



VALUE OF SOCIAL CAPITAL

Revisiting Theoretical and Empirical Premises of Social Capital

Minna Tuominen

TURUN YLIOPISTON JULKAISUJA – ANNALES UNIVERSITATIS TURKUENSIS SARJA – SER. B OSA – TOM. 692 | HUMANIORA | TURKU 2024





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To my mother

UNIVERSITY OF TURKU Faculty of Social Sciences Department of Social Research Sociology MINNA TUOMINEN: Value of Social Capital. Revisiting theoretical and empirical premises of social capital Doctoral Dissertation, 207 pp. Doctoral Programme on Inequalities, Interventions and New Welfare State (DPInvest) November 2024

ABSTRACT

Social capital is one of the most treasured concepts in the social sciences. However, the coexistence of competing theories on social capital has led to multiple conceptualisations and operationalisations. Consequently, the corpus of social capital research consists of numerous studies, the results of which do not constitute a cumulative pool of knowledge.

This dissertation contributes to the existing literature by providing further evidence of the associations among social capital, socioeconomic resources and well-being in different age and population groups. Specifically, this study aims to provide a more nuanced understanding of the relevance of socioeconomic resources to the dimensions of social capital, and of the relationship between these social capital dimensions and well-being, across different population groups. This is achieved by systematically breaking down the concept into more specific dimensions – social networks, trust and reciprocity – and exploring the assumed predictors and potential outcomes associated with each dimension. Theoretically, this dissertation draws from Pierre Bourdieu and Robert Putnam.

This dissertation comprises four published articles based on four distinct crosssectional datasets collected in Finland. While the identified datasets contain essential information on the various dimensions of social capital, the cross-sectional nature of the data does not allow for the establishment of causality or directional relationships between these elements. Nonetheless, this research contributes to the literature by providing further evidence of correlational associations among these factors and outlining potential pathways for the flow of social capital.

The first two articles focus on the supposed origins of social capital and the last two on its expected outcomes. The first article centres on early adolescents who are just starting to build social lives independent of their parents. Building on a structural equation model and a non-representative convenience sample collected from adolescents aged 12–13 years and their parents, the article assessed how parents' social capital and family socioeconomic resources relate to adolescents' social networks, trust, and reciprocal behaviour.

While previous literature has mainly focused on the socioeconomic gradient in social networks, the findings of the first article suggest that socioeconomic resources are also associated with other dimensions of social capital, especially trust and reciprocity, among adults, but less evidently among adolescents who grow up in contexts of relative equality. However, adult behaviour appears to serve as a model for shaping the social capital of adolescent children, and through the parents' example, socioeconomic background indirectly extends its bearing on youngsters' social capital.

The second article explores the development of social capital among international migrants who are establishing social interactions afresh in their new home country, assessing the relevance of socioeconomic background in the process. The analysis builds on a multinomial logistic regression model using large, representative survey data.

The results of the second article suggest that socioeconomic resources are particularly important for international migrants. Income emerged as the element most consistently associated with building social capital while settling in a new country. This may be related to the specific Finnish context, where the standard and cost of living are high. In striving for homophily with the locals, newcomers must earn a reasonably high income to be able to participate in social life according to the prevailing standards.

Consequently, these findings suggest that the relationship between socioeconomic resources and social capital may not be constant over time; rather, the larger the diversity in society, the greater the significance of socioeconomic resources in building social capital.

The third article turns again to adolescents, assessing how the different dimensions of social capital relate to their subjective well-being. This study applies linear and quantile regression analyses to representative survey data collected among 12–13-year-olds. The fourth article features a similar analysis, using a representative sample of the adult population.

The third and fourth articles support previous research, pointing to a strong positive relationship between social capital and well-being in both generations. The results indicate that in both generations, reciprocity and social trust are the most important factors for well-being. The social network dimension exhibited a substantially weaker but significant association with well-being in both generations.

These findings suggest that the relationship between social capital and wellbeing is likely to persist stably across age groups. However, the findings also suggest that adolescents with lower levels of well-being experience more significant improvements for each unit increase in social capital, whereas among adults who experience a scarcity of primary resources, other factors alongside social capital appear to play a significant role in their well-being.

In sum, this research contributes to the literature by demonstrating that the association between socioeconomic resources and social capital varies across different population groups. Combining past research with the present findings suggests that greater societal inequality enhances the significance of socioeconomic resources in shaping social capital. Trust and reciprocity are the dimensions most sensitive to socioeconomic variation. Additionally, the study highlights stability in the relationship between social capital and well-being across populations, with trust and reciprocity showing the strongest associations with well-being among adults and adolescents.

KEYWORDS: Social capital, social networks, trust, reciprocity, socioeconomic resources, social class, well-being, adolescents, adults, migrants

TURUN YLIOPISTO Yhteiskuntatieteellinen tiedekunta Sosiaalitieteiden laitos Sosiologia MINNA TUOMINEN: Sosiaalisen pääoman arvo. Sosiaalisen pääoman teoreettisten ja empiiristen lähtökohtien uudelleentarkastelu Väitöskirja, 207 s. Eriarvoisuuden, interventioiden ja hyvinvointiyhteiskunnan tutkimuksen lippulaiva (DPInvest) Marraskuu 2024

TIIVISTELMÄ

Sosiaalinen pääoma on yksi yhteiskuntatieteiden keskeisimmistä käsitteistä. Useiden sosiaalista pääomaa koskevien teorioiden rinnakkaiselo on kuitenkin johtanut määritelmien ja operationalisointien moninaisuuteen. Sen seurauksena sosiaalisen pääoman tutkimuksen korpus koostuu lukuisista tutkimuksista, joiden tulokset eivät kumuloidu yhteiseksi tietovarannoksi.

Tämä väitöskirja täydentää olemassa olevaa kirjallisuutta tarjoamalla lisänäyttöä sosiaalisen pääoman, sosioekonomisten resurssien ja hyvinvoinnin välisistä yhteyksistä eri ikä- ja väestöryhmissä. Tarkasti ottaen tämän tutkimuksen tavoitteena on tarjota yksityiskohtaisempaa tietoa sosioekonomisten resurssien merkityksestä sosiaalisen pääoman eri ulottuvuuksien kannalta ja näiden ulottuvuuksien yhteydestä hyvinvointiin eri väestöryhmissä. Tämä tehdään purkamalla järjestelmällisesti sosiaalisen pääoman käsite tarkemmin määriteltyihin ulottuvuuksiin – sosiaalisiin verkostoihin, luottamukseen ja vastavuoroisuuteen – ja tutkimalla erikseen jokaista ulottuvuutta selittäviä tekijöitä sekä niiden mahdollisia seurauksia. Teoreettisesti väitöskirja ammentaa Pierre Bourdieun ja Robert Putnamin näkemyksistä.

Tämä väitöskirja koostuu neljästä julkaistusta artikkelista, jotka perustuvat neljään erilliseen Suomessa kerättyyn poikkileikkausaineistoon. Vaikka aineistot sisältävät sosiaalisen pääoman eri ulottuvuuksien keskeisiä mittareita, niiden poikkileikkaava luonne ei salli syy-seuraussuhteiden tai eri elementtien välisten yhteyksien suunnan määrittämistä. Rajoituksistaan huolimatta tämä tutkimus tuo kirjallisuuteen lisää todisteita näiden tekijöiden välisistä korrelaatioyhteyksistä ja hahmottelee mahdollisia väyliä, joita pitkin sosiaalinen pääoma pääsee muodostumaan ja joita pitkin se puolestaan vaikuttaa eteenpäin.

Kaksi ensimmäistä artikkelia keskittyvät sosiaalisen pääoman oletettuun alkuperään ja kaksi viimeistä sen mahdollisiin seurauksiin. Ensimmäinen artikkeli keskittyy varhaisnuoriin, jotka ovat vasta alkaneet rakentaa itsenäistä sosiaalista elämää riippumatta vanhemmistaan. Artikkelissa tutkitaan, miten vanhempien sosiaalinen pääoma ja perheen sosioekonomiset resurssit liittyvät nuorten sosiaalisiin verkostoihin, luottamukseen ja vastavuoroiseen käyttäytymiseen nojautumalla rakenneyhtälömallinnukseen ja 12–13-vuotiailta nuorilta ja heidän vanhemmiltaan kerättyyn eiedustavaan mukavuusotokseen.

Aiempi kirjallisuus on keskittynyt pääasiassa sosioekonomiseen eriarvoisuuteen sosiaalisissa verkostoissa, mutta ensimmäisen artikkelin löydökset viittaavat siihen, että sosioekonomiset resurssit liittyvät myös muihin sosiaalisen pääoman ulottuvuuksiin, erityisesti luottamukseen ja vastavuoroisuuteen aikuisten keskuudessa. Yhteys on kuitenkin selvästi heikompi nuorten keskuudessa, jotka kasvavat suhteelli-

sen tasa-arvoisissa olosuhteissa. Aikuisten käyttäytyminen näyttää kuitenkin toimivan mallina, joka muovaa nuorten sosiaalista pääomaa, ja vanhempien esimerkin kautta sosioekonominen tausta vaikuttaa epäsuorasti myös nuorten sosiaaliseen pääomaan.

Toinen artikkeli tutkii sosiaalisen pääoman kehitystä ulkomaalaisten maahanmuuttajien keskuudessa, jotka rakentavat sosiaalisia suhteita uudessa kotimaassaan, ja arvioi sosioekonomisen taustan merkitystä tässä prosessissa. Analyysi perustuu multinomilogistiseen regressiomalliin käyttäen laajamittaista edustavaa kyselyaineistoa.

Toisen artikkelin tulokset viittaavat siihen, että sosioekonomiset resurssit ovat erityisen tärkeitä maahanmuuttajille. Tulot osoittautuvat tekijäksi, joka liittyy kaikkein johdonmukaisimmin sosiaalisen pääoman kartuttamiseen uuteen kotimaahan asettauduttaessa. Tämä saattaa liittyä erityisesti suomalaiseen kontekstiin, jossa elintaso ja -kustannukset ovat korkeat. Pyrkiessään samankaltaisuuteen paikallisten kanssa, uusien tulokkaiden on ansaittava kohtuullisen korkeat tulot voidakseen osallistua sosiaaliseen elämään vallitsevien standardien mukaisesti.

Näiden löydösten perusteella sosioekonomisten resurssien ja sosiaalisen pääoman välinen suhde ei välttämättä säily vakiona ajan mittaan; sen sijaan yhteiskunnan eriarvoisuuden kasvaessa sosioekonomisten resurssien merkitys sosiaalisen pääoman rakentamisessa näyttäisi korostuvan.

Kolmas artikkeli keskittyy jälleen nuoriin ja arvioi, kuinka sosiaalisen pääoman eri ulottuvuudet liittyvät heidän subjektiiviseen hyvinvointiinsa. Tämä tutkimus soveltaa lineaarisia ja kvantiiliregressioanalyysejä edustaviin kyselytietoihin, jotka on kerätty 12–13-vuotiailta. Neljännessä artikkelissa tehdään samankaltainen analyysi aikuisväestöstä.

Kolmas ja neljäs artikkeli tukevat aiempaa tutkimusta tuoden esiin vahvan positiivisen yhteyden sosiaalisen pääoman ja hyvinvoinnin välillä molemmissa sukupolvissa. Näiden tulosten mukaan molemmissa sukupolvissa vastavuoroisuus ja sosiaalinen luottamus näyttävät olevan keskeisimmät hyvinvointiin vaikuttavat tekijät. Sosiaalisten verkostojen yhteys hyvinvointiin on huomattavasti heikompi, mutta kuitenkin merkittävä molemmissa sukupolvissa.

Nämä havainnot viittaavat siihen, että sosiaalisen pääoman ja hyvinvoinnin välinen suhde säilyy todennäköisesti vakaana eri ikäryhmien välillä. Kuitenkin näiden tulosten mukaan nuoret, joiden hyvinvoinnin taso on alhainen, hyötyvät erityisen paljon sosiaalisen pääoman jokaisen yksikön lisääntymisestä. Sen sijaan aikuisten keskuudessa, jotka elävät resurssien niukkuudessa, muut tekijät sosiaalisen pääoman ohella näyttävät olevan merkittävässä roolissa heidän hyvinvointinsa kannalta.

Yhteenvetona voidaan todeta, että tämä tutkimus täydentää kirjallisuutta osoittamalla, että sosioekonomisten resurssien ja sosiaalisen pääoman välinen yhteys vaihtelee eri väestöryhmissä. Aiempien tutkimusten ja tämän väitöskirjan tuloksia yhdistelemällä voidaan todeta, että yhteiskunnallisen eriarvoisuuden kasvaessa sosioekonomisten resurssien merkitys sosiaalisen pääoman muodostumisessa lisääntyy. Luottamuksen ja vastavuoroisuuden ulottuvuudet ovat herkimmät sosioekonomiselle vaihtelulle. Samanaikaisesti tämä tutkimus korostaa sosiaalisen pääoman ja hyvinvoinnin välisen suhteen vakautta eri väestöryhmissä; luottamus ja vastavuoroisuus muodostavat vahvimmat yhteydet aikuisten ja nuorten hyvinvointiin.

ASIASANAT: Sosiaalinen pääoma, sosiaaliset verkostot, luottamus, vastavuoroisuus, sosioekonomiset resurssit, yhteiskuntaluokka, hyvinvointi, nuoret, aikuiset, maahanmuuttajat

Acknowledgements

Sixteen years after completing my master's, I returned to university. Though I have always enjoyed studying, rediscovering my student self after years in professional life required significant adjustment. This decision was largely shaped by another major event: moving back to Finland after nearly two decades abroad. During that period, much had changed – I had grown older, the University of Turku had gone digital, and Finland had become one of the happiest, albeit more polarised, countries in the world. Navigating these and other new circumstances, I took eight years to make my way, first through advanced studies in Sociology, and then doctoral training. Finally, the end of this journey is in sight.

Looking back, many individuals have contributed to this endeavour. First of all, I owe profound gratitude to my primary PhD supervisor, Associate Professor Elina Kilpi-Jakonen, who has supported me from the outset. She has provided invaluable methodological insights, steadfastly supported various funding, summer school, and course applications, and created opportunities for me to participate in diverse initiatives. She also co-authored two of the four articles included in this dissertation. Her guidance has been essential to my academic growth, and I am truly grateful for her support throughout this journey. I am also deeply thankful to my second supervisor, professor Jani Erola, who encouraged me to apply for the doctoral programme despite of the lengthy gap since my master's, and whose support in securing the material conditions for my research has been invaluable.

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fellow PhD candidate, with whom I have had the pleasure of teaching and who has offered invaluable peer support. Several other colleagues have crossed my path, enriching my journey with friendship and positive spirit, even if many only stayed in Turku for short periods.

Undoubtedly, my family and friends have been the most dedicated supporters of this journey. My greatest supporter of all time has been my mom, who always believed in me. Indeed, this adventure would never have started without her. While I am saddened that she will not be with me on the day of my defence, I find comfort in knowing that she always believed this day would come.

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> October, 2024 Minna Tuominen

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List of Original Publications

This dissertation is based on the following original publications, which are referred to in the text by their Roman numerals:

- I Tuominen, Minna and Jenni Tikkanen. (2023). Adolescent social capital: An intergenerational resource? *Journal of Adolescence*, 1–15. https://doi.org/10.1002/jad.12215
- II Tuominen, Minna, Elina Kilpi-Jakonen, Regina García-Velázquez, Anu Castaneda and Hannamaria Kuusio. (2023). Building social capital in a new home country. A closer look into the predictors of bonding and bridging relationships of migrant populations at different education levels. *Migration Studies*, 1-33. https://doi-org.ezproxy.utu.fi/10.1093/migration/mnad022
- III Tuominen, Minna and Leena Haanpää. (2021). Young people's well-being and the association with social capital, i.e. social networks, trust, and reciprocity. *Social Indicators Research*, <u>https://doi.org/10.1007/s11205-021-02762-z</u>
- IV Tuominen, Minna and Elina Kilpi-Jakonen. (2020). Hyvinvoinnin sosiaaliset juuret: Luokka-analyysi sosiaalisen pääoman ja hyvinvoinnin välisestä yhteydestä. Sosiologia, 57(1), 26–43, 119. <u>https://journal.fi/sosiologia/article/view/124421/74581</u>

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1 Introduction

Social capital is one of the most treasured concepts in the social sciences and is often considered a cornucopia that can supply diverse benefits to its holder. However, the fundamental nature of social capital remains ambiguous.

Through this dissertation, I seek to further the understanding of the elements of social capital – social networks, social trust, and reciprocal behaviour – and how they relate to well-being on the one hand and to socioeconomic status on the other. Additionally, I aim to enhance understanding of the stability and variability of these associations across diverse populations.

To achieve these aims, I have divided the concept of social capital into specific components, exploring the hypothesised predictors of each one, and assessing their potential outcomes. To understand the relative importance of these components across age groups and life events, this dissertation separately delves into the social capital of adolescents, adults, and international migrants.

This research is based on cross-sectional data, not allowing for the identification of time trends or changes over time. However, it was assumed that social capital is a resource that develops over the life course, and its predictors and outcomes may vary over time.

This dissertation comprises four published articles, the first two focusing on the supposed origins and the last two on the assumed outcomes of social capital. Although this order does not reflect the temporal sequence in which the articles were published, it supports the logic of the narrative.

The first two articles concentrated on the life stages wherein social capital is thought to originate. Specifically, the articles explore the hypothesised predictors of social capital among early adolescents who are starting to build social lives independent of their parents, and international migrants who are establishing social interactions afresh in their new home country.

To gain deeper insights into what makes social capital valuable across different life stages, the last two articles explore the relationship between social capital and subjective well-being during adolescence and adulthood. While I acknowledge that well-being is not the only possible outcome of social capital, and that other, more negative outcomes may also emerge, it remains one of the most extensively studied outcomes; however, it lacks systematically measured empirical evidence across different populations.

Among social capital theorists, Pierre Bourdieu (1986) provides the most thorough discussion on the roots of social capital, linking it strongly to the social class background. However, Bourdieu limits his view to the components of social networks and network members who can provide each other with material or symbolic benefits.

