by understanding human behavior through strengths and positive development (Peterson, 2006; Seligman, 2011; Uusiautti et al., 2020). In order to experience positive experiences, such as joy and accomplishments along one's career, it is essential to have a job and follow a career path makes self-fulfillment possible. These opportunities for flourishing and favorable career development can form the basis of a successful career path (Uusiautti & Määttä, 2015). This research aims to contribute to the understanding about flourishing at work in the field of construction industry.

A satisfying and meaningful career can be built not only by moving “upwards,”

but also without a change of jobs or titles (Redecopp & Huston, 2019; Wu et al., 2019). In addition, career progress is greatly affected by the environment (Baruch & Bozionelos, 2011; Cohen et al., 2004). The construction industry offers a plethora of satisfying and well-paid career paths to managerial positions (Gajjar et al., 2019). Since managerial positions at construction sites are not entry-level jobs (Byers, 2016), these managers are usually required to have both a university degree and construction work experience (see also Wilkes et al., 2015).

In the construction field, career progress is also greatly affected by social environment (Baruch & Bozionelos, 2011; Cohen et al., 2004) and social relationships and networks seemingly play an important role in successful career paths (e.g. Mäki, 2021; Rautio, 2022). In adolescence, parents have the highest level of influence on students (Bryan et al., 2011). Additionally, career guidance plays a pivotal role in young people's career choices (Francis & Prosser, 2013). During employment, positive social relationships at home and at work promote career success (Uusiautti & Määttä, 2015) and these relationships are commonly approached together with the individual's social skills such as empathy, cooperation and assertiveness (see Seligman, 2011). For those who aspire to succeed in the field, it appears that high social capital pays off (Ganiron & Tomas, 2013).

Work readiness studies have explored the early career stages of construction professionals (see, for example, Borg & Scott-Young, 2022; Torres-Machí et al., 2013) but very few actual career paths or the significant factors which affect them. It is known that career calling (Hall & Chandler, 2005) is strong among the ac-

tors in the field (Wu et al., 2019). In the construction field, career calling is a significant buffer against burnout and stress caused, for example, by role ambiguity in the variety of tasks that are related in the field (Wu et al., 2019). Career calling manifests itself as (1) action orientation, (2) clarity of purpose and (3) mission and pro-social intention, and thus, also makes people commit to their work (Wu et al., 2019).

From the point of view of our research, learning about early stage career calling and commitment can help the construction field for pointing out the attractiveness and career opportunities in a better and modern way. Successful career guidance itself can be regarded as social capital of students (Bryan et al., 2011), while it also increases the student's psychological capital to make self-appreciative and well-being-promoting career decisions that illustrate hope, optimism, self-confidence, and resilience (Luthans et al., 2004; Katajisto et al., 2021). Previous research proclaims the need both to raise awareness of career possibilities related to construction management (Wilkes et al., 2015) and to consider gender diversity when directing students to construction (Francis & Prosser, 2013). Such guidance helps students find meaningful careers and understand their abilities and strengths in different positions (see also Hyvärinen et al., 2022). If career guidance in the construction field is to be developed in such a way that it inspires new students and future employees, it is essential to reveal the aspects individuals see as important in their career development (MacDonald & Durdyev, 2021; Francis & Prosser, 2013).

Method

Two research questions were set for this research:

1. How do managers of construction sites with different kinds of professional backgrounds describe their careers?
2. What kinds of similarities and differences appear in their career narratives?

To answer these questions, we used the narrative approach. A narrative is here defined as a story of a career, which unfolds over time and with consequence within a specific social cultural milieu (see Wells, 2011). A semi-structured interview method was used to conduct the research interviews (see Brinkmann, 2018), and we also applied a narrative futuring technique (Horst, 2021) by asking the interviewees to imagine and talk about their career situations in the future. The interviews included questions about choice of field, significant career events, goals and prospects, personal qualities, and the importance of work. For the pursuit of interviewees, an invitation letter was dedicated to ones working in managerial positions of construction sites with a snowball method by contacting construction associations and companies, publishing the invitation in *Rakennuslehti* [Construction Magazine] in November 2020 and by directly contacting.

The data consisted of 21 oral (N=20) and written (N=1) interviews (19 men, two women, aged 25–74), conducted in Finnish. The participants had the following educational backgrounds: undergraduate degree in construction (N=1); master builder from a university of applied sciences (UAS) (N=10); UAS mas-

ter builder and UAS engineer (N=1); UAS engineer (N=5); UAS engineer and UAS master's degree in construction (N=1); and engineer (N=3). The job titles were foremen (N=5), site managers and responsible site managers (N=8), construction managers (N=3), construction engineer (N=1), chief executive manager (N=1), technical manager (N=1), business director (N=1), and retired from responsible site manager's position (N=1). Work experience in the field (including pre-managerial and pre-study tasks) varied among veterans, with between 30 and 42+ years (N=11), professionals, with between 10 and 20+ years (N=7), and novices, with between three and eight years (N=3). The interviews lasted from 20 minutes to almost two hours.

The analysis was conducted in two stages, namely analysis of narratives and narrative analysis (Polkinghorne, 1995; Squire et al., 2014). First, we implemented the analysis of narratives by categorizing the career stages through which the interviewees told their stories. The repetitive and exceptional elements of the careers are reported by referring to the group with which the interviewees identified themselves: novices, professionals, or veterans. Next, we implemented the narrative analysis in order to organize the stories into "meta-narratives" (Polkinghorne, 1995) describing the specificity of the interviewees' career paths. We noticed that career choice could have been decided by drift, vocation, or determination, but the choice of a career in construction did not necessarily determine the direction that career would take. Similarly, educational backgrounds and orientations varied, but the data showed that the interviewees did not necessarily consider the orientations relevant to their career advancement, while the orientation might have been chosen

The meta-narratives were formed based on the proximity of construction sites in regard to both career goals and career accomplishments.

due to the possibilities available. Individual and external factors affecting careers were also described both universally and in a unique way and may have featured in many types of career paths. Instead, when the interviewees described their future goals and the importance of the work, we noted that the strongest differentiating factor was the degree to which their career was related to actual construction and proximity to construction sites. Thus, the meta-narratives were formed based on the proximity of construction sites in regard to both career goals and career accomplishments. The narratives were tagged "CS" (construction site), "CS&H" (construction site or higher), and "H" (higher), where CS refers to career goals and achievements in the construction site, and H refers to career aspirations toward higher leadership positions off-site. All narratives could be placed into the following three categories:

- veterans (N=11), CS=9, and CS&H=2
- professionals (N=7), H=7
- novices (N=3) H=2, and CS=1.

In the report on results, the 21 interviewees are referred to with capital letters, A–U, and marked with the codes v, p, or n (veteran, professional, or novice).

Results

Career Advancement

Career choice and early career path

A majority of the interviewees had entered the industry either because close male relatives had provided role models or because they had participated in construction at an early age. In the *veterans’ stories*, own interest

in construction and diverse financial reasons played pivotal role, while educational possibilities were not always accessed easily. Most of the *professionals* had been very certain about their choice of field, although two had drifted to the field. *Novices* also mentioned the effect of their fathers but they had either been guided to or had drifted to the field. They had had multiple educational opportunities from which to choose.