Robert Putnam (2000) offers an alternative, multidimensional view of social capital that translates to an overall approach towards others. Specifically, he identifies three key dimensions: social networks, social trust, and reciprocity. Putnam (2000) pays less attention to the origins of social capital; rather, he expands the discussion about its benefits to more personalised, intangible gains, such as subjective well-being.

Drawing from these two scholars, this dissertation aims to assess, on the one hand, whether and how the various dimensions of social capital relate to social class or socioeconomic background, and on the other, how these multiple dimensions of social capital relate to well-being when considering socioeconomic background. Although these questions have been extensively explored previously, I aim to contribute to the literature by investigating these associations across different population groups while systematically examining social capital through the dimensions of social networks, social trust, and reciprocal behaviour, as defined by Putnam.

Some researchers argue that the theories of Bourdieu and Putnam are fundamentally incompatible. However, I find many similarities between the two. Their frameworks are discussed in Chapter 2, wherein I also present my understanding of social capital and the objectives guiding the present work.

Throughout this dissertation, I strive for conceptual and operational consistency while applying a theory-driven multidimensional approach to social capital. However, I have come to realise that maintaining conceptual consistency is more feasible than ensuring consistency in measurement.

This study is rooted in the Finnish context. Finland, along with other Nordic countries, excels in international comparisons of social capital, well-being, welfarestate development, and relative socioeconomic equality (Bartels et al., 2022; Ferragina, 2017; Portela et al., 2013). Hence, one may ask, why study the relationships between these factors in such a privileged context. It can be argued that a context marked by abundance can assist in identifying some of the more universal features of these relationships. It should also be noted that Finland is not immune to the increasing socioeconomic and political polarisation taking place across Europe. Here too, different segments of society are drifting away from each other, increasing friction between groups. Therefore, it is important to understand the roles and mechanisms of social capital in this landscape.

The findings of my research underscore the prime relevance of the cognitive dimensions of social capital, namely trust and reciprocity, especially in relation to subjective well-being, but also to socioeconomic background. These articles also hint at the mechanisms underlying the examined relationships. Although not offering definitive conclusions, this dissertation aims to inspire future research to delve deeper, considering not only the structure, but also the quality of social relationships.

2 Conceptual and Theoretical Framework

Social capital literature is compounded by diverse interpretations of the subject matter, which obscures clarity and understanding of the topic. This dissertation is mainly steered by the frameworks of Pierre Bourdieu (1986) and Robert Putnam (2000), two leading scholars who provided a basis for building assumptions regarding the likely causes and consequences of social capital.

Research articles I, III, and IV discuss some of the main similarities and differences between their concepts and compare them with those of James Coleman (1988; Coleman & Hoffer, 1987), another much-cited scholar in this field. This chapter provides a more thorough exploration of the main elements of Bourdieu and Putnam's social capital frameworks. This is preceded by a brief recap of some of the premises articulated by Mark Granovetter (1973, 1983), who is, perhaps, the most influential theorist in this field, despite not explicitly discussing social capital.

Granovetter was interested in social networks, specifically, in their structure and the interlinking ties between people and groups. His landmark observation (Granovetter, 1973, pp. 1361–1362) was that close friends tend to share several other close friends, whereas acquaintances hardly have common friends. In this view, the stronger the tie between two individuals, the denser the network around them, and the more friends and acquaintances they have in common. This is attributed to the principle of homophily; people are drawn to others who are like them and only sporadically come into contact with those who are significantly different. Granovetter (1973) further stated that likeminded people can easily understand and provide emotional support to each other, incentivising their interactions. He asserts that 'The strength of a tie is a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterise the tie' (Granovetter, 1973, p. 1361).

Conversely, Granovetter (1983) argues that acquaintances who differ from each other tend to have an interest in and access to societal spheres and knowledge other than what is shared among close friends. Moreover, he explains that the likelihood that such acquaintances occupy different socioeconomic positions is higher than between friends. The information and knowledge that individuals possess can hold

significant value for those in different social strata. This makes weak ties valuable. Nonetheless, as asserted by Granovetter (1983, pp. 228–229), not all weak ties hold equal relevance; only those that bring some useful benefits to the parties involved are important.

2.1 Bourdieu's framework of social and other forms of capital

In Bourdieu's (1985, pp. 723–725) framework, the social world is structured as 'fields of forces', each of which has a distinct logic and hierarchy. The dynamism within and between fields is shaped by the hierarchy of different types of resources, which Bourdieu essentially classifies as economic, cultural, and social capital.

As Bourdieu (1986) outlines, economic capital relates most directly to money and material wealth. Cultural capital refers to internalised knowledge and understanding as well as tangibles such as books, pieces of art, and educational diplomas. Social capital comprises 'social obligations' and 'connections'. More specifically, Bourdieu (ibid.) defines it as the accumulation of actual or potential resources that can be accessed by social network members, based on mutual solidarity. In other words, social capital refers to the number of people one can count on and their respective resources (material and non-material) that one can access.

Although Bourdieu's theory may appear profoundly utilitarian, it is not necessarily so. He (1986, pp. 248–249) asserts that people often build social connections without consciously pursuing profit.

Bourdieu's (1986) description of the relationships between the different forms of capital is somewhat ambiguous. Economic capital represents the most fundamental type that 'is the root of all the other types of capital'. Cultural and social capital are 'disguised forms' of economic capital, which can be converted through the allocation of time and effort. However, social capital 'is relatively irreducible to the economic and cultural capital possessed by a given agent,' although 'social capital is never completely independent of [them]'.

In addition, Bourdieu (2013) recognises the concept of symbolic capital, which does not have independent substance but refers to the values associated with other forms of capital. These values may vary across fields; however, when the possession of any form of capital becomes so prominent that it creates a distinction between people, it becomes symbolic. Symbolic capital can be assessed through prestige, authority, and other factors. Bourdieu (1986) also posits that social capital always functions as symbolic capital.

Bourdieu (1986, pp. 249–250) postulates that building a social network requires time and continuous sociability efforts. The process implies transforming a casual relationship (e.g. between colleagues or neighbours) into a stronger and longer-

lasting bond that involves subjectively felt obligations between network members. Further, connections between individuals are strengthened through social institutions such as marriage or employment, and are continuously reproduced through mutual exchange. The objects of exchange vary largely, ranging from mere words to concrete gifts or favours. The continuous process of exchange generates a sense of reciprocity and reinforces the bonds between those involved. Such bonds require time and energy but, in return, generate social capital (Bourdieu 1986). In this sense, Bourdieu's view of social capital is similar to that of Putnam (2000), who views it as an amalgamation of social networks, reciprocity and trust. Only the dimension of trust is largely absent from Bourdieu's framework.

However, in contrast to Putnam, Bourdieu considers social capital in the same way that currency is capital – as enabling transactions. Interaction between network members characterises an act of payment, and the obtained benefits epitomise purchased goods. Hence, in Bourdieu's (1986, p. 249) framework, the volume of an individual's social capital depends on the size of their social network and the volume of resources (economic, cultural, social, or symbolic) that each network member possesses and shares with them.

This is probably the most crucial difference between Bourdieu and Putnam. The latter (Putnam, 2000) does not link the outcomes of social capital to its core nature, nor does he measure the volume of social capital through direct returns. However, in Bourdieu's (1986) perspective, enhancing the accumulation of social capital requires engagement with people who have acquired high socioeconomic standing (preferably higher than oneself), and possess ample tangible and intangible resources.

2.1.1 Importance of social class and habitus

Social classes can be considered both in absolute terms, measured through the distribution of material resources between social groups, and through the valuation that people make of these groups, their properties, and lifestyles (Bourdieu & Wacquant, 2013, p. 296).

From Bourdieu's perspective (1990), social class establishes social order and shapes the living conditions of individuals from their upbringing into adulthood. Moreover, class indicates habits and dispositions that are deemed suitable or unsuitable for one's social position. These premises create 'habitus' (Bourdieu, 1990) that, while resembling 'character', is a learnt way of being rather than an innate trait.

Habitus is the product of an individual's position in the distribution of material properties and the symbolic capital associated with their possessions (Bourdieu & Wacquant, 2013). However, rather than a fixed or permanent way of being, it is persistent yet continuously shaped by new events. Habitus is first learnt and

internalised in the childhood home; thereafter, it is shaped by school experiences and continuously moulded throughout adult life (Bourdieu & Wacquant, 1995). However, previous experiences guide orientation and interpretation of subsequent ones; thus, earlier experiences are relatively more meaningful than later experiences (Bourdieu, 1990).

Bourdieu (1990) recognises that every person's life experiences are unique, but argues that the likelihood that individuals in the same class will face similar life situations is greater than between people who belong to different classes. Therefore, a certain homology exists in the habitus of individuals belonging to the same class. Through such similarities and differences (or distinctions), habitus creates a 'sense of one's place' and a 'sense of the place of others' in society (Bourdieu, 1990, p. 131). In short, habitus is 'embodied class' (Bourdieu, 1984), the way one is shaped by their class.

The concept of habitus has been criticised for its apparent determinism over human agency (Reay, 2004). However, Bourdieu explains that, instead of determining action, habitus defines the overall social scope and range of practices considered suitable for one's social class. From this pool, individuals are free to adopt the practices that they find most appropriate (Bourdieu, 1990; Reay, 2004, pp. 433–434).

2.1.2 Mechanism between social class and social capital

Through habitus, social class also moulds social behaviour and the conventions of socialising that, hence, differ between classes (Bourdieu, 1984, p. 437, 1986, p. 257). Bourdieu (1986) argues that the 'title of nobility' or an upper-class position implies an institutionalised form of social capital, wherein social relationships exist and persist without greater personal effort. Because of their social status, members of the upper class are known to more people than are known to them. Their company is sought after because they are 'worthy of being known' (ibid. p. 250). Thus, their social position ignites a powerful mechanism that continues to multiply their social capital and enables them to reach diverse forums. It can be deduced that individuals with a lower social position must make greater efforts to develop their social networks.

Although Bourdieu did not delve extensively into the social class gradient of social capital, Nan Lin extended his framework in a slightly different direction. Lin (2001, pp. 47–77) contends that maintaining homophilous relationships requires less effort than interacting with people from dissimilar backgrounds. He offers this as explanation for homophilous close relationships dominating the lower ends of the social hierarchy, wherein people experience scarcity in all forms of capital. Lin explains that homophilous relationships do not provide many new or additional resources precisely because they occur between individuals with similar

backgrounds. Conversely, heterophilous relationships – weak ties between people of differing social statuses – have the greatest potential for obtaining additional resources. Given that the highest social positions are intrinsically attached to valuable resources, those who occupy such positions have the least to gain from interactions with other ranks. Therefore, Lin (2001) argues that they too tend toward relatively homophilous networks. Conversely, those in the mid-range of the social ladder have the greatest likelihood of cultivating heterogeneous relationships.

Although not explicitly addressing social class, some evidence suggests that economic conditions tend to affect social relationships in a causal manner (Mood & Jonsson, 2015). Using panel data from Sweden, Mood and Jonsson noted that falling into poverty weakens both social relationships and social participation, whereas rising from poverty strengthens them. Similarly, Hjalmarsson and Mood (2015) observed that poorer youth tend to have fewer friends than wealthier youth. Interestingly, for adults, the most detrimental condition seems to be economic deprivation (Mood & Jonsson, 2015), whereas for youth, economic standards that lag behind their peers produced the most severe consequences (Hjalmarsson & Mood, 2015). Among adults, poverty seemed to primarily affect less close-knit relationships, whereas most trusted contacts persisted despite hardship. The study of youths did not enable a similar assessment.

Building on earlier research, Jonsson and Mood (2014) identify at least three mechanisms that may explain the association between poverty and social relationships. First, people with low-incomes find it difficult to pay for participation in social events (travel costs, membership fees, compliance with the norm of reciprocity, etc.) and therefore refrain from many social activities (economic effect). Second, people feel ashamed and have low self-esteem because of their income; consequently, they auto-exclude themselves from social events (psychological effect). Third, people are excluded by others who are better off and who wish to avoid embarrassing a friend who will anyway turn down social invitations (social effect).

Other researchers (e.g. Achdut et al., 2021; Mani et al., 2013) have suggested that poverty-related distress caused by pressing needs overloads mental capacities, leaving individuals with fewer cognitive resources for social engagement and rational decision making.

2.2 Putnamian social capital

The bulk of this dissertation rests on Robert Putnam's theoretical framework of social capital, which in turn builds on the ideas of Granovetter and other earlier scholars. Putnam (2000, pp. 19–28) defines social capital as 'the ways in which we connect with friends, neighbours and strangers,' including (i) social networks, (ii)

reciprocity and (iii) trust in other people. Individuals who engage with several others in a trustful and supportive manner possess high volumes of social capital. However, trustworthiness does not imply gullibility. The former is beneficial for both the individual and the community, whereas the latter is not considered an asset (Putnam, 2000, pp. 136–137).

In Putnam's framework, the three dimensions of social capital are tightly intertwined. Social networks 'entail' and 'foster' reciprocity, and trust is what develops through repeated interaction and what binds social relationships together (Putnam, 2000, pp. 20–21). Moreover, socially active individuals tend to be more trusting and trustworthy; a dense social network encourages trustworthiness among people, if not for any other reason but for the sake of one's reputation (Putnam, 2000, pp. 136–137). This almost romantic idea of reciprocal relationships – entirely immersed in trust – is absent in Bourdieu's text.

Putnam (2000) further disaggregates each dimension of social capital into two facets. First, he classifies social networks as informally structured (naturally formed between family members, friends, neighbours, and others) and formally structured (emerging in formal settings i.e. organised groups, associations, workplaces, etc.). Practically, any organisation that encourages people to meet regularly can generate social capital (ibid., pp. 49-51). The organisation becomes a 'locus of social solidarity', where people build reciprocal ties (ibid., p. 80). Reciprocity in this context should be understood broadly, ranging from friendly chats to material support.

Although Putnam (2000) does not focus on social hierarchy, he recognises that social capital tends to accumulate more among the 'haves' than the 'have-nots'. In his view, informal social relationships are prevalent across all social groups, whereas formal relationships are more common among the better-educated higher earners.

Second, Putnam (ibid.) distinguishes between specific and generalised reciprocity. The former refers to the mutual exchange of favours between two persons, whereas the latter relates to the extension of support to someone without expecting anything in return; 'I'll do this for you without expecting anything specific back from you, in the confident expectation that someone else will do something for me down the road' (ibid., pp. 20–21).

The idea of generalised reciprocity is fundamentally different from that of Bourdieu (and Granovetter). Bourdieu (1986) emphasised the direct benefits that can be *drawn from* networks as an integral part of the essence of social capital, whereas Putnam (2000) associates social capital with the effort and resources people *invest in* their networks. Strictly speaking, because of this difference, informal and formal social networks should not be used interchangeably with strong and weak ties (Granovetter, 1973; 1983), although many researchers, including Putnam himself (2000), have done so.

Third, Putnam distinguishes between thick and thin trust. Thick trust develops in relation to those with whom we maintain close relationships, whereas thin trust builds on a belief that most people – even those whom we do not know – tend to be trustworthy. Putnam (Helliwell & Putnam, 2004; Putnam, 2000) sometimes uses the concept of 'generalised trust' when referring to thin trust, wherein thick and thin trust are two sides of social trust. Although researchers (e.g. Borozan & Funaric, 2016; Ferragina, 2017; Sarracino & Mikucka, 2017) sometimes associate institutional trust with Putnam's framework, and his initial interest (1993) was in social organisations and institutions, in his primary work on social capital (2000), he explicitly states that institutional trust is not part of the social capital concept (pp. 136–137).

Referring to Granovetter's strong and weak ties, Putnam (2000, pp. 22–24) also distinguishes between bonding and bridging types of social capital. The former develops in inward-looking groups involving family and close friends that foster homogeneous identities. The latter originates in more outward-looking groups that engage people from diverse backgrounds and spawn broader identities. Bonding social capital entails thick trust, solidarity and specific reciprocity. Bridging social capital develops through thin trust and generalised reciprocity. It can facilitate access to resources and information that are not available among close contacts. Putnam (ibid., p. 23) further specifies that despite these differences, bonding and bridging social capital are not mutually exclusive. People may bond with each other over some aspects (e.g. through shared nationality or religion), but bridge with the same people in others (e.g. through education or socioeconomic position).

Although Putnam is one of the most cited authors in social capital literature, his framework has received plenty of criticism (e.g. Farrell, 2007). His conceptualisation has not always been systematic or consistent (Ponthieux, 2004). His views change between publications, and he sometimes contradicts his earlier premises. For example, Putnam (2000, p. 19) straightforwardly establishes in his seminal work that social capital refers to 'social networks and the norms of reciprocity and trustworthiness that arise from them'. However, in his earlier work (1993, pp. 167–176), he identified social capital through compliance with *overall social norms* instead of norms of reciprocity (although he recognised that reciprocity is a crucially related norm).

Similarly, in 1993, Putnam wrote that 'Trust is an essential component of social capital' (1993, p. 170). Ten years later, in a joint paper with John F. Helliwell, he stated that social trust is actually not part of the core definition of social capital; however, since it is 'a nearly universal concomitant of dense social networks', it can be seen as a central part and included in the definition of social capital (Helliwell & Putnam 2004, 1436).

Putnam has also been criticised for confusing the causes and consequences of social capital. For example, Portes (1998) claims that trust and reciprocity are mere

causes of social capital, not part of the capital itself. According to Putnam (2000), the concomitance of networks, trust, and reciprocity is inevitable. There is no one without the other two; hence, they cannot be disentangled.

Another inconsistency pertains to the nature of social capital. In 1993, Putnam wrote 'one special feature of social capital [...] is that it is ordinarily a public good, unlike conventional capital, which is ordinarily a private good' (1993, p. 170). A few years later, he (Putnam, 2000, p. 20) revealed a different view: 'Social capital has both an individual and a collective aspect [...] Social capital can thus be simultaneously a "private good" and a "public good". These discrepancies reflect, in part, a change in Putnam's research interests, which started from collectives (such as informal credit groups and social organisations discussed in Putnam 1993) and later drifted to relationships between individuals (Putnam 2000). However, the inconsistencies contributed to the plethora of definitions of social capital that have bewildered the research community.