I started with my father, grandfather, and uncle. Then vocational school, technical school, and working life. – – I had no other option in mind. (vL)	It’s a matter of blood inheritance. Grandpa is a master builder... (pF)	...through my father, I got a summer job – –. I felt I was not interested in construction work. – – The following summer, however, I went to a site – – and became interested in studying the industry. (nH)
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Work experience was followed by technical or high school, then commonly military service (mandatory for men in Finland) and higher education studies of site management or engineering. The actual site managerial work often began in the

role of foreman or site manager. As experience and know-how accumulated, they generally gained increasingly challenging sites or advanced to being responsible site managers.

I’ve held diverse positions from – – responsible site manager, construction manager, production manager, to CEO... (vB)	After [graduation] I immediately got to manage my own project as site manager... (pA)	I got to be a supervisor of – – construction workers, which was very strange because I was very young. (nH)
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Careers in these positions consisted of diverse and unique projects in several locations. Interviewees gave detailed descriptions about site progress, adversities faced, and solutions found. Several *veterans* and *professionals* had worked abroad,

some had also been entrepreneurs during their careers. Careers developed in the direction of interviewees’ own interest rather than, for example, an educational orientation.

Career Goals and Future Prospects

The *veterans* had either remained in or returned to managerial positions at or close to actual construction sites. All the *veterans* (N=11) aimed to stay in similar positions in the future. The *professionals* (N=7) and two of the *novices* (N=3), in

turn, were pursuing career advancement towards higher management positions performed further away from the immediate context of construction sites. One *novice's* story epitomizes how career development can also be pursued as an interest in developing in the site manager's task itself.

Similar challenging tasks, challenging sites. (vM)	...unit manager, regional manager. (pF)	Supervisors often ask me [about my career goals]. I really can't say because I think it's nice now, here. Of course, I want to learn more. (nT)
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Interviewees divided the management positions into construction site and office work. Those aiming to stay close to actual construction described themselves as “doers, with boots in clay.” Those pursuing higher management roles described their goals as being either to take on more responsibility or to emphasize developmental aspects of their work. The supervisor's role was described as more of a leadership role than one of leading *work*. Factors characteristic of construction work, such as the demand to be physically present at sites or engage in complex work tasks were also included in future prospects.

Significant Factors for Career Advancement

The range of *personal factors* affecting career paths were quite consistent: own ambition, interest in construction (some used the terms “passion” and “love”), and desire for continuous learning were often brought out. Interviewees valued social skills. Flexibility, self-confidence, resilience, determination, and goal orientation were commonly mentioned, as was the courage to take on the new challenges. Additionally, a *veteran* highlighted a personality that enjoys and fits project-type work.

Contracts and project-type work, my personality fits those. (vB)	Social skills, I have a lot of acquaintances and friends with whom I talk and get first-hand information about big projects. (pD)	I took on more responsibility and was really left alone. – – A foreman's work is sometimes very rough, and you have to know how to deal with it. (nH)
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External factors impacting careers appeared to be diverse: work-related contacts such as good colleagues and supervisors, cross-organizational networks, unofficial mentors and close friends supported and enabled career advancement. Furthermore, economic fluctuations quickly af-

fect the construction business and cause a limited work supply, which appeared in several narratives, yet the interviewees remembered numerous significant encounters and positive opportunities in challenging situations.

In -94 it was very quiet in Finland so – – a good friend lured me to a Russian project... (vL)	...I became unemployed and went to [a] construction site as a welder. – – I applied for a company ID and [started] my career as an entrepreneur. (pJ)	...an organizational change began. Everyone got fired. – – It was a good opportunity to begin the master builder studies. (nT)
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In many stories, coincidences, head-hunters and families played important roles. One *professional* mentioned effective study counseling, while one *novice* mentioned the lack of it. The birth of a child could make a person decide not to work out of town, and support received at home was perceived as a meaningful promoter.

Career Narratives to Managerial Positions

The Beginning of Three Management Paths

The dominant three career narratives leading to managerial positions depict paths where the actors have congruent construction-related experiences in their youth and family members who are construction workers. Career development for management positions starts in childhood and youth by getting to know the field early on with (basically male) relatives. Young people gain work experience

in assistant or summer jobs at construction sites. The field selection is confirmed at the stage they choose where to study. Often, the choice is clear, and construction is, in itself, interesting to applicants for construction studies at university.

During their studies, actors start expanding their networks and become familiar with various construction related jobs. Managers-to-be familiarize themselves with out-of-town work. Work experience before and during studies is useful and valued later in working life. While these manager pathways are markedly different, unique, and affected by various specific features, a commonality that can be identified among all interviewees is the significance of social relationships, networks, and the environment.

Path 1: Devotion to Construction Site Management

Construction site managers have a passion for both building and management and a

sense of doing substantial work yet being in a managerial position and having their “boots in the clay.” Site managers and responsible site managers like project-based work, value social relationships on construction sites, and feel that they are producing solid work results at the crossroads of many construction-related parties. The actors need to learn to take over multicultural work environments and specialized construction areas. Instead of the chance to take on a particular job title, career development is measured by the demands of construction sites, one’s own specialization and development, work experience and success in completing projects. At the end of their career, the actors on this career path have a great deal of construction expertise and many stories of memorable occurrences at work.

Path 2: Interest in Versatile Construction Projects

In this path, the actors partly experience participation in construction sites, but their work consists of the development and management of entities and is mostly office-based. Depending on the size of the employer company, these positions can be for example, a construction manager or project manager. From these management positions, one can move to site management or other managerial positions, and an experienced responsible site manager, for example in special construction sites, often follows this path. Moving to the position of responsible site manager does not feel like a career demotion but, rather, as accepting more challenging projects. However, the many dimensions of management and an interest in staying near construction sites are of interest to those following this career path.

Path 3: Passion for Leadership

Higher management positions are pursued and thus advanced to early on; those aiming for these positions aim at developmental and managerial tasks in general. At the time they selected their occupation, they had a strong interest in the construction industry. New challenges interest these actors, and they see them in various management positions. Usually, their career has progressed quickly in terms of job titles and areas of responsibility. Since there are relatively few higher management positions, the actors take advantage of opportunities to advance in their career, and opportunities may come by chance and through favorable events. Work takes place in the office, and career development is measured through job title and salary development, along with the development of leadership skills.

Discussion

In this research, it seemed that career development, rather than being a steady career progress toward managerial positions, could be viewed from the perspective of various capitals emerging in the narratives. The construction site managers brought up societal and economic changes that challenged or boosted their careers or could even cause them to change direction. Career goals might not be achieved as such if external factors, such as organizational, economic, societal, or location-related issues or favorable coincidences, did not enable them. However, favorable options and solutions for career development could be found by drawing on psychological and social resources.

The role of career guidance appeared in the career narratives only twice.

Social capital, in the form of who people know and what kinds of social networks they have (Luthans et al., 2004), had a strong impact on the interviewees' career choice and paths. They ended up in the construction field through personal interest and because of family members (e.g. MacDonald & Durdyev, 2021), and career development was supported by a large number of social and psychological factors. Psychological capital (e.g. Luthans et al., 2004) appeared as optimism, perseverance, and ability to recognize one's calling (e.g. desire to work on site). It also seemed to support wellbeing, facilitate self-appreciating career decisions (Luthans & Youssef-Morgan, 2017), and strengthen the ability to withstand business challenges and economic uncertainty (Luthans et al., 2004; see also Elsafty et al., 2020).