Throughout this dissertation, I rely on Putnam's definition of social capital in his main text – Bowling Alone from 2000 – wherein social capital is approached as an individual asset explicitly defined through social networks, reciprocity, and trust. I apply this definition throughout this empirical work.

2.2.1 Mechanism between social capital and well-being

Putnam's (2000) concept of social capital can be understood from the perspective of investment: the set of social networks that one maintains, the trust that one deposits in others, and the support that one is willing to provide to others represent an individual's investment in others. This social stock can generate both positive and negative outcomes (Putnam, 2000). At the individual level, the most important outcomes include better health, happiness and life satisfaction (Helliwell & Putnam, 2004; Putnam, 2000).

Happiness and life satisfaction are often used as synonyms of subjective wellbeing, which is defined through its characteristics: it is subjective (as opposed to objective), comprises positive measures (i.e. not simply the absence of negative ones), and includes a global assessment of life satisfaction (Diener, 1984, pp. 543– 544).

Putnam refers to studies by Michael Argyle (1987), Ed Diener (1984, 1994), David G. Myers (1995), and Ruut Veenhoven (1996) to argue that the best way to predict the level of individual happiness is through the breadth and depth of the person's social relationships (Putnam, 2000, p. 332). Frequent interaction with friends, family and neighbours generate higher levels of subjective well-being (Helliwell & Putnam, 2004, p. 1441). Overall, people who maintain stable social connections with friends, neighbours, colleagues, and so on are less likely to suffer

from sadness, loneliness, low self-esteem, or eating and sleeping problems (Putnam 2000, 332). Similarly, close family ties, friends, and participation in social events have a protective effect on overall health (Putnam, 2000, p. 326). Of all relationships, that with a spouse or an intimate partner is the most important; it is the "happiness equivalent" of quadrupling your annual income' (Putnam, 2000, p. 333).

Furthermore, according to Putnam (2000), participation in formally structured social networks is positively associated with happiness. However, an increasing frequency of participation does not necessarily contribute to higher levels of happiness; if too excessive, it can even decrease happiness (Putnam, 2000, p. 333). Essentially, the difference is between whether one participates at all or not.

For some reason, Putnam does not include the dimension of reciprocity in his empirical analyses, but finds trust to be an important predictor of well-being. He contends that both trust in other people and authorities (which he does not consider as part of social capital) are related strongly to well-being (Helliwell & Putnam, 2004, p. 1442). Similar findings have been reported previously. For example, Uslaner (2002, pp. 190–191) observe that a high level of social trust tends to generate positive outcomes at both individual and aggregate levels, as trust enables connection and cooperation with people who are different from oneself. Uslaner claims that volunteer work and contribution to charity are consequences of trust and a sense of connection. However, some critiques (Claibourn & Martin, 2000) argue that the trust generated within social networks or associations limits itself to members of that network without being extended to generalised social trust.

Putnam provides ample evidence for the association between social capital and well-being; however, he does not seek to explain the mechanism between the two. Overall, demonstrating the causal relationship between social capital and well-being is a complex endeavour. Nevertheless, the flipside, namely the relationship between loneliness and ill-being, has been relatively easier to substantiate. For instance, according to Cacioppo and Cacioppo (2014), loneliness can threaten health, well-being and ultimately, survival. They further explain that humans are fundamentally social species, and social interaction is part of our nature. In contrast, social isolation renders the brain into a self-preserving mode, which triggers complex biological, psychological, cognitive and social processes, which in turn increase the morbimortality if the situation persists.

Pinpointing the precise causal mechanism, which explain why and how social interaction increases well-being, is complex, partly because different people have different levels of need for social contact (Diener, 1984, p. 557). An introverted individual requires fewer social contacts than an extrovert does. However, Diener asserts that even introverts experience loneliness if the level of interaction is insufficient to meet their needs. The key difference is in the ability to control the level of social involvement (Cacioppo & Cacioppo, 2014, pp. 65–66). Moreover, not

all social contacts generate well-being; sometimes people feel lonely even in the company of others. The effect of relational variables (such as marital status, group membership, and frequency of social contact) on well-being is typically mediated by an individual's perception of relationship quality (Cacioppo & Cacioppo 2014, pp. 65–66). Marriage and intimate partnership may constitute the most important relationships, however, this is only if they are healthy and satisfy both parties.

Moreover, the importance of social contact may vary with age (Carstensen, 1995). However, to my knowledge, no longitudinal studies provide evidence of whether and to what extent the importance of social relationships and social capital change during the life course. Although some longitudinal studies show that a change in the level of social interaction is accompanied by a change in subjective well-being (e.g. Bae, 2019), these studies are not detailed enough to reveal the direction of the relationship. It could go either way, or operate bidirectionally (Diener, 1984, p. 557; Helliwell & Putnam, 2004).

2.2.2 Social production function theory

The social production function theory (SPFT) by Ormel et al. (1999) provides a comprehensive way of explaining the relationship between social capital and wellbeing by combining several psychological and economic theories. As illustrated in Table 1, SPFT is a hierarchical model that considers subjective well-being as the ultimate goal sought by every individual. The pathway to subjective well-being traverses physical and social well-being, which in turn depend on the diverse personal resources, constraints, activities and endowments that one can tap into.

In this framework (Ormel et al., 1999), social well-being is a complex dimension that depends on interactions with other people. It stems from one's status, perceived approval of others and affective relationships that provide emotional support. According to the author (ibid., p. 84), subjective well-being requires at least some level of physical and social well-being; however, insufficiency in one domain can be compensated by strengthening the other.

Top level	Subjective well-being						
Universal goals	Physical	well-being	Social well-being				
First-order instrumental goals	Stimulation/ activation (optimal level of arousal)	Comfort (absence of physiological needs; pleasant and safe environment)	Status (control over scarce resources)	Behavioural confirmation (approval for 'doing the right thing')	Affection (positive inputs from caring others)		
Activities and endowments (means of production for instrumental goals) (examples)	Physical and mental activities producing arousal	Absence of pain, fatigue, thirst, hunger; vitality; good housing, appliances, social welfare, security	Occupation, life style, excellence in sports or work	Compliance with external and internal norms	Intimate ties, offering emotional support		
Resources (examples)	Physical and mental effort	Food, health care, money	Education, social class, unique skills	Social skills, competence	Spouse, empathy, attractiveness		

 Table 1.
 Hierarchy of social production functions (Ormel et al. 1999, p. 67).

Certain premises influence the dynamics of these processes. Personality patently impacts the need for social interaction, disposition for positive and negative affect, and, to an extent, the capacity to experience subjective well-being (Diener, 1984, p. 557; Ormel et al., 1999, pp. 80–81). Life events can trigger temporary changes in well-being. However, individuals normally adapt to the situation by redefining directing standards and reshuffling available resources (Ormel et. al., 1999).

The SPFT provides a framework to explain how social capital contributes to subjective well-being. Informal social networks, reciprocity and trust, which are core resources for affect, can also contribute to status building and behavioural confirmation. Trust can sustain a sense of comfort. Formal social networks can support status building and behavioural confirmation. Moreover, as suggested by several scholars (e.g. Rozario et al., 2004; Sieber, 1974; Thoits, 1983), participation in various social networks may entail multiple social roles, which in turn can promote personality enrichment and self-esteem. Therefore, participation in formal networks may also contribute to comfort and affect. In summary, the SPFT identifies several pathways that can explain how social capital can generate subjective well-being.

2.2.3 Limitations of social capital

Despite its many positive associations, social capital is not always a blessing. Just as money can increase happiness to a certain level, social capital can also increase wellbeing, but not infinitely. According to the SPFT, the higher the current level of wellbeing, the smaller the effect of any one-unit increase in a first-order instrumental goal (Ormel et al., 1999, p. 68).

Extreme values of social capital, such as too intense social participation or an excessively naïve or trusting mindset, can become draining or harmful to oneself (Putnam, 2000, pp. 136, 333–334). Putnam (2007) also observes that communities with dense social capital tend to form ethnically and culturally homogeneous units that are intolerant towards people with different backgrounds; social capital can then develop into a driving force of exclusion. Furthermore, if the norm of reciprocity poses an excessive moral obligation towards others, social capital may become a burden (Garha, 2020; Morad & Sacchetto, 2020). Sometimes, the social control within a close-knit community may constrain individual freedom and pressure people to conform to group norms against their will (e.g. Varshaver & Rocheva, 2021).

On this basis, social capital appears to be a precarious construct, the measurement of which can be challenging. However, in the context of the present dissertation, I consider these examples as extreme cases. Similar to economic capital, I assume that it is generally preferable to possess more social capital than less.

2.3 Main concepts and assumptions in this dissertation

This dissertation seeks to contribute to the understanding of which aspects of social capital relate to well-being on the one hand, and socioeconomic status on the other, while exploring these associations across different populations. To achieve this, I break down the concept of social capital into more specific dimensions following Putnam's framework. Throughout this research, unless otherwise specified, social capital is defined as a combination of social networks, reciprocity, and social trust, as visualised in Figure 1. Among these dimensions, social networks represents the structural aspect, whereas trust and reciprocity embody the cognitive elements of social capital (e.g. Nyqvist et al., 2014). This dissertation focuses exclusively on individual social capital.

I use 'social relationships' and 'social contacts' interchangeably, whereas 'social networks' refers to a larger set of relationships, including both close and distant social relationships. Despite the recent growing interest in social capital within the realm of social media, I intentionally restrict the focus of this research to offline interactions because of the markedly different circumstances and modes of interaction that occur online.

In this context, reciprocity relates to Putnam's (2000) 'general reciprocity', which extends beyond the limited exchange of favours between two individuals and encompasses a broader flow of extending and also accepting help in diverse forms from others. Lastly, with social trust, I refer essentially to Putnam's 'thin trust', or trust in other people in general, even those whom one does not know.

According to my interpretation, this multidimensional conceptualisation of social capital aligns partly with Bourdieu's perspective. While he (Bourdieu, 1986)



Figure 1: Putnamian dimensions of social capital.

emphasises the importance of networks in social capital, he also acknowledges the necessity of reciprocity in cultivating these networks. However, the dimension of trust is notably absent from Bourdieu's framework.

Another feature that differentiates the two scholars is their understanding of the direct outcomes of social capital. Bourdieu (1986) emphasises the material and symbolic benefits that one can gain through network members as an inherent part of social capital. Conversely, Putnam (2000) highlights overall well-being as a potential outcome, but not an integral part or an automatic consequence of social capital.

This dissertation builds on Putnam's (2000) multidimensional concept of social capital, positing that it contributes to subjective well-being. Subjective well-being here refers to an individual's personal assessment of happiness and overall life satisfaction, distinct from one's physical state of health. Recognising the potential bidirectional relationship between social capital and well-being, this research aligns with Putnam's perspective, emphasising the primary pathway from social capital to well-being.

Throughout this dissertation, I use 'life satisfaction' and 'happiness' as synonyms for subjective well-being, acknowledging that happiness may denote a more short-term state of mind, whereas life satisfaction entails a longer term evaluation, as noted by Helliwell and Putnam (2004). However, these authors also observe a strong correlation between happiness and life satisfaction scales, yielding consistent results.

To explore the origins of social capital, I draw on Bourdieu's (1986) theory and suggest that social class or socioeconomic background influences the quantity of social capital. Although this relationship may also be bidirectional, I narrow my focus in accordance with Bourdieu's primary postulate.

To be precise, rather than socioeconomic resources, Bourdieu (e.g. 1984, 1986, 2005; 2013) focuses on social class, which refers to the hierarchical structure of society and an individual's position in it, determined by the volume of resources (economic, cultural and social capital) one possesses and the symbolic value assigned to them. Additionally, Bourdieu's concept of social class has an existential dimension; it generates hierarchical self-awareness, shapes individual habitus and behaviour, and becomes an intrinsic part of one's identity, expressed in all aspects of life (Bourdieu, 1984, 1990).

In my interpretation, social class refers to an individual's overall standing before others, which ultimately comes down to their material resources and social conduct and is strongly oriented by their education level and cultural understanding. More concretely, I see social class as being related to socioeconomic resources such as income, education, and occupation. These are also the parameters by which socioeconomic resources tend to be conceptualised in literature focused on resource inequality (e.g. Erola et al., 2016).

In my articles, I have employed both the concept of social class (Article IV) and socioeconomic resources (Articles I and II). In this dissertation, I use the terms 'socioeconomic resources', 'socioeconomic background', and 'socioeconomic status' (SES) interchangeably as broad terms to refer to social stratification based on income, education, and occupation.

Essentially, this dissertation revisits some of Bourdieu and Putnam's key arguments while systematically examining social capital through its three dimensions. This study has three aims. First, it seeks to obtain a more nuanced understanding of the relevance of socioeconomic resources to each social capital dimension. Second, it aims to deepen our understanding of the relationship between these dimensions and well-being. Third, it aims to assess whether the correlations between socioeconomic resources, social capital and subjective well-being persist across different age and population groups.

This research is based on the strong causal assumption that socioeconomic resources shape social capital, which in turn influences well-being. However, only cross-sectional data is used throughout this study, making it impossible to determine the temporal order of these associations. Nevertheless, this study operates under the assumption – substantiated by Bourdieu (1986), Putnam (2000) and extensive prior research – that such an order exists. In the absence of suitable longitudinal data, I assess the variation in these relationships across different population groups, namely adolescents, adults and international migrants. Through this analysis, I aim to determine whether the different datasets and population groups would yield consistent results regarding the relationships between socioeconomic resources, social capital and well-being.

3 Previous Empirical Findings on Social Capital

This section reviews research that has explored relationships similar to those addressed in this study. Specifically, I focus on two main areas: the relationship between socioeconomic resources and social capital and the relationship between social capital and well-being at the individual level. To capture temporal variation in social capital, I review longitudinal studies and literature examining social capital across different contexts and population groups, including youth, adults, and migrants. However, it must be recognised that the volume of literature is bulky, and continues to expand as researchers delve into these relationships in more specific contexts using improved data and increasingly sophisticated techniques.

In this literature review, I prioritise peer-reviewed scientific publications that have specifically focused on the direction and strength of the relationship between social capital, socioeconomic resources and subjective well-being, and the mechanisms explaining these relationships. Additionally, I seek to understand whether the observed relationships remain stable over time or vary by age or life stage. Studies that explore social capital in relation to other outcomes or predictors are excluded from the present review. According to the focus of my research, I concentrate on young people and working aged adults, migrants and non-migrants, leaving out studies related to older adults. Furthermore, I prioritise studies conducted in Europe and Western countries to limit cultural and contextual diversity. Similarly, studies that focus on population groups with disabilities or other health issues are not covered.

In addition to reviewing empirical findings, this section examines how social capital has been operationalised across various studies and the extent to which different studies focus on the same phenomena regarding social capital. To clarify the various operational approaches, I indicate in parentheses the social capital dimensions used by each author. While I recognise that this makes the text less reader-friendly, the information is important to substantiate the present dissertation.

Peer-reviewed publications were scanned in the following academic databases: SocIndex, ERIC, APAPsycInfo, APAPsycArticles, and Google Scholar, using search strings that included 'social capital' as the subject term in different combinations with 'socioeconomic status OR socioeconomic background OR education OR income OR occupation', 'well-being OR wellbeing OR life satisfaction OR quality of life', 'longitudinal OR panel OR life course', 'youth OR adolescents OR young people OR teens' and 'migrant OR migration OR immigrant OR immigration OR foreign-born'.

The literature review is confined to social capital at the individual level, expressed in real-life or offline contexts. Although the review is not limited to any specific methodological approach or theoretical line of thought, the vast majority of the identified publications on the topic are quantitative in nature.

This chapter begins with a review of the literature on temporal variation in social capital, and progresses to an examination of studies investigating its connection with socioeconomic resources. Subsequently, attention is directed towards understanding how social capital influences well-being. Finally, the chapter concludes by highlighting key gaps in the existing literature.

3.1 Stability and variation in social capital

While social capital has garnered significant interest among scholars, only a few studies have delved into its longitudinal development. This scarcity may stem from challenges associated with measuring social capital and limited access to suitable long-term data. Neves et al. (2019) addressed this gap by employing a longitudinal mixed-methods approach to track Portuguese youths' transition from adolescence to early adulthood, spanning the ages from 17 to 21 years. Their findings revealed a notable increase in both bonding (economic and emotional support from family, friends, or neighbours) and bridging (support from institutions) social capital during this period. Additionally, an intricate interplay emerged between these two types of social capital, wherein bonding facilitated bridging capital and vice versa. Institutions providing economic or emotional support also paved the way for forging new contacts that eventually developed into close friendships. The authors attribute the observed changes to a growing awareness of the significance of economic and emotional support (understood as social capital) and the evolving need for it among young individuals.

Major life events (such as school transitions, marriage, divorce, death, and migration) tend to provoke significant changes in social relationships. For example, Lubbers et al. (2010, 2021) observed substantial changes in social network composition among migrant populations. While migration may disrupt many existing relationships, it may also foster new friendships with people sharing similar life experiences (Kennedy, 2005; Patulny, 2015; Pratsinakis et al., 2017). However, the process of building new social relationships can be stressful and time-consuming (Ryan, 2011), and has been indicated as the primary reason why immigrant

populations report systematically lower levels of well-being than non-immigrants. Even if the well-being gap tends to shrink over time, it remains prevalent among first-generation migrants (Arpino & de Valk, 2018; Hendriks et al., 2018; Hendriks & Bartram, 2019).

Some studies suggest that instability or high turnover of relationships may be a common characteristic of social networks, even in the absence of major life events. For instance, a decade-long study on social networks among adult men and women in Canada (n = 33) observed that only 27% of close relationships persisted over 10 years (Wellman et al., 1997). In the same vein, a US-based longitudinal study (Marin & Hampton, 2019) of adults (n = 252) found that 47% of the supporting close ties mentioned at the first time point were not mentioned one year later. However, some of these ties were reactivated at subsequent data collection points. The authors conclude that 'perpetual flux' may be the normal state of social networks, not just occurring during major life events. Although some close relationships remain active over long periods, it is normal to observe others switching intermittently between active-inactive statuses. Rather than the frequency of contact, activity status depends more on the quality of the relationship and its reciprocal elements (Marin & Hampton, 2019). These results should be interpreted cautiously since the sample they all were based on was small and non-randomized.

Unlike networks, trust is a dimension of social capital that is surprisingly stable over the life course. Using panel data collected at 17-year-intervals, Stolle and Hooghe discovered that the level of trust reached by individuals at the age of 17 strongly predicted their trust level in adulthood at age 34 (Stolle & Hooghe, 2004). Similarly, Dawson (2019) analysed six waves of the British Household Panel Survey (n = 3,700) and noted that the individual level of social trust is highly persistent over time. Even if events such as being victimised by a burglary cause some fluctuation in the trust level, this is usually temporary; after a while, if no new negative events occur, trust tends to return to levels from before the incident. Early levels of social trust appear during the pre-adulthood stage, and are influenced by several factors, including socioeconomic background, socialisation, examples provided by the parents, genetics and even birth weight (Dawson, 2019).

Variation in the level of reciprocity over time has received limited interest from researchers. Early signs of reciprocal behaviour can be observed even in toddlers (House et al., 2013). As individuals grow and form friendships, expressions of reciprocity become a vital characteristic within such relationships (Blieszner & Roberto, 2004). Reciprocity is one of the most robust predictors of the longevity and strength of a friendship (Rude & Herda, 2010). Previous studies suggest that reciprocity, and prosocial behaviour in general, tend to increase during adolescence, stabilising between the ages of 14–20 years (Van Den Bos et al., 2010).
But where does social capital originate from, and when can we expect it to develop? Most studies examining adolescents' social capital use data collected from young people around 15-16 years of age or older. However, sociologists seldom discuss *when* children can be assumed to have developed their own social capital. Sociopsychologists define friendship as a voluntary relationship comprising intimacy, equality, shared interests and need-satisfying interaction (Blieszner & Roberto, 2004). The required level of cognitive commitment excludes young children. According to Holland et al. (2007), the first possible stage is between 11–12 years of age, when children gain greater autonomy and start developing new social relationships independent of their families. At the same time, it can also be expected that the development of trust in other people, and internalisation and compliance with the norm of reciprocity have been developed and continue developing during this period of life. However, studies that measure social capital at this early an age are rare.

3.2 Association between socioeconomic resources and social capital

This section is structured into distinct subsections, focusing separately on adult populations, youth, and individuals with migrant backgrounds. It concludes by synthesising key observations regarding the prevalent tendencies in this body of literature.

3.2.1 Cross-country variation among adults

In a study spanning 27 European countries, Pichler and Wallace (2009) explored the distribution of social capital (extensivity and intensity of interaction with formal and informal social networks) and observed a general trend: informal interactions were similar across social classes, but formal network extensions were significantly greater among the upper class, who actively participated in various organisations that granted them access to diverse resources. The authors also observed that the socioeconomic gradient was starker in countries with more pronounced social stratification, namely those in Southern and Eastern Europe, and in the UK, whereas fewer social capital inequalities were observed in countries with more attenuated hierarchies (Denmark, Sweden, and Finland).

However, socioeconomic disparities have also been observed in Nordic countries. Saltkjel and Malmberg-Heimonen (2014) observed a clear socioeconomic gradient in social capital (operationalised with participation in formal organisations and social trust) in Norway. Their findings underscore the vital role of education in predicting both organisational involvement and social trust. Moreover, trust level

was related to self-perceived poverty, immigrant status, and adverse childhood experiences, whereas formal organisational participation was primarily correlated with employment status.

Similarly, Kouvo (2010) found that the distribution of social capital (operationalised through participation in formal organisations, and social and institutional trust) in Finland is socially stratified. Participation in formal organisations and institutional trust were highest among the service classes (upper classes) and lowest among the non-skilled working class (lowest class). Interestingly, social trust was highest among the skilled working class but lowest among the unskilled working class and small-scale entrepreneurs. This indicates that, while statistically significant, the relationship between social trust and social class in Finland is not monotonic.

An interesting perspective was recently contributed by Dederichs (2024), who used two waves of German panel data to study the association between participation in formal social organisations and social capital (measured by socioeconomic positions of one's network members). His results indicate that participation in organisations improves access to social capital, thereby expanding one's connections to individuals at higher socioeconomic positions. This was found to be particularly beneficial for individuals in less advantaged socioeconomic positions; however, their likelihood of becoming involved in a formal organisation was relatively low. In fact, Dederichs (2024) observed a selection effect of social capital-rich individuals being more likely to join formal social organisations.

In the United States, race is often considered a relevant aspect of social position that influences the development of social capital. For example, a study by Cox et al. (2021) on eighth-grade school students' parents' social capital (understood as access to instrumental information related to child care, parenting advise and education through one vs. multiple school-based social network members) found that parents with double advantage of having a higher education level and White racial identification were more likely than other racial or socioeconomic groups to report abundant social capital.

3.2.2 Socioeconomic gradient in the social capital of youth

Researchers have identified a socioeconomic gradient among the social capital of younger age groups. A recent study by Lenkewitz (2023) investigated adolescents' access to social capital within school contexts in Germany, the Netherlands, and Sweden. The study measured social capital through indicators such as the occupational status of school friends' parents, number of books in friends' homes, and frequency of friends' book reading. The findings revealed that adolescents' own socioeconomic backgrounds influenced their choice of school, consequently shaping

their social capital environment. This association was observed in all the three countries, although it was slightly less pronounced in Sweden. Interestingly, across countries, adolescents' socioeconomic background played a less significant role in friendship selection and network formation within schools. One striking feature of this study is the highly unusual operationalisation of social capital. The author justifies this approach by emphasising the importance of cultural resources in educational settings and their potential as components of social capital (Lenkewitz, 2023, p. 247).

Fang and Saks (2021) studied the association between university students' job seeking strategies in Canada and their social capital (social network members who could assist in job search) and social class background. The study showed that upperclass students indeed had more social capital than their lower-class peers, and that social capital reduced the likelihood of students employing a haphazard job seeking approach.

The social capital perspective has also been used in studies focusing on social mobility. Using a unique 16-year longitudinal qualitative panel method, Lehmann (2023) sought insights into early stage professional development in first-in-family university graduates with working-class backgrounds. Although he did not specify his conceptualisation of social capital, the author describes how the blue-collar professions of parents left these young adults without advantageous networks that could help them in finding qualified first jobs in prominent companies. Moreover, the young individuals internalised a lower-class habitus, which made them uncomfortable in promoting their own achievements to potential employers. However, their class background also made these young adults resilient in the face of challenges and led them to actively seek workplace mentors who could support them in building their career path. While Lehmann's (2023) main interest is social mobility, his case examples reveal that social capital, loosely interpreted as beneficial social relationships, can develop over time through education and persistent efforts in building workplace networks, even when occupying largely underqualified positions. Implicitly, Lehmann suggests that this type of social capital is positively associated with subsequent socioeconomic success.

An older research by Holland, Reynolds, and Weller (2007) revealed that social capital, when predominantly of the bonding type, may hinder social mobility, particularly for individuals from lower socioeconomic backgrounds. Examining youth aged 11–30 years in the UK and Ireland, their study highlighted that although middle-class youth typically possess both bonding (such as close family and friends and local community ties) and bridging social capital (including access to institutional information and contacts outside their immediate community), those from lower-class backgrounds predominantly rely on bonding social capital. This reliance on bonding social capital impedes their social mobility.

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Similarly, a longitudinal qualitative study by MacDonald et al. (2005) highlighted that while bonding social capital (operationalised through close mutually supportive homogeneous networks) is important for fostering support among disadvantaged youth, it tends to reinforce lower-class identity and indirectly perpetuates social immobility.

3.2.3 Relevance of socioeconomic resources for social capital of migrant populations

According to previous studies, socioeconomic background plays a significant role in shaping social capital accumulation among migrants. For instance, Verhaeghe et al. (2015) observed a notable ethnic disadvantage in the social capital of Belgian labour market entrants (with a mean age of 18.7 years), which was operationalised as the social class position of their relatives, friends, and acquaintances. However, this disadvantage diminished and even reversed, particularly among second-generation migrant youth, when their socioeconomic backgrounds were considered. The association between social class and social capital was particularly evident within close networks involving relatives and friends, and linked to these individuals' decisions regarding education continuation or entry into the labour market. Consequently, Verhaeghe et al. (2015) concluded that social capital plays a significant role in maintaining socioeconomic status across generations.

Similarly, Andersson et al. (2018) and Mishra and Müller (2022) found that, after controlling for parents' socioeconomic resources, young migrants tend to have greater access to social capital than native peers. Andersson et al. (2018) conducted a large cross-sectional study (n = 5,836) in Sweden, measuring social capital using the number of contacts across different socioeconomic classes, including both domestic and transnational relationships. Mishra and Müller (2022) analysed cross-sectional data from 11,202 university students in Germany, assessing social capital through factors such as the socioeconomic status of network members, number of university friends, access to academic advice, and opinions of parents and friends regarding the student's university studies. Despite differences in measurement and context, both studies reached a similar conclusion: the perceived social capital disadvantage of migrant youth is largely attributable to their families' lower socioeconomic status.

A qualitative study by Fiske (2023) demonstrated the enduring significance of socioeconomic resources, even among refugees who have lost all material assets. The study focused on refugees residing in Indonesia without legal refugee or residential status, and found that refugees with higher education levels and proficiency in English had better opportunities to connect with affluent foreigners who could offer them financial and administrative support to migrate to a more

refugee-friendly country. The author considered this ability to establish beneficial connections as a form of social capital.

3.2.4 Direction of the association between socioeconomic resources and social capital

Riedel's (2015) study emerges as a rare attempt to investigate the direction and causality of the relationship between migrants' socioeconomic status and their social capital (measured through a latent factor built with several variables on close relationships with German natives). Using data from the German Socioeconomic Panel Study, Riedel examined migrants aged 18 years and above, spanning the 1st to 3rd generations living in Germany. Employing an autoregressive panel analysis, he addressed concerns such as simultaneity, reverse causality, and unobserved heterogeneity.

Riedel's findings suggest that migrants' social capital influences their socioeconomic position, as measured by a latent factor comprising education, income, and occupation, rather than the reverse. This outcome may not be surprising given the operationalisation of social capital; migrants' vibrant relationships with non-migrants tend to facilitate higher socioeconomic status (e.g. Lancee, 2012). However, some more recent studies (Dederichs, 2024; Lehmann, 2023) have suggested that the relationship between social capital and socioeconomic status may be bidirectional among non-migrant populations. For example, Dederichs (2024) observed that individuals with higher socioeconomic status were more likely to join voluntary organizations, but at the same time individuals with lower socioeconomic status who joined voluntary organizations, increased their social capital (i.e., access to higher socioeconomic positions).

Notably, all these studies operationalize social capital in line with Bourdieu's theory, focusing on the social status or socioeconomic resources of individuals' network members. Largely absent, however, are the cognitive dimensions of social capital: trust and reciprocity.

3.2.5 Dominant perspectives to social capital in these studies

What can be concluded from the extensive literature on social capital and socioeconomic resources? First, it is evident that researchers' interest in this topic remains strong despite the volume of existing literature. Second, while there is considerable variation in the operationalisation of social capital across studies, the centrality of social networks and accrued resources is undeniable, echoing Bourdieu's (1986) tenets.

Third, three distinct approaches to social networks emerge. Some researchers (e.g. Neira et al., 2019; Pichler & Wallace, 2009) consider social networks themselves as a reflection of social capital. Other, more recent groups (Dederichs, 2024; Lenkewitz, 2023; Verhaeghe et al., 2015), view networks solely as conduits for social capital, focusing on the socioeconomic status of network members as indicators of *access to* social capital. A third, and perhaps less common view (e.g. Cox et al., 2021; Fang & Saks, 2021), specifies valuable resources within a given context and interprets them as social capital. Each approach has produced valuable insights, but comes with its own limitations.

Researchers adhering to the first approach often treat networks at face value as social capital, without delving deeply into the mechanisms that render networks valuable enough to be considered as such.

Proponents of the second approach deserve recognition for establishing a systematic method for measuring social capital. This typically involves using a position generator to assess the socioeconomic status of family members, friends, and acquaintances within a network. The underlying assumption is that the socioeconomic status of network members reflects the resources to which the network holder has access, with a higher average socioeconomic position indicating greater access to valuable resources. However, the extent to which these network members actually provide resources to one another, and the types of resources exchanged, remain unclear (also Dederichs, 2024; Van Der Gaag & Snijders, 2005). Nevertheless, Lenkewitz (2023) argues that access to social capital is a prerequisite for its utilisation, highlighting the importance of recognising inequalities in access is to employ a resource generator (Van Der Gaag & Snijders, 2005) designed to capture the obtained benefits. However, resource generators have not been widely adopted in mainstream social capital research.

Furthermore, proponents of the second approach to social capital face the risk of engaging in circular reasoning when exploring the association between an individual's socioeconomic resources and those of their network members, which are interpreted as social capital. Social homophily (e.g. Lin, 2001; Riedel, 2015) suggests a moderate to strong correlation between these two variables. While this correlation may be important in certain research contexts, directly equating the socioeconomic resources of network members with social capital can obscure, rather than elucidate, the underlying mechanism between these elements.

Researchers adopting the third approach to social capital aim to address some of the challenges encountered in the second approach by specifying the resources they consider as constituting social capital. However, in doing so, they encounter a new challenge: as study contexts vary, so does the essence of social capital. Consequently, this approach leads to an endless array of conceivable resources that can be considered social capital. While I acknowledge the value of such findings, I argue that this flexible approach to social capital contributes to the complexity surrounding the concept and impedes the accumulation of our understanding of its fundamental essence.

3.3 Association between social capital and wellbeing

Over the past two decades, the relationship between social capital and well-being has garnered considerable attention. Studies consistently link high levels of wellbeing to strong social capital (e.g. Bjørnskov, 2003; Ferragina, 2017; Rodríguez-Pose & Berlepsch, 2014). At the aggregate level, Switzerland, the Netherlands, and the Nordic countries consistently exhibit the highest levels of social capital (Bjørnskov, 2003; Ferragina, 2017). However, the domain of social capital that relates to well-being varies considerably across studies.

3.3.1 Cross-country variation among adults

A much-cited study by Bjørnskov (2006) covered 83 countries and observed that the importance of social capital dimensions (participation in formal organisations, social trust, and social norms) on well-being varied across countries, with social trust emerging as the only dimension showing a robust effect on life satisfaction.

In a similar study focusing only on European countries, Rodríguez-Pose and Berlepsch (2014) found large variations in the relative importance of social capital (informal social networks, participation in non-political organisations, participation in sociopolitical activities, social trust, institutional trust, and norms and sanctions). Sociopolitical activism was found to be relevant for well-being, mainly in Western Europe, and compliance with norms and sanctions was identified in the Southern and Eastern regions. In their study, the dimensions that were significant and positive across Europe were daily informal interactions, church attendance, social and institutional trust, and finding others fair.

Similar to Bjørnskov (2006), several researchers (e.g. Glatz & Eder, 2020; Neira et al., 2018, 2019; Portela et al., 2013; Zhang, 2020) have found social trust to be a particularly strong predictor of well-being. However, according to a large (n = 8,029) UK-based study by Jones et al. (2014), it is not simply trust but the broader cognitive social capital (including sense of trust, feeling of belonging to the local community, feeling valued in the community) that is the most important psychosocial measure of well-being. Although club membership is also a significant predictor, it is not as influential as cognitive social capital.

Regarding participation in formal social organisations, Portela et al. (2013) observed that the relevance varied depending on the nature of the organisation and motivation for participation. Involvement in sociopolitical movements often stems from profound dissatisfaction with current societal status of affairs, which is related to lower levels of happiness and well-being. In contrast, participation in civic organisations is often intrinsically motivated and tends to correlate with higher levels of well-being (Portela et al., 2013). This may explain why researchers often obtain contradictory results regarding the effect of formal social networks (Nyqvist et al., 2008). Alternatively, it may also indicate that social participation contributes to worse well-being if it promotes unhealthy behaviours or requires rigid conformation to group norms (Nyqvist et al., 2008).

Besides the plethora of social capital theories and approaches, a fresh study by Crowley and Walsh (2024) argues for yet another definition of social capital that includes tolerance as a distinct dimension. According to the authors '[T]he capacity to have high tolerance to diversity would act as a bridge (or the glue) for most people to trust, engage and network with others and with institutions. Tolerance of different beliefs and cultures stem[s] from shared norms, values and attitudes' (Ibid., pp. 28-29). Their study focused on social capital (social ties, social and institutional trust, and tolerance) and life satisfaction in European Union transition countries, and found a positive relationship between well-being and each social capital dimension, including tolerance.

Neira et al. (2019) studied the relationship between social capital (social trust, institutional trust, social networks, and norms of civic engagement) and well-being in Europe using quantile regression, and observed each social capital dimension to be related to well-being, but their respective level of importance depended on the well-being quantile; all social capital dimensions played a significantly greater role on the well-being of the least happy people.

In another article, Neira et al. (2018) suggested that the relative importance of individual social capital may carry less weight for well-being in contexts where the aggregate level of social capital is high. They found evidence of this in relation to institutional trust. The importance of institutional trust to well-being was relatively low in contexts where aggregate-level institutional trust was high. The authors observed a similar context-based interaction with informal social networks but not with social trust. The relevance of the contextual level of social capital was also highlighted in a Chinese study, wherein contexts marked by high inequality in social capital generally experienced lower levels of well-being, especially among individuals who possessed limited volumes of social capital (Appau et al., 2022).

Sechi et al. (2024) investigated the endogeneity of trust as a predictor of wellbeing, proposing a chained pathway wherein individual wealth influence trust in institutions, leading to formal social engagement, subsequently affecting trust in others and ultimately influencing well-being. However, their findings provide only partial support for this model, with variations observed between urban and rural contexts. They concluded that wealth may not be a central predictor of social capital.