It is, however, reasonable to point out that the role of career guidance appeared in the career narratives only twice; in one story as a significant factor affecting career choice, and once it was mentioned to have been lacking. The careers of the interviewees had ultimately turned out well, but the absence of teachers and student counselors in the data was remarkable. The potential of counseling could be better leveraged, especially from the perspective of introducing the various possibilities of careers in the construction field and finding the most suitable paths for each individual.

When telling somebody else's story, the key ethical questions concern story own-

ership and entitlement (Guthrie, 2022; Shuman, 2015). In this research, the uniqueness of each participant's story is influenced by the theme and questions of the interview, and finally, by the interpretations made by the researchers. This may have led, for example, to an emphasis being given to the importance of certain experiences in the career stories, since the semi-structured interviews consciously aimed to encourage the narration of particular social experiences (see Slembrouck, 2015). For example, if more novices or women were reached for the research, the findings might have gotten different emphases. In terms of reliability, however, the narratives appeared rich yet highlighted those career events that the interviewees themselves wanted to bring up and express as meaningful for them.

Conclusion

The construction industry will experience a major shortage of skilled labor due to the retirement of baby boomers and the lack of new talent entering the industry to replace them (Gajjar et al., 2019). As also discovered in this study, traditionally the nature and notion of careers has been based on hierarchical, even rigid, structures. Past career models had a clear, uni-dimensional direction of prescribed "advancement," whereas both practice and research now demonstrate models of careers that comprise a variety of options and directions (Baruch, 2004). We now have multi-option criteria to assess career advancement or success. These can be inner satisfaction, life balance, autonomy, freedom, or other measures of self-perception (e.g. Baruch, 2004; Karima et al., 2022) or can be defined, for example, through individual, social, and work-related roles (see Rautio, 2022).

How to make construction careers more attractive in general, including to women.

Another important notion for further contemplation is how to make construction careers more attractive in general, including to women, so that women would not need to overcome barriers and find ways to cope in male-dominated construction environments (see Lingard & Francis, 2008; Naoum et al., 2020; Styhre, 2011). Our research provides new information about how people enter a construction career and how the career development plan may depend on, for example, how attractive they find working on site or being in higher leadership positions. Furthermore, the work itself has become increasingly fragmented and unpredictable. From the perspective of a construction site worker, this poses another challenge for collective identification at the workplace. Löwstedt and Räisänen (2014) talk about tensions between an in-group and “outsiders,” which was referred to in our study in situations where “real” construction workers and office workers collaborate. Various managerial roles may have similar competitive elements, which, however, does not favor the future development of the field.

Based on the analysis of narratives and narrative analysis conducted in this research, two main implications emerge:

1. In construction firms, it is crucial to pay attention to the role of various positions. As shown in this research, not

everyone aims for a higher managerial position or wants to leave behind work at the construction site. Quite the contrary: On-site work should be appreciated and branded in a new way, namely how to become a skilled manager who is familiar with construction processes and able to lead work on site. Finding meaning in on-site work arises from the ability to accumulate psychological and social capital; if the career goal is more hierarchical, these capitals remain equally valuable.

2. The attractiveness of managerial careers in the construction field should already be emphasized before university studies. The career opportunities should be better described and discussed. In addition, the nature of the work, both on-site and in higher managerial positions, needs more attention from career counselors: The positive sides of both should be discussed. In general, the pride gained by working in the construction field can be best explained through narrative research findings such as those presented here.

We suggest that construction education should emphasize the collective professional pride of the construction industry, for example by familiarizing students with various development options and supporting their reflection on their own measures of success. Generally, appreciation of all the aspects of multidirectional career development (including development *in the tasks and expertise*, not just to various leadership positions) should be highlighted to strengthen commitment to and pride in construction work.

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New insights into career-related continuous learning in construction companies: Supervisor conceptions of career support

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Abstract

In a time when the construction industry shares the challenge of labour shortage, more attention should be paid to how attractive careers in the construction field are in the first place. The constantly evolving working environment is causing significant changes in careers and career management in the field, leading to the need to explore company practices that can contribute to the development of fulfilling careers. In this research, we investigated how supervisors in construction companies perceive career support for their employees. This was a phenomenographic study in which 23 supervisors of five construction companies in Finland were interviewed. The analysis showed that the supervisors' perceptions could be categorized into six support types varying between company, professionally, and individually oriented perspectives. Based on the analysis, needs for continuous learning in the construction field can be identified more broadly, highlighting also the various opportunities to advance careers in the field.

Keywords

Career support, construction companies, supervisor perceptions, continuous learning, phenomenography

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Introduction

Research on career development and success has shown that employees' psychological dimensions as well as their social networks and relationships play an important role in construction careers (e.g. [Moore & Gloeckner, 2007](#); [Rautio, 2022](#); [Syben, 2008](#)) and work success ([Rautio, 2022](#); [Rosa et al., 2017](#)). How to support these careers is an essential question that deserves more research attention ([Rosa et al., 2017](#)). In this article, we present a study on how career support for employees is understood in construction companies. We aim to provide new viewpoints for understanding and developing career support practices in the field.

Internationally, the construction industry shares a common challenge of labour shortage ([Gajjar et al., 2019](#); [Ministry of Economic Affairs and Employment, 2022](#)). It is also internationally noted that a lack of education of young adults to generate interest in construction as a career path ([Bigelow et al., 2018](#)) concretizes in working life ([Gajjar et al., 2019](#)). Careers in the field take place in traditionally male-dominated environments, commonly recognized as complex, people-intensive, and fast-changing ([Dainty et al., 2007](#); [Rosa et al., 2017](#)) multicultural projects ([Tabassi et al., 2019](#)). These features lead to employment patterns necessitating that employees actively adapt to emerging challenges and difficulties in their career development ([Hall et al., 2018](#); [Savickas et al., 2009](#)). Due to the transformation of work contexts, careers are significantly changing, which implies the need to study personal and organizational resources that can promote the development of satisfactory careers ([Bargsted et al., 2021](#); [Rosa et al., 2017](#)).

Previous studies identify a number of field-specific features affecting careers: two of the key objectives are to maintain and improve productivity and safety measures, which contribute to the development of a wide range of practices ([Akram et al., 2019](#); [Pekuri et al., 2011](#)). Gendered, masculine working practices affect careers in the sector (e.g. [Naoum et al., 2019](#); [Raiden, 2016](#)), and employees' work and well-being stressors have long been associated with high workload, long working days, and insufficient time spent with family ([Dainty et al., 2007](#)). Structural fragmentation, diversity of work practices, and rapidly changing projects require people with specific competences and from various companies to work in such frameworks, where they quickly need to create co-operative working conditions ([Bigelow et al., 2018](#)). Additionally, the construction industry is going through a time of great upheaval as new technologies, digitalization, internationalization, new types of business models, and climate change are changing operations and causing new learning requirements ([Akinosho et al., 2020](#); see also [Adeel et al., 2023](#)). Yet, both in Finland and internationally, the vast majority of construction companies are still small and local ([ILO, 2024](#)), and in Finland, the construction sector accounted for about 9.8% of all enterprises and 10.8% of person-years worked ([Statistics Finland, 2022](#)). Thus, as the sizes and operational fields of the companies vary, the resources and practices available to companies to support careers also vary. All this poses remarkable challenges but also major chances for career development and makes work in the construction industry an appealing field of research. Through a qualitative research approach, we aim to produce insights that can be used to structure and further develop career support in the construction sector and in research.

In order to reveal supervisors' different ways of understanding the support of employees' careers, we applied a phenomenographic approach, which focuses on describing a phenomenon through a 'second-order perspective' (Harris, 2011). The results bring an important addition to the wider social discussion about career success. The conclusions drawn from the findings shed light on why collective understanding of career support should be broadened and on how the success of individuals, and thus of work communities and companies, could be enhanced.

Theoretical approaches to construction career development

Modern careers

Both in science and empirically, one can recognize internationally shared megatrends (Wang et al., 2022) and features that mark the beginning of this millennium at work, affecting careers and leadership practices and causing a need for continuous learning (Zaitouni et al., 2020). As some of these features, Burns (2020) mentions globalization, technological development, dynamic economic and structural changes, rapid obsolescence of knowledge, employment prospects and career redefinition, human needs and the purpose of work, and implications of education in the world of work. When speaking about modern careers, we specifically refer to careers that are carried out in the eddies of these trends, characteristic of current working life.

The dramatic pace of technological change is transforming the way companies and the construction industry operate. Even if the field of construction will always need practical human skills and labour, technological forecasting and social change will affect modern careers and the future of work in this field, too (Frey & Osborne, 2017, 2023). Modern construction industry and construction management development cannot much longer execute inefficient, old construction methods as a response to the ongoing enhancement of efficiency, quality, and safety standards (Adeel et al., 2023). Instead, intelligent construction (e.g. smart city industry) will have an increasing impact on the construction practices and learning needs in the field (Adeel et al., 2023). The digital economy is gradually affecting the world of work, strongly also construction processes, and as such building information modelling, artificial intelligence, and machine learning (Frey & Osborne, 2023) can be seen as driving forces behind the development (Adeel et al., 2023). In this research, we particularly focus on developmental and learning aspects of modern careers.

The career-related learning that takes place in working life and throughout their career has become a requirement for employees, and employers have a key role in utilizing both formal and informal continuous learning (Rowold & Kauffeld, 2009). Previous studies have shown that in working life, there has been a growing interest in strengthening thriving or the psychological state in which individuals experience both learning and a sense of vitality (Porath et al., 2012). When individuals increase their participation in career-related continuous learning, their managerial success also increases (Kuznia et al., 2010). For about two decades, studies around successful work-life and leadership have shared a growing interest in the optimal use of human capital, which requires 'going

beyond it' by strengthening a deeper knowledge about its psychological aspects (Luthans et al., 2010; see also Arnold et al., 1993). Career success is suggested to be related to various aspects of an individual's life, and it can be experienced and defined in multiple ways; it may refer to happiness and satisfaction but also to mastery and visible achievements (Seligman, 2011). Career-related research in the field of positive psychology (e.g. Achor, 2010; Hyvärinen et al., 2022; Linley et al., 2013; Niles et al., 2011; Seligman, 2011; Uusiautti & Määttä, 2015) has emphasized the importance and understanding of the individual perspective and the mutual benefit that can be achieved in working life when the understanding is shared.

Modern careers are also explained by the idea of career adaptability, which refers to the psychosocial resources that enable individuals to overcome challenges in their career development (Savickas & Porfeli, 2012). Career adaptability has been recognized as a significant predictor for positive career outcomes, such as salary, promotability, and career satisfaction (Johnston, 2018; Rudolph et al., 2017). It can be defined through four dimensions: becoming concerned about one's vocational future; taking control over one's vocational activities; expressing curiosity to explore possible selves and future work scenarios; and acquiring confidence in pursuing vocational aspirations and implementing career choices (Savickas & Porfeli, 2012; see also Zhu et al., 2019). Research has consistently shown that developing and flourishing at work in areas that interest an employee also strengthen their commitment to work, provide joy and well-being, and in many ways contribute to their success and thus that of the whole company (Achor, 2010; Seligman, 2011; Uusiautti, 2015).

Based on the aforementioned research, we consider careers as individual experiences that are intertwined with contexts and environments (Baruch & Bozionelos, 2011; Cohen et al., 2004) and, at their best, as a positive source of identity, creativity, and life challenge as well as status and access to social networking (Baruch, 2004). The opportunities for flourishing and favourable career development can form the basis of a successful career path that can include personal development hierarchically and horizontally with expanding expertise and skills in the field (Redecopp & Huston, 2019; Uusiautti & Määttä, 2015; Wu et al., 2019). However, in order to find the right type of career and be able to flourish, the construction site worker needs support for building the career (Wu et al., 2019).

Career support in the construction field

Construction companies have at their disposal a wide variety of ways to identify employee competence and to support career development (see Borg & Scott-Young, 2022). In bigger companies, human resource managers may design career programs matching employees' capabilities and interests with organizational requirements and opportunities (Ismail et al., 2014). In this context, career programs refer to employees' complete work experience in organizations (Ismail et al., 2014; Roongrengsuke & Liefoghe, 2013). When these programs are properly designed and implemented, this can steadily promote the career advancement of employees (Ismail et al., 2013; see also Baruch, 2004) and affect previously confirmed concerns that construction companies now face challenges

regarding voluntary employee turnover (Chagadama et al., 2022). Through good career management practices, companies can also positively affect employee retention (Hlanganipai & Mazanai, 2014). Supervisors and leaders therefore play a significant role in the successful implementation of career support practices. It is already known that smaller companies may not have official or strategic career programs (e.g. Chagadama et al., 2022; Perrenoud, 2020), but career support may still be included in companies' values, leadership practices, and efforts to strengthen employees' competence or practical needs, which then provide the structure for the support.

As described in the Introduction section, the construction field appears manifold with multiple stressors such as role ambiguity, changing work environments, and economic pressure in the field (Wu et al., 2019). However, the reason why people commit to construction work can be explained by high levels of career calling (Wu et al., 2019), and the career choice seems to have similar influencing factors among women and men (Oo et al., 2020; Rautio, 2022). Still, people with different cultural or gender backgrounds may have quite different career aspirations (McIntyre et al., 2024; Oo et al., 2020; Raiden & Räisänen, 2019) and the masculine and white norms in the field can shape career aspirations and experiences already from the time of educating oneself (McIntyre et al., 2024).

The need for research on supporting career development can also be found in the construction industry in terms of cultural or gender differences (e.g. Rosa et al., 2017). For example, the effectiveness of current career support strategies in supporting women's career development may be limited, and in order to develop a more gender-balanced construction industry, new support strategies are urgently needed (Rosa et al., 2017). With this study, we aim to shed light on how individualized career support strategies can be viewed and thus developed.

Method

The following research question was set for this research: How do supervisors perceive employee career support in construction companies?

We applied a phenomenographic approach to reveal supervisors' diverse – even contradictory – understandings and perceptions of employees' career support in construction companies. Phenomenography is a method 'adopted for mapping the qualitatively different ways in which people experience, conceptualize, perceive, and understand various aspects of, and phenomena in, the world around them' (Marton, 1986, p. 31). Being established and used in education for decades (Marton & Booth, 1997), phenomenography is also extensively applied in other disciplines concerning workplace studies (Sandberg, 2000; Teeter & Sandberg, 2016). The content of perceptions and the relationships between them (e.g. Marton & Pong, 2007; Paloniemi, 2004) were of our particular interest. The concepts arise through the how-and-what aspect: How do the interviewees understand the theme and what are the elements included in it? (e.g. Harris, 2011). The purpose of the phenomenographic research is to reveal the variety of perceptions about the phenomenon under investigation and thus understand better the meanings that, in this case, the supervisors give to employee career support through their

various perceptions. Though each interviewee presented their own interpretations of the phenomenon, conceptions were not studied at the level of individuals but as a whole set of meanings in qualitatively different perceptions (e.g. Marton, 1986). This research approach does not aim at generalizable findings per se but can provide understanding about the phenomenon that is usable and scalable in the construction field and from the needs of continuous education.