Meanwhile, Schmidt et al. (2021) found that social networks moderate the impact of education on quality of life among European older adults. They suggest that individuals with lower educational levels may benefit more from having larger social networks in terms of their quality of life. This could be attributed to less-educated individuals having larger families, implying a reverse causality. Additionally, less-educated individuals may rely more on social relationships in their daily lives.

Analysing pooled data from several waves of the European Social Survey, Sarracino and Piekałkiewicz (2021) found a decline in aggregate-level well-being across Eastern and Western European countries following the 2008 economic crisis, which they attribute to reduced income and social capital measures. Although income briefly gained importance, subsequent improvements in social capital, particularly trust, facilitated well-being recovery in Eastern Europe and moderated the negative effect of persistently reducing income in Western Europe.

Delhey et al. (2023) reached a different conclusion using a two-wave panel survey in the UK and Germany to examine the impact of diverse resources (economic, human, social, and psychological capital) on changes in individual wellbeing during the COVID-19 pandemic. Of their sample, approximately one-third reported an increase and another third a decrease in life satisfaction between spring 2020 and spring 2021. They found that only psychological capital, driven primarily by mental health issues, significantly influences changes in well-being. In contrast, social capital factors (presence of a partner and children, trust, and church attendance) were not substantially related to individual-level changes in well-being during the pandemic, despite being significant positive predictors in cross-sectional analyses. The authors suggest that the usually positive effects of close ties may have been outweighed by increased concerns for the health and well-being of significant others.

Tapani and Sinkkonen (2022) used an online survey to examine factors contributing to meaningful life experiences among Finns. Their qualitative content analysis revealed that social capital fostered through diverse community engagement, altruism and volunteering significantly enriches individuals' lives, instilling a sense of greater meaning and fulfilment.

To my knowledge, only one study found a non-positive association between social capital and well-being. Woo and Kim (2018) examined nationally representative samples from South Korea and Taiwan, and found a strong positive relationship between well-being, and informal networks, social support, and institutional trust in Taiwan. However, none of the social capital variables showed a significant relationship with well-being in South Korea. This discrepancy was attributed to the prevalence of individualistic values and intense competition in Korean society.

Overall, these findings underscore the importance of context in the relationship between social capital and well-being. Thus, researchers increasingly call for nuanced analyses focusing on population sub-groups rather than country-level comparisons (Bradshaw & Rees, 2017; Kroll, 2011; Meier & Stutzer, 2008). For instance, there are some indications of significant differences between age groups regarding this relationship. Jones et al. (2014) found that the impact of social capital on well-being is most pronounced among older adults aged 65 years and above. Moreover, it has been suggested that elements predicting well-being in youth may differ significantly from those relevant to adults (Bradshaw & Rees, 2017).

3.3.2 Social capital and subjective well-being among youth

A literature review conducted by Korkiamäki and Ellonen (2008) consistently identified a positive association between young people's social capital and wellbeing. However, the authors highlight a significant challenge arising from the varied operationalisations of social capital, suggesting that 'almost any positive person-toperson interaction falls into the category of social capital' (p. 92). While this observation aligns with Putnam's conceptualisation, it underscores the necessity of clearly defined dimensions for measurement.

The authors noted that prior studies focused on youth often emphasised the structural characteristics of family, school, and neighbourhood, while frequently overlooking peer relationships. Furthermore, these studies often portrayed children and young people as passive recipients of adult support, control and attention, rather than active participants (Korkiamäki & Ellonen, 2008). Indeed, earlier studies on youth frequently relied on parental reports of young people's social capital and wellbeing, rather than self-reports obtained directly from adolescents (Ferguson, 2006).

In recent years, there has been a shift in the approach of youth researchers towards directly collecting information. Additionally, contemporary researchers are increasingly attentive to the interplay between young people's socioeconomic backgrounds and social capital when investigating their well-being.

For instance, Achdut et al. (2021) discovered that social capital, including informal and formal social networks, trust, and online social network usage, partially mediates the relationship between poverty or material deprivation and psychological distress among young adults in Israel. Their findings suggest that informal social capital and trust buffer the negative impacts of poverty and material deprivation on psychological distress, whereas online social network use exacerbates this effect. However, online social networks also nurture informal networks and indirectly mitigate psychological distress. Conversely, formal social networks were not significantly related to psychological distress.

Achdut et al. (2021) observed that young adults from a lower socioeconomic background exhibited less informal social capital, hypothesising that this may be a consequence of their family and friends experiencing dire material circumstances and therefore being less available to support one another. The authors highlighted that lack of close relationships may diminish social trust, perpetuating the negative impact of poverty on social capital.

Similarly, Laurence (2019) found a relationship between trust and young people's well-being. Using data from England, he showed that, in disadvantaged communities, young people are more frequently exposed to negative social relationships and less frequently to positive relationships, leading to lower levels of social trust. This in turn correlates with lower subjective well-being among young people.

Neves et al. (2019) employed a rare longitudinal mixed-methods approach to investigate bonding (economic and emotional support received from family, friends or neighbours) and bridging (economic and emotional support received from institutions) social capital in Portuguese youth in relation to well-being. Their study commenced with data collection from adolescents aged 17 years and followed them for nearly five years. The results revealed that youths with higher-educated parents had better access to bonding social capital, but limited access to bridging social capital. This finding contradicts previous studies (Holland et al., 2007), although the operationalisation of the variables, as acknowledged by the authors, may explain this discrepancy. Bridging social capital, defined as the economic and emotional support provided by institutions, was less frequently required by young people with highly educated parents, particularly mothers.

Overall, the study (Neves et al., 2019) highlighted the central importance of parental support for the vast majority of youth, regardless of their socioeconomic background. Parental support fostered motivation during school years and aided in navigating the transition from adolescence to young adulthood and into the labour market. Those lacking parental support often compensated with friends and romantic partners providing the necessary strong bonds and acting as role models. Additionally, they sought guidance for personal development, networking, and skills and interest expansion through various institutions such as schools and cultural organisations.

3.3.3 Social capital and well-being among migrant population

There has been limited research on the association between social capital and wellbeing of migrant populations compared to other groups (also e.g. Du Plooy et al., 2020). Although not the primary focus of this dissertation owing to practical constraints, I find it pertinent to provide a brief overview of recent studies in this area.

Research suggests that migrant populations often report lower levels of wellbeing than non-migrants (Adedeji, 2021; Arpino & de Valk, 2018; Delaruelle et al., 2021). Adedeji (2021) conducted a systematic literature review of social capital (trust and reciprocity, social participation, social cohesion, and social networks) and quality of life among migrants and found that the strength of this association varied across measures and migrant groups. Social participation generally exhibited a positive association with quality of life, whereas the relevance of social cohesion varied from positive (Alvi et al., 2012) to non-significant (Bennet & Lindström, 2018). Notably, variations in the definitions of social capital and quality of life contributed to differing findings across studies. When self-rated health was used as a measure for quality of life, elements such as trust or reciprocity were not significant (Bennet & Lindström, 2018). However, when applying a broader subjective perception, both trust and reciprocity appear highly relevant (Zhang, 2020).

Arpino and de Valk (2018) compared predictors of well-being between migrant and non-migrant populations in European countries and uncovered intriguing variations. Meeting others emerged as more relevant for individuals with a migratory background, whereas participation in social activities was more significant for nonmigrants. However, having someone with whom to discuss personal matters was equally important to both groups.

Delaruelle et al. (2021) studied migrant youth's well-being across 29 countries and found that adolescents with a migration background tended to report lower life satisfaction than natives of European countries; however, variations were observed between countries and schools. In general, social capital was found to moderate the relationship between migration background and mental health, with perceived family and peer support, and the national level of social trust acting as protective factors.

3.3.4 Direction of the association between social capital and well-being

Recently, with increasing availability of panel datasets and advanced analytical techniques, researchers have delved deeper into the direction of the association between social capital and well-being with mixed results.

Employing cross-lagged panel analysis on two waves of data from 18 countries and societies (n = 8587), Zhang (2020) used two measures of trust – trust in close relationships and trust in one's community – as proxies for social capital to explore their association with life satisfaction. His main results indicated a reverse relationship, with life satisfaction being longitudinally associated with both types of trust, whereas only trust in the community revealed a longitudinal association with life satisfaction.

Meanwhile, Bye et al. (2020) who focused on a far more limited sample of firstyear university students in Australia (n =: 95) but collected data on three occasions, found that as students' social capital (i.e. trust, relatedness, social support and bridging social capital) increased, so did their *university life satisfaction*. However, regarding the students' overall well-being, the results reflected a significant bidirectional relationship. Overall, the authors conclude that social capital is a rather stable asset, with changes occurring slowly.

Notably, both studies reflect short-term changes based on data collected over a six-month period with 2-3 data collection rounds. Chan et al. (2024) contributed to this discussion with a substantially longer follow-up period, spanning 1968 to 2015, and focused on the US population. Their findings revealed that higher levels of early-life economic (family income) and social capital (personal and professional mentoring received between the ages of 17 and 30) have enduring effects on wellbeing, even in middle age (with participants averaging 48 years of age). These elements exhibit a positive association with positive well-being indicators and a negative association with negative indicators. In conclusion, the study suggests that both economic and social capital during early life stages independently influence later-life well-being.

3.3.5 Dominant perspectives to social capital in these studies

In reviewing the literature on social capital within the realm of well-being studies, it is evident that trust emerges as a central dimension, and Putnam (2000; 1993) and Coleman's (1988; Coleman & Hoffer, 1987) theories dominate this discourse. Notably, Coleman's theories have exerted considerable influence on the investigations into young people's social capital (Ferguson, 2006; Korkiamäki & Ellonen, 2008). Alongside trust, social support and the dynamics of both close and distant social networks feature prominently as dimensions of social capital. A striking feature of this literature is the lack of consensus on a singular definition of social capital.

3.4 Gaps in previous research

Although the present review covers only a small fraction of the corpus of social capital literature, it is sufficient to illustrate the challenge of drawing firm conclusions about the association of social capital with socioeconomic status and well-being. Briefly, finding two studies that measure social capital in the same way is a challenge.

Engbers, Thompson and Slaper (2017) mapped the social capital measures used in US-based studies and came up with a list of over 50 different variables (24 on informal interaction, 9 on formal networks, 13 on trust and 9 gauging norms and adjustments). An apparent trend in both American and European studies is the limited inclusion of reciprocity as a dimension of social capital. While studies on social support often touch upon this concept, they typically focus solely on the support that individuals receive, overlooking their contribution to others. Furthermore, youth-focused studies frequently neglect dimensions of trust. The social network dimension is more systematically present; however, it is operationalised inconsistently with several different measurements.

Thus, although the overwhelming majority of earlier studies observed a significant positive relationship between social capital and well-being, disparities in the operationalisation of social capital make it difficult to draw any overarching conclusions regarding which aspects relate to well-being or to compare the relationship across different population groups.

The same applies to studies on social capital and socioeconomic resources, although there is a somewhat more systematic approach, particularly among researchers adhering to Bourdieu's school of thought. As discussed earlier, these researchers generally conceptualise social capital through the socioeconomic status of the people with whom one interacts and collect information using a position generator. This approach has yielded compelling evidence of socioeconomic (e.g. Alecu et al., 2022; Andersson et al., 2018; Otero et al., 2021; Verhaeghe et al., 2015) or ethnic (Carol, 2014; e.g. Koops et al., 2017; Leszczensky & Pink, 2019; Martinovic et al., 2015; Martinović, 2013) homophily within social networks, occasionally illustrating how it persists across generations. However, the robustness of such studies is countered by a significant limitation. The narrow operationalisation of social capital as merely the summation of network members' socioeconomic positions fails to provide insights into the quality of the relationships or the actual benefits derived from them.

On a positive note, an increasing number of recent studies have employed a resource generator as a replacement or complement to the position generator (Van Der Gaag & Snijders, 2005). A resource generator is more focused on the actual benefits one can or has obtained from the network. Such an approach could also be applied more broadly to other dimensions of social capital, including trust and help

provision, but thus far, such an extension of the instrument is rare (e.g. Lannoo et al., 2012, p. 379).

Therefore, I argue that there is still a need to consolidate literature on social capital as a multidimensional resource by employing a fixed theory-driven approach and implementing more systematic measures for its operationalisation. Furthermore, such systematic measures should be applied to diverse population groups and life stages to assess whether there is anything universally valuable in social capital and identify the key predictors of such elements.

4.1 Research objectives

This study builds on Bourdieu's premise that socioeconomic status shapes social capital and Putnam's argument that social capital enhances well-being. While these propositions have been extensively explored previously, I seek to contribute to the understanding of the domains of social capital that relate to well-being and socioeconomic status by exploring these associations across different population groups and systematically addressing social capital as social networks, social trust, and reciprocal behaviour.

More generally, I aim to (1) provide a more nuanced understanding of the relevance of socioeconomic resources to the Putnamian dimensions of social capital, (2) deepen understanding of the relationship between these social capital dimensions and well-being, and (3) assess these relationships across different population groups.

By consistently applying one theory-based conceptualisation of social capital to different groups, I hope to gain fresh insights, both substantive and methodological, into the relationships among social capital, well-being, and socioeconomic status.

This dissertation is composed of four published articles, all of which were coauthored by other researchers. The first one explores the origins of social capital and its hypothesised relationship with socioeconomic background in early adolescence and adulthood. The second article applies a similar design to the context of settling in a new home country after international migration. The third and fourth articles focus on the association between social capital and subjective well-being in adolescence and adulthood, respectively. Table 2 summarises the design of each study. In the following sections, I present the datasets, variables, and methods used in greater detail.

4.2 Data

Social capital, like many other objects of social research, is a subjective phenomenon not documented in official registers. Hence, social capital can only be assessed through survey or interview techniques that rely on information reported by study subjects. Nowadays, many social surveys include variables suitable for measuring some of the dimensions of social capital; however, it is hard to find datasets that cover all three dimensions (networks, trust and reciprocity). This dissertation builds on four cross-sectional datasets, with each article employing a distinct one suitable for the research question and population group of interest.

All data were collected in Finland. Two sets were gathered as part of international multi-year research programmes; one is a national-level survey, whereas the other covers only four municipalities in southwestern Finland. The selection of a single country was a deliberate, to control for political and cultural contexts that may influence the social code and normative environment. Moreover, this design allowed for a closer focus on distinct sub-groups of the population.

4.2.1 Survey on Children's and Parents' Social Capital

The first article explores the origins and potential intergenerational roots of social capital. For this purpose, I required data on social capital from two successive generations. As this proved difficult to find, I ultimately opted to collect the data myself. I wanted to tap into social capital at the earliest possible stage and therefore chose the age group of 12–13 years as the population of primary interest. This decision was supported by the notion that, in early adolescence, children start broadening their social ties independent of their families (Holland et al., 2007).

To prepare the survey tools, I first designed the parents' questionnaire and then used it as the basis for the adolescents' version. Both questionnaires covered topics regarding family relationships, friendships, spare time activities, and perspectives regarding other people in addition to sociodemographic and household characteristics.

Measured dimensions	 I Dependent variables: Adolescents' social networks (informal), social trust, help provision, help reception composed as latent factors Independent variables of interest: Parents' social networks (informal and formal), trust, reciprocity; adolescents' perception of parents' sociability; parents SES; neighbourhood socioeconomic disadvantage 	 Dependent variable: A composite variable measuring bonding and bridging social capital Independent variables of interest: primary motive of migration, age at the time of migration, number of years lived in Finland, has or not Finnish citizenship, Finnish/Swedish language skills, self- rated income level, education acquired in Finland, degree of urbanity of the living area, proportion of people with foreign background living in the same municipality, experience of any form of discrimination in the past 12 months,
Methods	Structura equation modelling	Multinom regressio
Data	Self-report survey on children's and their parents' social capital in South-Western Finland, 2018 (n: 163)	Survey on Well- Being among Foreign-Born Population in Finland, 2018-19 (n: 5,247)
Population of interest	Early adolescents (aged 12-13) and their parents	Foreign-born population
Research questions	 (1) Do adolescents 'inherit' social capital from their parents? (2) To what extent can the socioeconomic context explain social capital accumulation? 	 (1) To what extent do migration context, socioeconomic status, or social context predict the accumulation of social capital while controlling for other background factors? (2) Do tertiary-educated migrants use different resources to build social relationships than those with a lower level education?
Title	Adolescent social capital - An intergenerational resource?	Building social capital in a new home country. A closer look into the predictors of bonding and bridging relationships of migrant populations at different education levels
	_	=

 Table 2.
 Research design of the articles I-IV.

Dependent variable: Subjective well- being (one dimensional and multidimensional) Independent variables of interest: Adolescents' social networks (informal and formal), social trust, reception of help, deprivation index	Dependent variable: Subjective well- being (one dimensional) Independent variables of interest: social networks (informal and formal), social trust, institutional trust, reciprocity, social class
Linear and quantile regression	Linear regression and ordered logistic regression (for sensitivity check)
International Children's Worlds survey, 3rd wave, 2018-19, subsample of Finland (n: 821)	European Social Survey, 6th wave, 2012, subsample of Finland (n: 1,935)
Early adolescents (aged 12-13)	Adult population
(1) To what extent does social capital, i.e. social networks, trust, and reciprocity, relate to young people's subjective well-being? (2) Does the importance of these three dimensions vary at different points of the SWB distribution?	 To what extent does the volume of social capital vary between the social classes? How does the association between social capital and well-being vary between the social classes?
Young people's well-being and the association with social capital, i.e. social networks, trust and reciprocity	Social origins of well-being. Social class-based analysis of the association between social capital and well- being [Hyvinvoinnin sosiaaliset juuret. Luokka-analyysi sosiaalisen pääoman ja hyvinvoinnin välisestä yhteydestä]
=	2

To formulate specific questions for each dimension of social capital I used examples from earlier surveys. Although all three dimensions of social capital have rarely been covered in a single study, many earlier surveys, including those designed for adolescents, cover one or two dimensions. These studies formed the basis for my questionnaire. Only the trust dimension was absent in practically all adolescent surveys; accordingly, I designed two new sets of trust-related questions (see Appendix I for a detailed formulation of the variables). I pretested the adolescent questionnaire with school students who were one year younger than the target population (11–12 years) to confirm clarity and ease of comprehension.