Research data

To find suitable research participants to be interviewed, we started the data collection procedure by compiling a list of over 40 companies operating in Finland through online searches and searches of *Rakennuslehti* [construction magazine], issues spring and summer 2022. Those companies ($N = 15$) that presented employees' career development programs or practices on their websites were selected for initial contacting. The companies were contacted by email and by phone. Finally, five of fifteen companies decided to participate in this research.

The participating companies were either Finnish ($N = 2$) or Finland was one of their areas of operation ($N = 3$), and the number of employees in Finland in 2022 varied as follows: 650+ ($N = 2$), 300–650 ($N = 1$), 50–299 ($N = 1$), and fewer than 50 employees ($N = 1$). For confidentiality, the number of employees of the largest companies is deliberately reported to be anything above 650. The companies were informed to prompt three to four supervisors to volunteer to be interviewed. Interestingly, two of the companies directed more people to the interview; thus, three to eight supervisors from each company participated. The companies decided themselves which business areas of construction the interviewees represented.

The data consists of twenty-three oral, semi-structured interviews (twenty-one men, two women, aged 31–61 years, average 42), conducted via video call with Teams or by phone. The participants' job titles were production manager ($N = 1$), human resource director ($N = 1$), region manager ($N = 1$), financial manager ($N = 1$), head of unit ($N = 2$), project development manager ($N = 1$), construction manager ($N = 4$), project director ($N = 2$), responsible site manager ($N = 3$), site engineer ($N = 1$), operational manager ($N = 1$), CEO ($N = 1$), foreman ($N = 1$), and site manager ($N = 3$). The participants' educational backgrounds were construction engineer ($N = 7$), master of science in technology ($N = 6$), master builder ($N = 4$), automation engineer ($N = 1$), master of business administration ($N = 1$), construction engineer/civil engineer ($N = 1$), construction engineer/surveying engineer ($N = 1$), construction and civil technician ($N = 1$), and a bachelor of business administration ($N = 1$). Work experience in the field varied between 6 and 39 years (6–9 years $N = 3$; 10–19 years $N = 8$; 20–29 years $N = 6$; 30–39 years $N = 6$). The durations of the interviews were 15–45 min. We refer to the interviewees as supervisors, as these interviewees were either supervising subordinates, colleagues, or interns in their careers. According to the *Cambridge Dictionary*, supervisor means 'a person who is in charge of a group of people or an area of work and who makes sure that the work is done correctly and according to the rules'.

Interviews

We followed three practices of the relationality phenomenographic approach (Bowden, 2005): (1) a similar opening scenario for every interviewee, (2) the interviewer's minimal participation in speech, and (3) the only evidence used in developing categories of description was that contained within the transcripts. Though we were particularly interested in the phenomenon of supporting white-collar workers in their careers, this was not defined in the interviews for the following reasons: the companies do not necessarily separate the means of supporting employee career by the employee group; the interviewees represented a wide range of supervisor positions in the companies; and career paths may concern employees of various statuses depending on the phase of their career. Thus, the interviewees were allowed to approach the phenomenon from their own perspective. The interview questions were as follows: Does the company have a program or policy for identifying, designating, or managing employee competencies? What kinds of career opportunities are available to employees in the company? Are there any other opportunities offered by the company you would like to talk about? Do you feel it is your role to support employees in their career? Could you give an example of a situation where you have supported an employee in their career? What requirements (e.g. competence) do you have to meet to support the careers of the employees? How do you think career support could be developed in the construction field? How can you tell if an employee in the construction field has succeeded in their career?

Analysis

Following the methodological path of Marton and Pong (2007), the analysis was conducted in six phases: (I) Familiarizing with the data; (II) Selecting the units of meaning, which initially led to about 300 expressions relevant to the research problem, including any of the three critical aspects: objective, subjective, and contextual (Zygmunt & Naidoo, 2022). A unit was formed whenever there was sufficient evidence that a particular conception had been described, and a single sentence in the data could contain several units of meaning. For example, when the original expression was '... on the other hand, there must be a need for the employee in the company, that is, that there would not be the problem that the steps of the pyramid are full and the next step can't be found' (Supervisor 16), we identified two units of meaning: first, demand and need for construction and, with it, certain job descriptions, and second, career opportunities as a pyramid. (III) Forming initial subcategories of the data: the units were studied in detail to identify within each unit the elements of the phenomenon that were focused upon and to devise a description of each conception's structural aspect. In doing so, we paid attention to the explicit variations that the interviewee brought in as they focused on a particular element, as well as to the variations that were implied by that element (Tables 1 and 2).

(IV) Arranging/grouping and rearranging subcategories. We combined subcategories with the same content into descriptive categories, naming the description categories with descriptive terms. (V) Forming descriptive categories.

Table 1. Example of the formation of subcategories.

Unit of meaning	Subcategory
The difference in values between generations The person's CV and references as indicators of career development Career development potential is the employee's desired attitude, motivation, desire to learn, interest, and asking questions Professional pride in success at work and career development	Supporting employees' work skills as a cumulative entity/whole: knowledge, competence, and social and psychological capacities
The company's needs and size affect the employee's career development Coincidences in career development, when opportunities and needs coincide Demand and need for construction and, with it, certain job descriptions Competition for competencies can drive an employee forward in their career, and opportunities become available The competition for competencies leading to inexperienced employees in too-demanding tasks The effects of generations and time on what is considered typical for career development in the construction industry Encouraging learning, training, and thus career development	The job/career opportunities in the company as the basis for support Supporting employees' careers by taking into account social demands (incl. economic cycles) and competence and learning requirements typical of the time concerning the construction work
The influence of gender and nationality/ethnic background on career development Career development as the increase in competence and responsibility, without a change of titles Career opportunities as a 'pyramid' Career development as an increase in demands of work tasks Understanding that employees have their own views on career development	The impact of company values on supporting careers (equality) Supporting the increase in professional competence Supporting hierarchical job title path Supporting the development of work tasks Career support as matching the employee's and employer's perceptions

(VI) Creating a system of descriptive categories and presenting the outcome space. In the final stage of analysis, we identified the relationships between the categories and their positioning in relation to each other. While horizontal description categories embody equal perceptions of the phenomenon, vertical description categories embody the order of perceptions, for example, from the point of view of time, maturity level, change, or degree of generality (Marton & Pong, 2007; Uljens, 1996). We identified the outcome categories

Table 2. Example of the formation of descriptive categories.