To obtain a representative sample of children and their parents, I engaged the public-school network in Turku, one of Finland's largest municipalities. I invited all comprehensive schools in the municipality to participate in the survey; however, only one-third accepted. Consequently, I expanded the scope to include three nearby municipalities (Kaarina, Raisio and Parainen). Ethical clearance was obtained from my host institution (University of Turku), the respective municipal education authorities, and school personnel. Additionally, I sought parental consent, although the National Research Ethical Board in Finland does not consider it necessary in this context (TENK 2009)¹. However, I sought parental consent primarily because the data collection involved strong identifiers from students (first name, last name, class ID, and school name) to subsequently match their data with that of their parents. Although this requirement limited the sample size, I deemed it necessary to ensure compliance with ethical research principles, thereby safeguarding the integrity of the research process.

In total, 21 of 62 schools (34%) in the four municipalities agreed to participate in the survey. In these schools, 494 of 626 sixth-grade students (79%) were authorised by their parents, of whom 460 (93%) consented to participate in the survey (corresponding to 21% of sixth-grade students across the four municipalities).

Subsequently, the students' parents were invited to participate in a separate survey designed for adults. In total, 179 parents completed the questionnaire. In five cases, both parents responded, of which I retained the response received first to include only one parent for each adolescent in the sample. Eight parents who participated in the survey despite their children not doing so were excluded. The final analytical sample comprised matched pairs of adolescents with one parent each. Finally, I excluded three more cases wherein the adolescents had recently changed schools, on the assumption that the change might have temporarily affected their social networks. The final analytical sample consisted of 163 adolescent-parent

¹ According to TENK, parental consent is not necessary for ethically cleared surveys that take place in school context with an approval from the school personnel, and where the children can be considered mature enough to decide for themselves.

pairs. Although the data are not representative of a larger population, they provide a rare opportunity to compare social capital between two generations.

I collected data between March and May 2018, with considerable support from teachers. The students completed the questionnaires (available both in paper and online formats) during school hours and with adult guidance (provided either by a teacher or me), whereas the parents responded online independently, guided only by the instructions provided in the questionnaire. Students' response times varied roughly between 20 to 40 minutes.

Subsequently, using both adolescent and school names as identifiers, the two datasets were merged into one. Additionally, official postal code area statistics regarding the socioeconomic profile (household income level and unemployment rate) of the schools' neighbourhoods were collected to complement the survey data. These data are openly available from the Statistics Finland website and were used as proxies for adolescents' living areas. This is a reasonable approach given that, in Finland, most children attend a school in the same neighbourhood that they live in. The complete survey data was fully anonymised and will be made publicly available through the Finnish Social Science Data Archive after the approval of this dissertation.

4.2.2 Survey on Well-being among Foreign-born Population in Finland

The second article explored the predictors of social capital among international migrants who are in the process of settling in a new home country. The purpose was to identify the key resources needed to start accumulating social capital afresh, often as an adult. The Survey on Well-being among the Foreign-born Population in Finland (FinMonik) proved suitable for this purpose.

FinMonik is a cross-sectional survey that was administered by the Finnish Institute for Health and Welfare (THL) in 2018–2019 to obtain reliable data on health, well-being and service use among people with foreign backgrounds who currently reside in Finland (Kuusio et al. 2021). The survey covered a broad range of topics including quality of life, welfare, participation in social and societal activities, experience of discrimination, safety, and employment. Ethical approval was obtained from the Institutional Review Board of THL.

As described by Kuusio et al. (2021), the population of interest comprised individuals of working age (18–64 years) who had lived in Finland for at least a year and not entered the country through adoption. They had to have been born abroad and their parents (or only known parent) also born abroad. The survey was based on stratified random sampling of 24 strata in mainland Finland, covering 18 countries and the six largest cities. A minimum of 600 foreign-born people were sampled from

each county using the population register maintained by the Digital and Population Data Service Agency. A total of 12,877 individuals were invited to participate in the survey (excluding those removed for over coverage), and 6,836 (53 %) accepted.

The questionnaire with all related information letters were made available in the country's official languages (Finnish and Swedish) and 16 other languages that were most frequently spoken in the country (Albanian, Arabic, Dari, Farsi, French, English, Spanish, Mandarin Chinese, Kurdish [Sorani], Polish, Somali, Thai, Turkish, Russian, Vietnamese and Estonian). Most of the data were collected through self-administered online or printed questionnaires; however, in some cases, telephone and face-to-face interviews were used to encourage participation. The survey was complemented with data from several national registers that provided further details about the respondents' socioeconomic status, family situation, immigration background, and health status. Access to FinMonik data for scientific use can be requested from THL.

The second article built on the FinMonik data, with an analytical sample of 5,343 individuals who had no missing values in the variables of interest.

4.2.3 International Survey of Children's Well-being

The third article in this dissertation explores the relationship between social capital and well-being in early adolescence. Data were obtained from the International Survey of Children's Well-being (ISCWeB, <u>https://isciweb.org</u>), a research project that commenced in 2009. The ISCWeB aims to collect robust and representative data worldwide on children's lives, social relationships, daily activities, time use, and perceptions of well-being (<u>Aims and objectives - CHILDREN'S WORLDS</u> (<u>isciweb.org</u>)). The project is a collaborative effort of academic researchers from different countries and serves families, practitioners, decision-makers, and researchers.

To date, three survey rounds have been conducted. In every round, crosssectional data were collected through national school networks from three different age groups (around the ages of 8, 10 and 12 years). The third wave comprised data on over 128,000 children from 35 countries (<u>The current phase - CHILDREN'S</u> <u>WORLDS (isciweb.org)</u>). Finland has participated since the second round (2013– 14), with a research team from the University of Turku managing the data collection. The survey data are openly available.

The sampling strategy of ISCWeB varies between countries. In the third round, Finland's sample was obtained through stratified sampling of four major regions of the country (NUTS2). A random selection of municipalities was conducted according to the proportional number of students in each region, generating a nationally representative sample of sixth graders. Altogether, 29 schools participated

in the third wave. Data were collected online using a Webropol survey tool. The ethical committee of the University of Turku approved the study protocol in 2018.

Before the third data collection round (2018–2019), I had the opportunity to include a few social capital-related questions in Finland's questionnaire for the 6th graders. Combined with the original survey questions, it became possible to measure the level of young adolescents' social capital in Finland. The third article analyses this Finnish subsample with 821 respondents, who had no missing data in the variables of interest.

4.2.4 European Social Survey

The fourth article assessed class-based differences in social capital, and the relationship between social capital and well-being, among the adult population in Finland while accounting for their social class backgrounds. Data were obtained from the European Social Survey (ESS, <u>www.europeansocialsurvey.org</u>), an academically driven biannual cross-sectional survey conducted across European countries to monitor changes in attitudes and values. Topics such as politics, well-being, religion, democracy, work, mass media, social and institutional trust, household composition, and demographics are repeated in every survey round. Furthermore, each round collects data on rotating modules, which have thus far included topics such as immigration, ageism, and personal and social well-being (<u>Source Questionnaire | European Social Survey (ESS)</u>).

The ESS follows high-quality standards for data collection and processing. Each country collects random probability samples representative of all persons aged 15 years and older residing in the given country, irrespective of their nationality or native language (<u>Sampling | European Social Survey (ESS)</u>). Until now, data have always been collected through face-to-face computer-assisted personal interviews (<u>Data Collection | European Social Survey (ESS)</u>).

Since its inception in 2001, 38 countries have participated in at least one round of the ESS (FAQ | European Social Survey (ESS)). In the latest (10th) round, 32 countries participated (<u>News | European Social Survey (ESS)</u>. Finland has participated in every round, with Statistics Finland collecting the data._ESS data are openly available free of charge for non-commercial purposes.

The fourth article examined Finland's sample from the sixth round of the ESS, which was collected in 2012. Although not the latest ESS dataset available at the time, it was the only dataset with variables suitable for measuring all three dimensions of social capital. The analytical sample of my study comprised 1,935 respondents who had no missing data in the variables included. Because of the interest in social class-based differences in social capital, I set a lower limit of 18

years of age for the sample, as it was thought that younger people may not have developed an independent social class status.

4.3 Measurements

The Putnamian multidimensional social capital is the central concept of this dissertation. In each article, I have applied the concept consistently, in line with the theory. However, operationalising it consistently proved challenging, as nearly all datasets lacked one or more of the necessary measures. The survey that comprised the most complete set of social capital variables was the one I designed and collected data for in the first article. An additional strength of this dataset is its provision of similar information on social capital for both generations. However, the small sample size (n = 163) limits its utility. Consequently, this dataset was used only in the first study.

Moreover, the approach to modelling social capital varied according to its role within the analysis as a dependent or independent variable. In the first two articles, social capital was treated as the outcome variable and its socioeconomic and other potential origins were explored. By contrast, the last two articles used social capital measures as independent variables to examine their relationships with well-being. Although it was not possible to employ identical measurement methods across all articles, I sought to consistently incorporate the three dimensions of social networks, trust, and reciprocity in each case. Moreover, I distinguished between formal and informal networks, relationships and contacts across the articles.

Appendix I presents the original formulation of each social capital-related variable used in this research. In the first article, adolescents' social capital was measured using 12 separate variables under four latent factors (three items each for the domains of social networks, trust, help provision and help reception). Although the use of structural equation modelling and latent factor structures allows for the simultaneous analysis of several dependent variables, the modelling technique presents other restrictions. Too low a correlation between some items and too strong cross-loadings between other factors limited the original model design. Therefore, an otherwise relevant item (number of adolescents' hobbies, the only variable representing formal networks) was excluded from the model, and some residual correlations had to be permitted to obtain a converging model.

Similarly, social capital was considered an outcome variable in the second study. The best available dataset, FinMonik, included broad measures of social capital but lacked specific variables on social networks, trust, and reciprocity. Using four original variables (e.g. 'How many good friends do you have living in Finland? Consider all those whom you can trust and who can help you when you are in need.' and 'During the past 12 months, how often did you participate in activities of: sports

associations/a hobby group/political association...'), I first built two dichotomous items measuring abundance versus scarcity of bonding and bridging social capital, respectively. I then combined the two items into one, obtaining four categories measuring the different combinations of abundant or scarce bonding and bridging social capital. Although it was not possible to form distinct measures for networks, trust and reciprocity, the four variables used to compose bonding and bridging social capital were tapped into each of these dimensions, thus permitting consistency with Putnam's framework.

The third and fourth studies treated social capital measures as independent variables. The third and fourth studies included 12 and 9 distinct items, respectively, to cover the three dimensions of social capital. Although there was some correlation between items, multicollinearity did not become an issue.

The measurement of the other two key concepts – subjective well-being and socioeconomic status – was more straightforward. Well-being, which was the outcome variable in the third and fourth article, was measured in each case using two different approaches. In the third article, I used one univariate (overall life satisfaction scale) and one multivariate measure (students' life satisfaction scale), whereas in the fourth article, I used one single-item measure for the main analysis (happiness scale) and another (overall life satisfaction scale) for a robustness check.

Variables related to socioeconomic resources were included in each article, but in slightly different ways. The first article included parents' education, equivalised household income and self-rated income level to compose a latent SES factor which was used as an independent predictor of both parents' and their children's social capital.

In the second study, the socioeconomic background of the foreign-born population was measured through their self-rated income levels and whether they had acquired some education in Finland. In addition, the respondents' educational level (tertiary or not) was used as the criterion for dividing the dataset into two subsamples for separate analyses of the predictors of social capital in each group.

The third study was based on data collected exclusively from younger adolescents and included limited measures of their socioeconomic backgrounds. To assess the relationship between their social capital and well-being while controlling for their socioeconomic background, a material deprivation index was composed of eight dummies asking whether the respondents possessed specific items, such as good clothes, a mobile phone, or access to the Internet at home.

The fourth study assessed the relationship between social capital and well-being among the adult population, and to account for socioeconomic status, a simplified social class measure was built that loosely followed the European Socio-Economic Classification (ESeC). Similar to the Erikson–Goldthorpe–Portocarero classification, ESeC considers individuals' current occupation, employment relation, number of employees and supervision responsibilities as the basis for social class structure. Using these specifications, we identified three classes: salariat, middle and working class. These were used to separately analyse the volume of social capital and its relevance for subjective well-being in each class.

Appendix I presents the original variables measuring social capital, well-being and socioeconomic resources used in this dissertation.

4.4 Methods

The majority of studies were conducted with some form of multivariate regression analysis – namely linear, quantile, and multinomial regression – depending on the research questions and type of the dependent variables. Only the first study built on structural equation modelling, which too can be considered an expanded version of regression analysis. Below, each methodological approach is briefly presented, starting from the simplest and proceeding towards the more complex modelling technique.

4.4.1 Linear regression

Ordinary least squares linear regression is still one of the most commonly applied analytical approaches in the social sciences. It allows for the inclusion of multiple independent variables in a model to explain as much of the variance as possible in the outcome variable. The regression equation also includes an error term that accounts for all other factors that contribute to the variance in the outcome variable but are not included in the model. Although the predictors may be moderately correlated, they should not correlate with the error term. Otherwise, the estimates are considered biased.

Linear regression estimates express the strength of the relationship between a given predictor and the outcome variable, while holding all other included predictors constant. The fit of a model is typically evaluated based on the coefficient of determination (R2 or adjusted R2 in multiple regression), which can be interpreted as the proportion of variance in the outcome variable that is explained by the model. (Wooldridge, 2020).

Linear regression analysis was applied in the fourth article to explain the variance in well-being associated with social capital across social classes while controlling for demographic and other relevant predictors. Well-being, in this context, was measured by the level of happiness indicated on a scale of 0 to 10, and treated as a continuous variable.

First, we compared the mean values of happiness and social capital variables across social classes (salariat, middle and working). Well-being was regressed

separately on each social capital variable to assess the relative importance of each item. To understand whether social capital relates differently to well-being across social classes, we ran two regression models for each class, first with control variables and then full models including all social capital variables. By comparing the difference in the coefficients of determination between the two models, we evaluated the relevance of social capital to the well-being of each social class. For all analyses, we used post-stratification weights.

4.4.2 Unconditional quantile regression

Unconditional quantile regression (UQR) is a non-parametric version of linear regression. Unlike conditional quantile regression, UQR first divides the distribution of a continuous dependent variable into quantiles and then calculates the estimates for the predictor variables separately for different points of the distribution scale. Thus, the modelling technique enables the identification of potential differences in the strength of relationships across the measurement scale (Borah & Basu, 2013; Firpo et al., 2009; Rios-Avila, 2020).

As a non-parametric approach, UQR involves fewer assumptions than regular linear regression. However, to interpret the results at the individual level, the assumption of rank invariability must hold (Dong & Shen, 2018; Gregg et al., 2019). This means that a one-unit change in any independent variable should not change the person's ranking on the scale of the dependent variable.

The third article assessed the relationship between social capital and well-being among young adolescents, referring loosely to an earlier work by Dinisman and Ben-Arieh (2016). Two different measures of well-being were used as distinct dependent variables: the overall life satisfaction scale based on a single question, and the Student's life satisfaction scale (SLSS) built with five separate questions. Both variables were converted to a 0-100 scale to facilitate comparison.

Owing to the strong (left) skewness of the well-being variables, we decided to employ UQR in addition to a conventional linear regression for the analysis. We first tested the relationship between the social capital variables and well-being using Pearson's correlations and Kruskal-Wallis non-parametric tests. We also compared the mean values of key variables between adolescents at the lowest and highest ends of the well-being scale (SLSS).

For the main analysis, stepwise linear regression models were first constructed for both dependent variables. We then conducted UQR on the SLSS (the only truly continuous one of the two dependent variables). The regression estimates generated for the lower end of the SLSS were compared to those at the higher end to verify whether social capital variables related differently to well-being at different points on the well-being scale. We also compared the quantile regression results to those of the linear regression to assess consistency between the two approaches.

The analyses were performed using case weights to reflect the stratified sampling strategy and the distribution of young people across the strata. The case weight was calculated such that the size of the weighted sample remained the same as that of the unweighted sample.

4.4.3 Multinomial logistic regression

Multinomial logistic regression is an expansion of logistic regression that is applicable to a nominal outcome variable with more than two categories. Multinomial regression produces separate estimates for each outcome category compared with a reference category. Estimates can be expressed as log odds, relative risk ratios or odds ratios.

The second article employed a multinomial logistic regression approach to evaluate the relative importance of socioeconomic and other resources in the accumulation of social capital by international immigrants when settled in a new country. The dependent variable comprised four categories (abundant social capital, mainly bonding, mainly bridging and scarce social capital). To facilitate interpretation, all results from the multinomial logistic regression models were converted into average marginal effects (AMEs). This produced estimates for each outcome category, including the original reference category, wherein all other categories form the reference group. AMEs can be interpreted as a change, measured in percentage points, in the probability of a given outcome category associated with a one-unit change.

To specify the final analytical model, we introduced sets of predictors (migration-, SES-, and context-related) to the model in a stepwise fashion. After each addition, the better-fitting model was compared to the more complex one. The selection of the better-fitting model was oriented by adjusted McFadden's pseudo R2, Akaike information criterion (AIC), and Bayesian information criterion (BIC) indices. Similar to normal R2 and pseudo R2, the higher the coefficient, the better the fit. By contrast, for AIC and BIC, the lower the estimate, the better the model fit. However, BIC imposes a greater penalty for the number of parameters (Fabozzi et al., 2014) and usually supports simpler models. Therefore, we considered all the fit indices simultaneously to obtain a better sense of the overall fit.

The analysis was first conducted for the full sample and then separately for the two education levels to detect eventual differences in the predictors of social capital formation. To account for non-participation and stratified random sampling, we used sampling weights in the analyses (except when evaluating the best-fit model).