Subcategory	Description category
Supporting employees' work skills as a cumulative entity/whole: knowledge, competence, and social and psychological capacities	Supporting employees' holistic growth
The job/career opportunities in the company as the basis for support	Career support based on the needs of and opportunities in the company
The impact of company values on supporting careers (equality)	
Supporting employees' careers by taking into account social demands (incl. economic cycles) and competence requirements typical of the time concerning the construction work	Supporting employees' continuous learning
Supporting hierarchical job title path	Supporting employees' hierarchical pathway of titles
Supporting the development of work tasks	Supporting employees' professional development
Supporting the increase in professional competence	
Career support as matching the employee's and employer's perceptions	Supporting transformative co-creation/a combination of company and employee goals

as horizontally positioned so that, although clearly distinct from each other, their sub-categories connect them by positioning them at the intersection of the main categories.

Results

Next, we introduce the findings based on how the supervisors perceived the career support in the construction companies in relation to the nature of careers.

Supporting employees' hierarchical pathway of titles

A majority of supervisors regarded their support as the means to help employees advance their careers as hierarchical progress all the way from internship to managerial positions. This was how the structured career paths were also often described. Support meant analyzing the employee efficiency, supporting advancement on a hierarchical career path with various training, and rewarding employees by promoting them into more demanding supervision/leadership/managerial roles.

... It's very typical [---] that you advance from one expert position to another and then you're traditionally rewarded with a supervisor's role ... (Supervisor 19)

Hierarchical advancement was often described as supported with various coaching, testing, and training solutions.

[For support to be a] unit manager [---], we hired an external coach [---] and then we had tripartite meetings [---] and those certain tests, in this case the WorkPlaceBigFive test, 360 and First Beat related to endurance. [---] Then came the emotional intelligence test and the coping test. (Supervisor 16)

Interesting indications of a hierarchical understanding of career development were that those who were satisfied with work under the same title were not considered to have ‘the desire’ for more demanding tasks. In this case, the means of support might not be identified.

...employees who’d have the potential to handle more demanding tasks, but they don’t necessarily have the interest and desire for it. [---] They’re satisfied [---] with the foreman’s career where they’ve started... (Supervisor 8)

The desire to advance quickly along the hierarchical path was also perceived as problematic and not sustainable if it was seen to be the goal of too many employees. There are more tasks close to the operational levels and not enough senior management positions.

Supporting employees’ career development in the direction of the needs and opportunities of the employer company

When supporting employees’ careers by guiding them according to the opportunities the company had to offer, the size of the company and social and economic factors played major roles.

... Areas of expertise we have a shortage of. For example, young site engineers with economic skills, or concrete work supervisors [---]. I should [---] guide people to these areas. (Supervisor 4)

Support was adjusted to the availability of employees and to demand in the company’s operations. When there was a need for employees but not enough experienced ones, inexperienced ones had to be guided into responsible positions or trained in operations where there was lack of expertise.

Skill or labour shortage in the construction sector [---] has driven to constant competition. [---] We have to put young, inexperienced guys on the next step a little too early and too quickly. (Supervisor 16)

The support of motivation and professional pride were considered essential in cases where other options of career development were considered limited. Many interviewees

pointed out that social skills of the supervisor, such as the ability to listen, to recognize strengths, and to be present for employees, played an important role.

... based on the strengths [---]. It would be good to develop the weaknesses as well, but based on the weaknesses, you can't be thrown into the most difficult task if you've never done it, so in a way we play in areas of strengths. (Supervisor 15)

Supporting employees' professional development

When supporting careers as professional development, the support included guiding towards opportunities where professionalism and competence grow, such as variation in projects or choosing suitable work pairs.

I always try to place [employees] on projects where something different happens [---] so that they learn [specific] tasks and get [specific] qualifications. (Supervisor 4)

Other employees promote career development if you choose work pairs so that the more experienced can teach the less experienced. (Supervisor 23)

Generational values and differences were considered meaningful when supporting professional development; for example, younger generations were said to enjoy the positions of site manager for a shorter time. Besides shortening careers in one position, downsides mentioned were turnover and commitment challenges, to which the means of support had to respond. As one guiding tool, an interviewee mentioned mentorship that the company had enabled.

I've supported people [---] as a mentor when they take on new tasks. We've taken this type of tool to the site, so that we can take another construction manager to work there, who's not actually a work manager yet, but learning the duties of one. (Supervisor 8)

Also, professional development was supported and complemented with educational possibilities.

I try to recommend to them all possible training that the company offers and also external training according to their wishes [---] if it comes up [in development discussions and results discussions] that they would like to study or transfer or take on more demanding tasks ... (Supervisor 8)

Support as transformative co-creation/a combination of the company's and employees' needs

Where career development was seen as a joint construct between the company and the employee, the emphasis of support was on open interaction, discussion, and listening to employees and taking into account individual perceptions. Supervisors used personalized means in career support, utilizing organizational structures, demands, and opportunities.

... We've created quite precisely, systematically, a path for him [to be a construction manager]. First, [---] we know our customers have certain requirements regarding the education of employees in responsible positions. We complemented his university of applied sciences degree in the right field. [---] And then supported it with training provided by us and others. And now he's become a construction manager. (Supervisor 10)

Support is described as requiring mutual identification of skills and strengths and as including new ways of thinking about career development and competition between companies for skilled workers.

If we're on the axis of 'construction manager, responsible site managers, site clerks' then we're probably close to the basics, whether it's technical competence, know-how, negotiation skills, supervisory work or whatever, then in a certain way it is continuous communication, which I think is essential. (Supervisor 16)

The emphasis here was on both presenting opportunities and what the company has to offer, communicating about opening possibilities, and recommending employees to senior managers (to enable progression) and on listening to the employees themselves, where it might be noted that the employee had something surprising in mind: the employee might aim for something other than the company's representatives had assumed.

... I wanted to keep him in the house, so I told my supervisor that I'd like to make this guy a construction manager. (---) I supported him in his growth in that changing environment ... (Supervisor 18)

Supporting employees' holistic growth

According to these perceptions in the data, career/work development is a growth story that is understood through career stages and cumulative, holistic human development.

The younger ones [---], because it's a growth story, [---] they still have a hunger for growth to advance. (Supervisor 1)

The interviewees reflected that the age of the employee determined values and, for example, whether the employee still had a hunger for growth or had reached a point where other aspects of life and personal interests and values also determined career goals and development. When supporting holistic growth, career support was seen first and foremost as taking into account the whole person and supporting psychological aspects, such as professional pride.

... Those who succeed in the construction industry exude a kind of professional pride. (Supervisor 17)

Supporting employees' holistic growth may also lead to a situation where the supervisor genuinely supports the employee in thinking about the right steps for him or her and, in this way, can also support a change of job.

... But I try to use common sense in how to help people, because common sense goes a long way in guidance and encouragement, also in rewarding and negative aspects. (Supervisor 17)

Supporting employees' continuous learning

The interviewees also approached career support by reflecting the need for continuous learning (based on a holistic view of the skills, livelihoods, training provision, and labour needs of people of working age) characteristic to the construction field, gender and ethnicity as promoters or preventers, demands for and trends of construction, competition between companies, economic cycles, career development trends, and employment situations. Career/professional development requires learning, which can be supported by, for example, learning-friendly management and a good working atmosphere.

The working atmosphere, if it gets bad then no one wants to learn there. When everyone is having fun, then it's nice and you can absorb new things and develop your know-how. (Supervisor 23)

Employee learning could also be enhanced by encouraging employees to actively seek out learning opportunities they might need.

... We encourage people to be proactive in their own training. (Supervisor 18)

To support and develop an atmosphere of continuous learning, an interviewee presented a proposal to develop career support as a common mission of continuous learning in the whole sector: instead of competence competition between companies, everyone benefits if employees gain experience in different organizations and bring along new insights and ways of working.

... should [the support] get to the point where a certain kind of rotation [of workers] was more normal. This industry, it's not rocket science so that anyone would manage to take someone else's major trade secrets, so shouldn't we just be brave enough to let people develop without thinking that if we invest [a certain amount] in a person's training, then we're afraid that the person will change the workplace. But, if everyone would [invest], then it was just an investment in the development of the whole sector. (Supervisor 19)

Discussion

As presented in the Results section, the supervisors' ideas about how to support careers were based on their perceptions about the shape of careers in the construction industry. These can be roughly divided into three categories based on what kind of an approach they

represent on the development of the employee: (1) professionally oriented (development of competences), (2) company-oriented (the company's objectives, needs, and opportunities), and (3) individually oriented (holistic growth) perspectives on career support. This division and the six forms of career support are positioned in Figure 1. In these three sections and at their intersections, there are different perceptions of what kind of development can be supported. Supporting the employee's continuous learning is recognized as a uniting point of view; it is therefore in the middle of the figure.

In the light of the results, career support in these three dimensions can be viewed from the perspective of continuous learning.

1. Professionally oriented career support focuses on professional development and advancement, measurable work achievements, education, evaluation, and supporting employees on predetermined, structured career paths with established (yet transformative) competence requirements. If the company is unable to offer opportunities for professional development, the supervisor may refer the employee

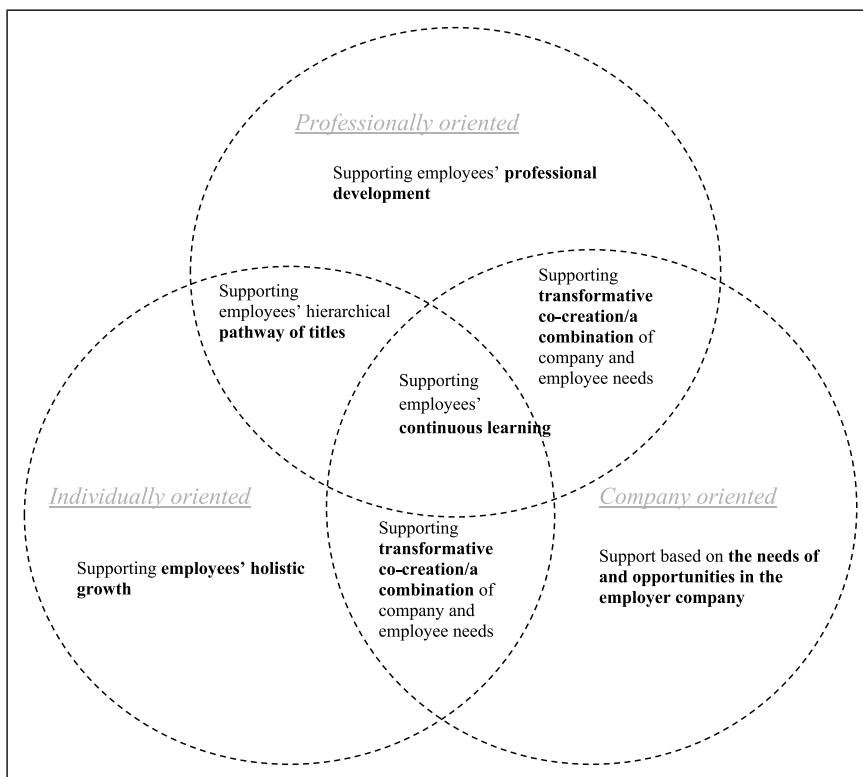


Figure 1. Outcome space: supervisor conceptions about the support of employee career development.

to another company or to another type of position to apply for professional development. The priority is that support is targeted to professional development. Continuous learning objectives are thus not only occupational know-how but also career adaptability dimensions: considering occupational future and activities, supporting curiosity about possible future work scenarios, and confidence in pursuing vocational aspirations and implementing career choices (see also [Savickas & Porfeli, 2012](#)).

2. Company-oriented support considers the needs and opportunities of the company as overriding, as, for example, the size of a company or a specific construction industry determines the career opportunities available. In case the company is small, careers may be supported in the sense of ‘everyone does everything’ or ‘it’s like running your own business’, which may lead to a wide variety in career development. This orientation may be a dominant form of career support operations in bigger companies as well, for example, when the economy is tight, demand for construction is scarce, there is a lack of employees, or the career paths of the company are otherwise very structured/predetermined. From the point of view of continuous learning, the employee’s learning is guided to the greatest extent by the demands of the environment.
3. Individually oriented career support primarily values open discussion, shows humanity, and considers the individual as a whole, considering career stages and employee values, reconciliation of work and family, and flexible education and work solutions that inspire the worker. From the point of view of continuous learning, psychological dimensions such as emotional intelligence are emphasized. Different career options are recognized in terms of supporting individual success ([Rautio, 2022](#)).

In this sense, our findings have similarities with the idea of transformative learning as suggested by [Sterling \(2010\)](#). Sterling focused on the challenges that we have also highlighted in the context of construction field – namely ‘contemporary socio-ecological conditions of unsustainability, complexity and uncertainty present to educational purposes and practice’ ([Sterling, 2010](#), p. 17) – and call for wider understanding of continuous learning and its transformative nature in the field. When contrasted with the transformative learning theory, our division into three perspectives of professionally, company-, and individually oriented career support illustrates the need for considering continuous learning opportunities as epistemic learning. [Sterling \(2010\)](#) states that providing such epistemic learning experiences that are transformative in nature is a challenge. Our research provides new viewpoints to better understanding the needs for continuous and transformative learning experiences in the construction field from the perspective of career support and in which the construction company can have, in all three levels, a meaningful role.

Supporting a hierarchical career path can be both an individual goal and a journey understood as professional development and can thus be placed at the intersection of individual and professional areas. Transformative co-creation can also be placed either at the interface between individual holistic views and company needs or at the intersection of

professional and company needs. Thus, continuous learning is seen in these categories in a more multidimensional way: as a combination of holistic or professional and company-driven themes.

Further, we argue that continuous learning in this context should first be understood as an activity, namely learning, where the learners are construction workers and companies are education providers. Second, continuous learning should be understood as a phenomenon influenced by the social factors presented in the introduction; thus, we also understand that, in addition to active learning, the actors themselves produce the environment and themes of continuous learning that are considered important now and in the future. Therefore, alongside reactive learning, the learners can also proactively produce and develop the themes of and needs for continuous learning. Supporting employees' continuous learning covers occupational, work/environmental, and holistic growth aspects.

Views cutting across categories were recognized in the interviews as something that challenged leadership and characterized the working environment in the field, or, in other words, formed the field-specific needs for continuous learning. Regardless of how a supervisor understood career support, the employee's own skills and competencies, goals, and social skills were highlighted as things that can promote or prevent career development.

Reliability

The phenomenographic approach was integral to the overall research, thus being more than a method for gathering and analyzing data and reporting findings (Sin, 2010). To ensure the reliability of our phenomenographic findings, we committed to interpretive awareness and maximum loyalty to the data when interpreting meanings by carefully following the processes of phenomenographic research and by describing the analytical process (Marton & Booth, 1997; Sin, 2010). We also sought to set aside possible pre-conceptions by identifying them and making interpretations of the meanings of the data as explicit as possible throughout the research process (Sin, 2010).