4.4.4 Structural equation modelling

The structural equation method (SEM) builds on path analysis, wherein relational paths and their directions are informed by a given theory. The purpose of SEM analysis is to define a model that identifies patterns of covariance among observed variables and explains as much of their variance as possible. Although normally theory-driven, SEM is seldom applied rigidly to confirm or refute the first theory-based model. Given that the first model seldom offers a good fit, adjustments are made to find an alternative model that remains theoretically justifiable, parsimonious, and shows an acceptable fit to the data. (Kline, 2011).

Generally, SEM considers observed variables, latent variables (composed of observed variables), and residual or error terms that represent the variance unexplained by predictors. As explained by Kline (2011), unexplained variance is partly due to random measurement errors and partly due to systematic, unrelated variance. Error variance is estimated based on the entire model and data, and these estimations influence the overall evaluation of the model. This characteristic of SEM yields more realistic results than conventional regression-based analyses, which assume that variables are measured without errors.

Although theory typically guides the structure of SEM modelling, the complexity of the model is limited by the sample size, which determines the number of parameters that can be included in one model. Ideally, the ratio of sample size to parameters should be approximately 20:1, indicating that a model with 10 parameters should have a sample of at least 200 (Kline, 2011).

The goodness-of-fit of SEM is typically evaluated by the ratio of chi-square to the degrees of freedom, root mean square error of approximation (RMSEA), standardised root mean square residual (SRMR), Tucker Lewis index (TLI), and comparative fit index (CFI). The commonly accepted cut-off values are $\chi^2/df < 2$ for the chi-square test (Byrne, 2012; Hu & Bentler, 1995), < 0.08 for RMSEA and SRMR (Hair et al., 2010; Hu & Bentler, 1998) and \geq 0.90 for TLI and CFI respectively (Bentler, 1992; Hair et al., 2010).

An advantage of SEM is its flexibility in encompassing several outcome variables (observed or latent) in the same analysis. In the first article, we applied the SEM technique to explain, in a single model, adolescents and parents' social networks, trust, and reciprocal practices, in addition to family and residential areas' socioeconomic status. Two hypothetical models were used to examine the potential intergenerational transmission of social capital: one with direct links between parents' self-reported social capital measures and adolescents' social capital measures, and another with adolescents' perceptions of their parents' sociability mediating the paths from parents' social capital.

Due to restrictions caused by the ratio of the sample size to the number of parameters (Kline, 2011), we generated factor scores instead of latent factors to

measure adolescents' social networks, trust, provision and reception of help; parents' social networks, trust, reciprocity, and socioeconomic resources; and neighbourhood socioeconomic disadvantages. Factor scores were generated and saved separately to be used in the main SEM analysis as observed variables. Only adolescents' perception of parents' sociability – the hypothesised mediator of intergenerational transmission of social capital – was identified as a latent factor.

Our final full model fitted well with the data, with the following indices: $\chi^2(35)$: 45.3, p 0.11 (scaling correction factor 1.04); RMSEA 0.04; SRMR 0.05; CFI 0.96; TLI 0.93. The analyses were carried out using Mplus 8.4 with a maximum likelihood estimator with robust standard errors (MLR) due to the limited sample size of n = 163 (Muthén & Muthén, 2006).

5.1 Social capital and socioeconomic resources in adolescence and adulthood

The first article analysed the relationship between social capital and socioeconomic resources among early adolescents and their parents. Data were obtained from a survey of children and parents' social capital in Southwest Finland that I collected purposefully for this dissertation. Although previous research has explored the potential socioeconomic origins of social capital, this study adds value by operationalising social capital using the dimensions of social networks, social trust and reciprocity for both generations. Furthermore, this study delved into the question of whether social capital can be considered an intergenerational resource transmitted from parents to children, a topic that has received limited attention in the existing literature.

In the sample, both parents and adolescents consistently reported high levels of social capital. Our findings indicated that socioeconomic resources – measured as parents' highest education, per-person equivalised household income and self-rated income – were significantly related to all social capital dimensions in the adult sample. Social trust was the dimension most strongly linked to socioeconomic conditions. However, in the model, trust was the factor with the highest scale reliability and strongest overall factor loadings, which may explain the relatively prominent results in this regard. Conversely, social networks showed a somewhat unclear relationship with socioeconomic resources, possibly mediated through social trust. However, the results related to social networks varied somewhat between the models, probably because of the small sample size and relatively low factor loadings.

In contrast to many previous studies (e.g. Lannoo et al., 2012; Verhaeghe et al., 2015), our first study did not identify a direct association between family SES and adolescent social capital. Nevertheless, we observed an indirect positive link between SES and adolescents' inclination to interact reciprocally with others. This connection was mediated through parents' social capital and the perception that adolescents form of their parents' sociability.

It is worth noting that our study focused on young adolescents aged 12–13, a considerably younger group than that examined in most other studies. The significance of SES may become more pronounced in later stages, as the adolescents mature. Alternatively, our sample, which primarily comprised middle-class families in a relatively egalitarian Finnish context, may not have adequately captured the nuances of socioeconomic influence. Moreover, socioeconomic factors are likely to relate less directly to the qualitative terms of social capital defined by Putnam. This notion finds support in Hjalmarsson and Mood (2015) who did not find a relationship between family income and adolescent friend nominations in Sweden.

By contrast, our study found that living in a socioeconomically disadvantaged neighbourhood was negatively related to adolescents' social trust and reciprocity, whereas it did not reveal any direct relationship with adults' self-rated or perceived social behaviour. One possible explanation for this may be that adults' social interactions occur predominantly outside their immediate living areas.

More than socioeconomic resources, adolescents' perceptions of their parents' social behaviour emerged as a crucial predictor of the social capital that they developed. Parents' example was particularly strongly associated with adolescent reciprocal behaviour. However, we did not find a direct relationship between parents' and adolescents' self-reported social capital.

While contributing to the existing literature, we recognise that our results were derived from a relatively small and non-representative sample. The parents' sample was predominantly composed of mothers, who tend to exert a stronger influence on children's social learning process overall (Nomaguchi et al., 2011; Padilla-Walker et al., 2018; Rotenberg, 1995; Wu, 2022). Thus, our results may not adequately reflect the relationship between fathers' and their offspring's social capital.

Moreover, the structural model of adolescents' social capital had some limitations. The factor compositions were only validated with Cronbach's alpha and fit indices. The scale reliability of the adolescent social network factor was lower (0.5) than is generally recommended (> 0.6); however, the overall scale reliability of adolescent social capital was good (0.78). These limitations indicate that our results should be interpreted with caution, and future research should seek to further validate our findings.

In summary, our main findings suggest that socioeconomic resources directly predict levels of social trust and reciprocity in adults and indirectly influence their social networks through trust. Conversely, in early adolescence, socioeconomic background does not have a direct association with any aspect of social capital; its influence is solely indirect and mediated by parents' social behaviour.

5.2 Social capital and socioeconomic resources when settling in a new home country

Major life events, such as the transition from school to work, divorce and migration, often impact social relationships. Building on the FinMonik survey, the second article examined the dynamics of social capital among foreign-born immigrants as they settled in a new country, using Finland as a case study. The ultimate purpose was to identify factors that could foster or hinder the accumulation of social capital when individuals encounter entirely new life circumstances.

Past literature has often emphasised the significance of migrants' education levels for the success of their integration (e.g. Patulny, 2015). Therefore, we analysed the composition of social capital within both the full sample and separately, among migrants with tertiary and lower levels of education. Thus, we sought to determine whether individuals with varying educational backgrounds employ different resources to create social capital.

We considered four distinct configurations of social capital as possible outcome variables: (i) extensive bonding and bridging (abundant social capital), (ii) mainly bonding, (iii) mainly bridging and (iv) scarce bonding and bridging (limited social capital). We adopted composite dimensions of bonding and bridging because of the unavailability of precise measures for networks, trust, and reciprocity.

Our results suggest that nearly one in every four migrants possess abundant social capital, while roughly one-third have limited social capital. In the higher education group, abundant social capital prevailed as the dominant category, whereas in the lower education group, the proportion of people with limited social capital was nearly twice that of people with abundant capital. These findings are in line with the existing literature, indicating that higher education levels are related to broader social networks (Koops et al., 2017; Martinovic et al., 2015; Patulny, 2015; Schnell et al., 2015).

Contrary to our expectations, we found more similarities than differences in the predictors of social capital between education groups. While accounting for a wide range of migration-related factors and control variables, socioeconomic status stood out as the primary predictor of migrants' social capital in the new country. Regardless of whether individuals belonged to the higher or lower education brackets, a satisfactory income level consistently emerged as the most important resource for fostering the growth of abundant social capital and shielding against its scarcity. Although sufficient income was notably more prevalent among tertiary-educated migrants than among those with lower levels of education (51% vs. 36%, respectively), it alone did not account for the disparity in social capital between the groups.

Additionally, educational background was found to be important for social capital formation. In the full sample, tertiary education emerged as a significant

predictor of abundant social capital, and simultaneously decreased the likelihood of scarce capital. Similarly, within the lower education group, accomplishing some education in the new home country (Finland) supported the creation of abundant social capital and protected against scarcity.

The operationalisation of social capital through the combination of bonding and bridging capital was chosen because the data did not include specific variables for social networks, trust or reciprocity. In this context, the combination of bonding and bridging was regarded as a good alternative for understanding social capital as a multidimensional asset. Our analytical framework was structured to identify unique predictors of bonding and bridging social capital within two distinct education groups. However, our findings indicate that both bonding and bridging social capital are predominantly influenced by the same factors, regardless of educational level.

In summary, socioeconomic resources appear to play a central role in predicting the accumulation of social capital when individuals establish themselves in a new host country. While migration-related factors may dictate the overall context of integration, income and education emerged as primary resources for building social capital.

5.3 Social capital and well-being in adolescence

The third article shifts the focus from the potential origins of social capital to its possible outcomes. Using data from the ISCWeB survey, the study explored the relationship between the three dimensions of social capital – social networks, trust and reciprocity – and subjective well-being among adolescents in Finland at the earliest stage when they could be assumed to have developed their own social capital. Although the topic itself is not new, previous research mainly focuses on older adolescents, typically around 15–16 years of age. Furthermore, to the best of our knowledge, Putnam's three social capital dimensions have not yet been systematically applied to adolescents.

To evaluate the relative importance of social capital for well-being, we compared partial models, which included one social capital dimension at a time, and the full model, which included all social capital dimensions, to the baseline model, which only included control variables.

Considering that the distribution of well-being is strongly left-skewed in Finland, we deemed it relevant to assess whether the importance of the three social capital dimensions varied at different points in the distribution. We also wanted to test the performance of different regression methods applied to such a skewed outcome variable and therefore, compared the results of ordinary least squares regression (a common approach in well-being research) to those of UQR (a non-parametric approach). Additionally, we tested the use of a reverse-coded, log-transformed wellbeing measure.

Our descriptive results indicate that early adolescents in Finland are generally highly satisfied with their lives, with the average score ranging between 86 and 88 on a scale of 0 to 100 for the two well-being indicators. Bivariate analyses revealed that there was significantly and systematically more social capital among adolescents at the higher end of the well-being scale than those at the lower end.

Similar to previous research (e.g. Ferguson, 2006; Korkiamäki & Ellonen, 2008), our study found a clear relationship between adolescents' social capital and wellbeing. However, our study further contributes to the literature by showing that even in early adolescence, each social capital dimension is associated with well-being. Of all the social capital dimensions, trust explained the most variance in well-being, as indicated by the largest increase in the coefficient of determination. Conversely, the social networks dimension (which pervades social capital literature) explained the least amount of variance in adolescents' well-being. Of all social relationships, those with family members systematically emerged as the most relevant for well-being at this young age.

Overall, the inclusion of social capital variables in the baseline model in our study significantly increased the coefficient of determination. However, when analysing partial models, each of which considered only one social capital dimension, we observed notably higher estimates and, in some cases, stronger statistical significance than in the full model comprising all dimensions. These findings underscore the importance of concurrently examining all three dimensions of social capital, particularly when investigating their relationship with well-being. Focusing solely on one dimension could introduce unobserved variable bias owing to the correlation between social networks, trust, and reciprocity.

Additionally, linear modelling of the skewed well-being variables overemphasised the significance of social capital. When the modelling was repeated with a reversed and log-transformed well-being scale, the coefficient of determination decreased from 47% to 36%. Nevertheless, social capital explains a large share of the variance in well-being. This observation reinforces the fact that linear modelling of a heavily skewed outcome variable can lead to biased results.

UQR also indicated that all three social capital dimensions matter for adolescents' well-being across quantiles. However, the coefficients of determination suggested that social capital matters, especially for adolescents at the lower end of the well-being distribution.

Regarding well-being measures, our study compared the performance of two scales: one based on a single variable, and another composed of five variables. Our results showed that although the composite variable was somewhat more sensitive to variation in social capital, the difference from the single measure was not substantial, particularly when considering a more conservative confidence level (p < 0.001).

While the ISCWeB dataset provided an exceptionally comprehensive array of variables for assessing social capital, it was limited in capturing the reciprocity dimension. Specifically, the dataset included information on received help but not on the provision of help, which is a fundamental aspect of reciprocity. Additionally, questions concerning trust were incorporated into the questionnaire by me and were not subjected to a formal validation process.

In summary, our study suggests that each dimension of Putnamian social capital is highly relevant to the subjective well-being of early adolescents, with trust and reciprocity being the most important of the three.

5.4 Social capital and well-being in adulthood

The fourth article analysed the relationship between the three dimensions of social capital and well-being with a focus on the adult population in Finland, aged 18 and above. The aim was to explore whether the volume and relative importance of social capital dimensions varied across different social classes. We drew on data from the sixth round of the ESS and employed the ESeC classification to identify three social classes: salariat (the highest class), middle class, and manual working class (the lowest class, encompassing both skilled and unskilled labourers).

The main analyses were based on a single-item happiness variable as an outcome measure of well-being. Similar to the third article, we assessed the relative importance of the social capital dimensions by comparing partial and full linear regression models, examining the respective coefficients of determination, both in the full sample and among three social class-based subsamples.

In line with earlier literature (Bartels et al., 2022), our results indicated that the overall level of happiness is high in Finland, with the average score being 8.09 on a scale of 0-10. The salariat class reported the highest (8.22) and the working class, the lowest (7,81) average level of happiness. The difference was statistically significant.

This study found small but systematic and significant differences in all dimensions of social capital across social classes. The salariat class presented the most extensive informal and formal social networks and the highest levels of trust in other people. Conversely, the working class presented the lowest mean values in all but one social capital measure (frequency of informal social encounters). These findings are consistent with past research showing that both trust and participation in formal organisations vary across social classes (Hanifi, 2006; Iisakka, 2006; Sanaksenaho, 2006). The differences between the two classes were not significant only in relation to the level of reciprocity (although the working class still produced
the lowest mean values); instead, the middle class stood ahead of the other two classes.

When analysed individually, each social capital variable showed a statistically significant relationship with well-being, except for participation in formal organisations. When the variables were combined into the full model, the magnitude of the social capital estimates dropped notably but remained significant and positive. Here too, the reduction in estimates can be attributed to the moderate correlation between the social capital variables. This finding highlights the necessity of incorporating all dimensions of social capital into the same model to avoid biased estimates.

On average, the inclusion of social capital variables in the baseline model doubled the coefficient of determination. The most significant increase was observed in the salariat class (186%), whereas the smallest increase was in the working class (76%). Nevertheless, the results emphasise the substantial impact of each dimension of social capital on subjective well-being across different social classes. Our study identified reciprocity, especially the reception of help when in need, and social trust as the factors most pivotal to explaining most of the variance in well-being.

In summary, our findings suggest that social capital and well-being tend to accrue primarily in the most advantaged segments of the population. Nevertheless, irrespective of social class, every dimension of Putnam's social capital plays an important role in predicting well-being, with reciprocity and social trust emerging as the most vital.

5.5 Summary of the main findings

Overall, the articles in this dissertation indicate that social capital is associated with socioeconomic resources; the better-off tend to accumulate most of it. However, there seem to be differences between age groups.

Generally, among adults, the more socioeconomic resources one has, the more social capital one tends to possess. The findings of this research suggest that social trust and reciprocal behaviour are the social capital dimensions that are most sensitive to socioeconomic conditions. However, the direction of these relationships is not evident.

The importance of socioeconomic resources is particularly pronounced for international migrants when establishing themselves in a new country. In this lifechanging context, the development of social capital is most strongly associated with income level, while educational resources also play a significant role. Typically, tertiary level education facilitates the accumulation of abundant social capital among international migrants. By contrast, social capital formation in early adolescence seems more directly related to parents' example of social behaviour rather than their socioeconomic background. However, as adolescents adopt their parents' behavioural example they are indirectly affected by parental socioeconomic resources.

Additionally, the articles identified social capital as a vital factor associated with subjective well-being in both adults and adolescents. Although the association may be bidirectional, this study clearly shows that social trust and reciprocity are among the most important covariates of well-being, notably exceeding the importance of social networks, which have often been considered the principal expression of social capital. This holds for both adults and adolescents.

The main results of the articles are summarised in Table 3.