A phenomenographic research cannot be replicated as such, and it does not aim at generalizable data because in phenomenography, the emphasis is placed on the reflexive relationship between the phenomenon and the participant, backgrounding the influence of social discourses on the participant, the relationship between participant and researcher, and the researcher's own relationship to the phenomenon (Bowden, 2005). This means that the analysis of perceptions provided a deeper understanding about the phenomenon under investigation and that the results are never the conceptions as themselves. However, the phenomenographic approach allowed us access to view analytically the conceptions of career support identified in the selected group of respondents – supervisors in construction companies.

The participants represented a variety of educational backgrounds, ages, and work experiences and can thus be considered providing quite a rich data for the purpose of this research. It is however noteworthy that they operated in supervisor positions where they were involved in supporting careers and that the participants actually represented

companies that had established career support programs or practices. By intentionally focussing on this group, we wanted to reveal the full range of perceptions about career support (both in the formal sense and in everyday interactions with employees) and provide information for the further development of those support practices and better meet the needs of future employees in the construction field. This can be seen as a limitation for the representativeness of the participants compared to a situation if we had invited supervisors also from companies that did not have any established career support programs.

The conceptions are essential to be revealed because (phenomenography is originally a learning theory stating that) people can be guided to experience a phenomenon in more powerful ways if they become simultaneously and focally aware of more critical aspects of a phenomenon than was previously the case (Marton & Booth, 1997). People are more likely to discern such features when they experience variation between and within these features (Marton & Booth, 1997). We also followed the quality criteria for analysis as stated by Marton and Booth (1997) to make sure that the results categories are (1) in a separate relationship with the phenomenon revealing new perceptions about it; (2) in a logical relation with each other; and (3) providing a concise illustration about the variety of perceptions.

Conclusion

Previous studies have recognized parallel, sometimes even competing, perspectives on careers (Arthur et al., 2019; Driver, 1982; Plant, 1997). These perspectives may consider visible and measurable steps and career stages, or they may also include an individual perspective, such as the values, goals, and meaning of work set by the individual. Thus, a construction career cannot be spoken of as a single entity, nor is it defined in the same way for everyone. Instead, career studies have identified different types of careers that are seen to be shaped by the influence of a number of individual and external elements (e.g. Inkson & Amundson, 2002; Rautio, 2022).

While our results provide valuable information on the many dimensions and opportunities for career development, they also reveal some critical aspects between the perceptions of supervisors on career support and support practices applied in the companies. Therefore, it may not be enough to share best practices in career support in companies, as these strategies may not be able to adequately address the specific situations or contexts faced by individual employees and their perceptions of career development and success. We argue that construction careers should be understood and thus supported more broadly in education and companies, not only as a vertical or horizontal move from one job to another but also as the deepening of skills in jobs with the same title – following the idea of transformative, continuous learning. Thus, for example, a long-term responsible site manager would also be recognized as having had a developing career. As Savickas et al. (2009) stated, the new relationship between the worker and the work world creates the need to develop and apply new systems of personal promotion. A satisfying and meaningful career can also be built without changing jobs or titles (Zhu et al., 2019) through a more epistemic learning of the profession and its meaning at the personal, organizational, and societal levels (Sterling, 2010).

A topical issue in working life is that organizations are becoming increasingly aware that career success depends on the ability to continuously learn and adapt to the environment, but scant attention has been paid to how learning activities contribute to managerial success (Zaitouni et al., 2020). Our study showed that the interviewees aimed to support employee enthusiasm and to provide encouragement for continuous learning and that supervisors value and call for a culture that integrates continuous learning aspects with career support practices, where career development is understood in companies and career programs in a broader sense. Themes of learning may consist, for example, of professional, psychological, or social aspects that consider the needs among employees with various ethnical backgrounds and genders (McIntyre et al., 2024). For example, Becker et al. (2014) highlighted the importance of communication skills for engineers and construction professionals, emphasizing that these skills are equally as important as technical abilities. They also stressed the significance of providing timely feedback and evaluations to young engineers in a positive and effective manner to support their personal and professional development, inspire motivation, and foster engagement in their work. Oo et al.'s (2020) study showed that especially among early career women, their job satisfaction and commitment with the construction field increased if their career expectations could be met at the workplace.

Career development in the sense of continuous learning can only be effectively supported when it is conscious. As Ekwuno (2022) argues, no matter how skilled a construction manager is, if the employer is not communicative and proactive in responding to notifications, the construction manager will not deliver, and all stakeholders are needed as a team to achieve greater success in the industry. It is therefore important to recognize in career management that career advancement is greatly influenced by the perceptions and assessments of others (Floris et al., 2020). This research complements this notion by revealing that the means to support career advancement are affected by conceptions about career development.

Chagadama et al. (2022) state that high voluntary employee turnover is undesirable for organizations and is a significant business concern of managers. Reasons for voluntary turnover include alternative employment opportunities, job satisfaction levels, interpersonal conflict, a sterile work environment, work–life balance challenges, or other personal reasons. In the light of our results, we may look at previously presented findings from two directions: First, this reinforces the need to broaden understanding of, and reward for, all kinds of career development in construction companies, not just the most recognized ones that often emerge from the company-oriented goals. Second, we may approach this through the lenses of continuous learning that brings in the societal and individual perspectives for career support in a new manner. Määttä and Uusiautti (2023) suggest that employees should be motivated to recognize their own learning and development needs and autonomously seek opportunities to learn new skills (see also Zaitouni et al., 2020). This study adds that the competition for human resources and concern about education provided by the company being wasted if employees change employer could also be seen differently from the perspective of transformative learning: the movement of employees between companies and gaining experience elsewhere

increases the competence of each company. If every company invested in enabling learning in the spirit of continuous learning, it would collectively pay back.

Finally, by understanding the complexity of careers and the effect of various perceptions concerning it, we also understand that there is a need to diversify the ways and methods that educational institutes, construction companies, and society employ to support career development. For example, the new governmental reform for continuous learning in Finland and its connections with the research and development investments in companies require new understanding about the needs for support and learning opportunities (Finnish Government, 2022) that our research provides for the construction field.

We conclude with two main contributions of this research. The first one is a learning-theoretical perspective for careers and the latter focuses on the concrete support mechanisms of the future in the constructions field:

1. In construction education and work, career development could be supported through the idea of continuous learning, covering occupational, work/environmental, and holistic growth aspects. Continuous learning can be seen as an activity, namely *transformative learning*, where the learners are construction workers, companies, and education providers, and as a *phenomenon* influenced by social factors, trends, and the aforementioned actors. Alongside reactive learning, learners can also proactively produce, develop, and support flourishing careers and pursue epistemic learning for seeing the construction field in new ways.
2. Construction companies already have multiple supporting and encouraging practices to support successful career development and to enhance professional pride. To support construction professionals' careers sustainably, we should commonly consider varieties of career development, taking into account their multiple aspects and the diversity of career paths. This research focused on companies that already had established career support programs or practices. However, the findings showed that the support system does not fully pay attention to the diverse career aspirations the employees may have, nor were all supervisors aware of the possibilities that their companies had for supporting their employees' careers. Thus, the research provides new ideas for supporting careers and building new and more varied career support programs not only in those companies that already have one but for those whose programs are still emerging.

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