	Title	Research questions	Main findings	Main contributions to literature
_	Adolescent social capital - An intergenerational resource?	 (1) Do adolescents 'inherit' social capital from their parents? (2) To what extent can socioeconomic context explain social capital accumulation? 	Although social capital is not transmitted in the way biologically heritable traits are, parents' social capital shapes youngsters' perception of sociability, and predicts each dimension of adolescents' social capital. Family SES relates to parents' social capital and through that indirectly to adolescents' reciprocity. Neighbourhood SES relates directly to adolescents' social trust and tendency to receive help.	Provides evidence of possible mechanisms for social capital accumulation among young adolescents.
=	Building social capital in a new home country. A closer look into the predictors of bonding and bridging relationships of migrant populations at different education levels	(1) To what extent do migration context, socioeconomic status, or social context predict the accumulation of social capital when controlling for other background factors? (2) Do tertiary-educated migrants use different resources than those with lower levels education to build social relationships?	In the higher-educated group, abundant social capital is predominant, whereas in the lower educated group, scarce social capital is more than twice as common as abundant. A satisfactory level of income is the most important predictor of abundant social capital for both education groups but is a more common characteristic in the higher education group.	Provides evidence of the importance of income and education for social capital accumulation when settling in a new country.
=	Young people's well-being and the association with social capital, i.e. social networks, trust and reciprocity	(1) To what extent does social capital, i.e. social networks, trust, and reciprocity, relate to young people's subjective well-being? (2) Does the importance of these three dimensions vary at different points on the SWB distribution?	Adolescents at the higher end of the well-being scale possess more social capital than those in the lower end. All three dimensions of social capital relate to adolescent well-being, but the relationship with trust and reciprocity is particularly pronounced. The importance of social capital is greater for those whose well-being level is low.	Provides evidence of the relevance of the three dimensions of social capital (networks, trust, reciprocity) for the well-being of adolescents across well-being quantiles; illustrates the weakness of a linear modelling of well-being when the distribution is strongly skewed.

 Table 3.
 Main results of the articles I-IV.

 Social origins of well-being. Social class-based analysis of volume of social capital vary the association between social capital vary the working class the most and volume of social capital vary between the social capital vary between social capital and well-being and well-being and well-being across all socioeconomic classes? Social class-based analysis of volume of social capital vary between the social classes? How does the association between social capital and well-being across all socioeconomic vary between the social capital and well-being across all socioeconomic classes? How does the association between the social capital and well-being across all socioeconomic vary between the social capital for well-being is most pronounced among individuals in the professional class. 	Provides evidence of the relevance of the three dimensions of social capital (networks, trust, reciprocity) for well-being across the social classes.
 Social origins of well-being. Social class-based analysis of the association between social classes? (2) between the social classes? (2) How does the association capital and well-being between social classes? (1) To what extent does the association vell-being between social classes? (2) how does the association between social classes? 	The professional class has the most and the working class the least social capital. All three dimensions of social capital, especially trust and reciprocity, correlate with well-being across all socioeconomic classes. However, the significance of social capital for well-being is most pronounced among individuals in the professional class.
Social origins of well-being. Social class-based analysis of the association between social capital and well-being [Hyvinvoinnin sosiaaliset juuret. Luokka-analyysi sosiaalisen pääoman ja hyvinvoinnin välisestä yhteydestä]	 (1) To what extent does the volume of social capital vary between the social classes? (2) How does the association between social capital and well- being vary between the social classes?
-	Social origins of well-being. Social class-based analysis of the association between social capital and well-being [Hyvinvoinnin sosiaaliset juuret. Luokka-analyysi sosiaalisen pääoman ja hyvinvoinnin välisestä yhteydestä]

6 Discussion

This dissertation contributes to our understanding of the fundamental nature of social capital by revisiting key assertions from leading scholars, while breaking the concept of social capital into more specific dimensions. Accordingly, this study investigates how socioeconomic resources may predict these dimensions, as suggested by Bourdieu, and how the dimensions relate to well-being, as articulated by Putnam. To assess variability in these relationships, this study focuses on three different population groups – young adolescents, adults, and international migrants – using four cross-sectional datasets.

Without the possibility of subjecting any of these relationships to causal testing, research is grounded in extensive theoretical literature, which suggests that socioeconomic status influences social capital, which in turn influences well-being. However, recent empirical findings tend toward a bidirectional or even reverse relationship, especially between social capital and well-being. I recognise the complexity of the relationship between social capital and well-being, and acknowledge the need for further exploration of potential bidirectional dynamics in future studies.

The main contribution of my study is the provision of further empirical evidence of the correlational relationships between these elements across diverse population groups, while considering social capital as a multidimensional asset. My research indicates that social capital, viewed broadly as an overall approach toward other people, is indeed a multidimensional phenomenon. Social networks, particularly informal relationships, develop through diverse forms of support extended to and exchanged with people who generally believe in the good intentions of others, even of those they may not know well. Without trust, there is no reciprocity, and without the two, there are no social relationships. The notion of their coexistence is highly persuasive and supported by moderate correlations between the three dimensions. Excluding one of them from any analysis in this research, notably inflated the estimates for the others. Hence, I conclude that social capital is fundamentally multidimensional.

6.1 Social capital and socioeconomic resources

Previous literature has consistently evidenced that social capital tends to amass among the most advantaged social segments (Bourdieu, 1986, 1990; Lin, 2001). According to Bourdieu (1986), this is not necessarily a result of a conscious utilitarian endeavour; rather, those who possess ample socioeconomic resources are seen by many as successful and attractive individuals with whom others wish to relate.

Similarly, the present research found evidence of the better-off possessing the largest volumes of social capital. While previous literature mainly focused on the socioeconomic gradient in social networks, this thesis suggests that socioeconomic resources are also associated with other dimensions of social capital. Moreover, this study indicates that the relationship between SES and social capital exists among adult populations but is less evident among young adolescents. This finding suggests that the relationship between socioeconomic resources and social capital may not be stable, but rather varies across life stages.

While thought-provoking, it must be noted that these results are based on a rather small (n = 163) non-representative dataset dominated by families whose education and income level are close to the Finnish average. It could be considered a convenience sample of middle-class families from Southwest Finland. However, more robust data from a representative sample, ideally with repeated measurements, are required before firm conclusions can be drawn.

However, placing these results in the context of existing research, it seems reasonable to assume the following. In early adolescence, socioeconomic background does not play a direct role in building social capital as long as the adolescents' family resources do not substantially differ from those of the dominant average, the last specification being important. Hjalmarsson and Mood (2015) provide persuasive evidence that adolescents who lack the socioeconomic conditions available to their peers have fewer friends than those whose family resources meet the dominant standards. The authors explain that youth who stand out because of substantial resources scarcity are seen by their peers as less attractive for a potential friendship. Similarly, Papapolydorou (2014) observed that in contexts wherein socioeconomic differences are more clear-cut, material cues (clothing, accessories, makeup, etc.) efficiently reveal youngsters' socioeconomic background, and make them aware of socioeconomic hierarchies. In such contexts, young people consciously choose friends among their socioeconomic equals. However, the preference for homophily diverges from Bourdieu's (1986) idea of the better-off being the most appealing company.

Consequently, claiming that socioeconomic resources are irrelevant to social capital in early adolescence appears to be a misguided interpretation. Even if the importance of such resources may increase as young adolescents mature and start

engaging with more diverse social circuits, it is nonetheless likely that at an early age, the significance of socioeconomic background is triggered when confronted with distinct inequalities. However, according to my first article, in a context where relative equality prevails, adolescents' trust, reciprocity, and social networks do not seem to depend on socioeconomic resources; at least, not directly.

However, this research highlights a potential indirect pathway between social capital and SES. First, my study suggests that even in a context of relative equality, adults' social capital is related to their socioeconomic resources. Their sensibility to SES differences is more refined and they may be exposed to more intangible signals of socioeconomic distinctions than their children. Among adults, SES seems to relate to the ways in which they approach others, especially to the trust they deposit on people. Second, my results suggest that social capital is not transmitted from parents to children the way some biologically heritable traits are, but rather adult behaviour serves as a role model for shaping the social capital of adolescent children. Third, through the parents' example, socioeconomic background indirectly extends its bearing on youngsters' social capital. Notwithstanding the limitations of my dataset, it seems relevant to point out that among both adults and adolescents, the cognitive dimensions of social capital – trust and reciprocity – show the strongest relationship with SES.

My second article focused specifically on the foreign-born population in Finland. Due to the unavailability of specific variables related to social networks, trust and reciprocity, I could only measure social capital through the dimensions of bonding and bridging. This study provided further evidence for the importance of socioeconomic resources in social capital. The results suggest that socioeconomic resources are particularly important when international migrants are settling in a new country. From a broad range of other possible factors, income emerged as the element most consistently associated with building social capital. This may be specific to the Finnish context, wherein the standard and cost of living are high. In striving for homophily with the locals, newcomers must earn a reasonably high income to participate in social life according to the prevailing standards. This again supports the assumption that the greater the disparities – whether socioeconomic, cultural, or ethnic – the more significant of socioeconomic resources become for building social capital.

The significance of income may be particularly prominent as many immigrants have to renegotiate their social status in a new country because the merits or status achieved in the origin country are not necessarily valued equally (Csedő, 2008; Lubbers et al., 2021). In addition, income alone may not ensure that immigrants gain equality with the local population, but when combined with higher levels of education, income increases the probability of newcomers gaining more extensive bonding and bridging capital.

While most life events are said to have an impact on social relationships, international migration and settling in a new country represent extreme events, wherein most social contacts are thrown into turmoil. Other events, like graduation, divorce, or job loss may alter one part of a social network while leaving others unchanged. In such circumstances, the significance of income and education may be less pronounced; however, existing literature shows that they also matter in such contexts. In particular, unemployment or a sudden drop into poverty has been shown to have a detrimental effect on the level of social interaction and involvement, whereas getting out of financial hardship tends to exert an opposite effect (Mood & Jonsson, 2015; Perttilä, 2011). Mood and Jonsson (2015) provide convincing evidence that the connection is likely to be causal in the presented direction. The authors also observed that changing economic conditions mainly affect formal social engagement and participation, and not the closest relationships.

In summary, combining past research with the findings presented in this dissertation suggests that the relationship between socioeconomic resources and social capital may not remain constant over time or across different contexts. Rather, the importance of socioeconomic resources in shaping social capital is likely amplified in contexts with greater inequality.

6.2 Social capital and well-being

The positive relationship between social capital and well-being has been evidenced repeatedly in the literature (e.g. Bjørnskov, 2006; Ferguson, 2006; Forsman et al., 2013; Helliwell & Putnam, 2004; Korkiamäki & Ellonen, 2008; Neira et al., 2018; Portela et al., 2013; Putnam, 2000; Rodríguez-Pose & Berlepsch, 2014). However, studies have not contributed consistently to cumulative knowledge because of variations in the definition and measurements of social capital.

The third and fourth articles in this dissertation reassessed the referred relationship by leaning on Putnam's theory and operationalising social capital systematically as social networks (informal and formal), social trust, and reciprocal behaviour. Using representative datasets, the articles explored social capital and well-being among young adolescents (Article III) and adults (Article IV) in Finland. As expected, our results support past research, indicating a strong positive relationship in both generations.

Both studies utilised regression analyses, controlling for a large set of factors known to be related to well-being, including social class (for adults) and material deprivation (for adolescents). Our results indicated that in both generations, reciprocity and social trust are most crucial elements for well-being, with the former having a slightly greater relevance to the adult sample, and the latter to the adolescent sample. The social network dimension was found to have a substantially weaker but nevertheless significant association with well-being in both generations. Of the different relationship types, close informal relationships with one's spouse or partner (among adults) and family members (among adolescents) emerged as the most important, whereas formal social relationships (i.e. participation in organised social groups) did not hold any relevance for well-being. Based on these findings, it appears plausible to conclude that the relationship between social capital and well-being is similar across age groups.

To understand whether the association between the three dimensions of social capital and well-being vary between the better- and worse-off, we repeated the above analyses for distinct subsamples. The third article compared the relationship between social capital and well-being separately among adolescents at the lower and higher end of the well-being scale. Overall, the results remained largely similar to those of the full sample. However, close, trusted and supportive social relationships emerged as particularly important for young people with low well-being scores. This is in line with the SPFT (Ormel et al., 1999, p. 68), according to which people whose well-being level is low benefit most from any one-unit increase in first-order instrumental goals. Similarly, Putnam (2000) observed that children who fare poorly experience the greatest gains if their social capital increases.

In the fourth article, we conducted separate analyses for different social classes among the adult population. The results were similar to those above; however, in the working class (the lowest), the significance of social capital was somewhat smaller and that of the background variables (including demographic and socioeconomic variables) larger than that of the salariat class (the highest one). This study also found an overall social class gradient in both subjective well-being and the social capital dimensions, with the working class appearing at a disadvantage on all but reciprocity measures.

Although these results do not invalidate the perception of stability between social capital and well-being across population groups, they add nuance to the notion. Social capital emerges as an important covariate of well-being in all walks of life; however, for adults in the lower social strata, a range of other factors (not examined in this dissertation) also demonstrate strong association with well-being.

Although it is not possible to confirm causal mechanisms or the direction of these relationships using the datasets at hand, the findings from both generations consistently demonstrate that the link with well-being is primarily rooted in cognitive dimensions of social capital. This aligns also with previous research (Jones et al., 2014; also Nyqvist et al. 2008). Possibly, the cognitive dimensions correlate more strongly with well-being due to their reliance on subjective evaluations and similar measurement scales, unlike measures of social networks. While removing subjectivity from these measures is challenging, future studies should, at the very least, harmonize the scales used across different social capital dimensions. Another

potential avenue for future research would be to employ position, resource, and trust generators to measure social capital and verify their relationship with well-being.

Nevertheless, the importance of cognitive dimensions is logical because trust and reciprocity reflect the quality of social relationships. This aligns with the SPFT (Ormel et al., 1999), which posits that trustworthy and supportive relationships foster emotional well-being. Without such qualities, social networks, even if numerous and widespread, resemble hollow structures devoid of genuine significance.

Thus, it seems reasonable to suggest that apparent inequality in well-being can be reduced, even if not eliminated, by strengthening social capital and affective relationships, especially among the most disadvantaged population groups.

6.3 Methodological insights

This dissertation employed four popular methodological techniques to model multidimensional social capital. Here, it is opportune to reflect on what I have learnt methodologically about multidimensional social capital. Albeit not startling novelties, I list below key lessons I have learnt from my years of research.

First, I have come to realise that the three dimensions of social capital are correlated to the extent that when one is absent from the model (but included in the error term), the resulting estimates tend to overemphasise the significance of the included dimensions because of the unobserved variable bias. Therefore, the search for more robust results starts with the inclusion of all three dimensions in the same analysis.

Second, fitting multidimensional social capital into a regression model is straightforward as long as it is addressed as the regressor explaining the variance in any given dependent variable. Despite the moderate correlation between the dimensions, the emergence of multicollinearity is unlikely. What remains important is the selection of individual variables following the principle of parsimony to preserve statistical power.

Third, when placed on the other side of a regression equation and taken as a dependent variable, the multidimensionality of social capital becomes an issue that necessarily requires simplification or alternate modelling method. Excessive simplification, which eventually occurred in the second article of this dissertation, blurs relationships and reduces the potential contribution of the findings. Since the dimensions may have unique predictors, as suggested by the first article, it is important to differentiate them clearly. Therefore, the most reasonable approach is to depart from conventional regression analysis when considering social capital as the outcome.

Fourth, while multidimensional social capital is a more realistic concept, it is harder to address consistently across datasets due to the lack of standard measures for its dimensions. Adopting a simplified definition may be the only feasible option to achieve measurement consistency. However, if the interest is solely in social networks, it would be more precise to address the topic using this term rather than referring to 'social capital', which would obscure the focus. If the interest is indeed in social capital and a simplified approach is needed, tools like a resource generator can offer reasonable results while retaining some multidimensionality. Nevertheless, the risk of biased results remains. The bottom line is that there will always be a tradeoff between obtaining unbiased results and maintaining consistent operationalisation of social capital. Embracing the multidimensional concept of social capital remains the most promising option for enhancing the likelihood of accurate findings, even at the cost of operational consistency with prior studies.

6.4 Limitations

Ideally, this research would have involved a life course analysis of social capital. However, in the absence of suitable longitudinal data, I relied on several crosssectional datasets collected from different individuals at different points in their lives. Nevertheless, I have interpreted my results as indicative of social capital's relevance over time, as if they were referring to the same individuals.

The articles in this dissertation are based on the analysis of four distinct crosssectional datasets, which were selected primarily because they comprise thematically relevant measures for the research objectives. However, reliance on cross-sectional data is accompanied by obvious limitations. Cross-sectional data capture only a snapshot of a particular time point and do not provide the temporal dimension necessary for inferring causality or understanding the underlying mechanisms of observed relationships. Additionally, one of the datasets used in this analysis that is particularly central to the conclusions regarding the relationship between social capital and socioeconomic status, was relatively small (n = 163) and nonrepresentative. This limitation affects the generalisability of the findings and underscores the need for further research.

To limit variation in the results due to contextual differences, this dissertation builds exclusively on data collected in Finland. Based on similar cultural and socioeconomic circumstances, the Finnish context can be reasonably compared to other Nordic countries; however, given its distinctive characteristics, such as being a global leader in subjective well-being and exhibiting a high average level of social capital (regardless of the measurement method), it cannot be considered representative of any broader European or global context. Therefore, the generalisability of these findings is limited.

Recent literature suggests that the associations tested in this dissertation may be bidirectional; however, these studies operationalize social capital differently from the present research. Additionally, the cross-sectional design here cannot corroborate or refute those earlier findings. While this dissertation provides insights into the associations between social capital, socioeconomic resources and well-being, it cannot draw definitive conclusions on the direction or causality of these relationships. These limitations highlight the need for future research employing longitudinal designs to elucidate the mechanisms and dynamics of social capital over the life course.

Nevertheless, I hope that my research will inspire others to pay more attention to the cognitive dimensions of social capital and further explore these relationships in different geographic and cultural settings – ideally with longitudinal data. Perhaps, my work can also challenge the research community to think through alternative approaches to measuring and modelling social capital as a multidimensional resource. An interesting approach would be to apply a position/resource generator more innovatively to studies analysing the association between social capital and well-being.

7 Conclusion

To my knowledge, this research represents the first attempt to systematically measure the relationship of social networks, social trust, and reciprocity with socioeconomic resources and well-being across different age and population groups. Given the cross-sectional nature of the data, it was not feasible to establish causality or directional relationships among these elements. Nonetheless, this study contributes to the literature by providing further evidence of correlational associations among these factors and outlining potential pathways through which social capital may flow.

This dissertation corroborates findings from earlier studies showing that socioeconomic resources play a significant role in shaping social capital in adulthood, and their significance intensifies during life events that necessitate the establishment of new relationships under altered circumstances. Furthermore, the cognitive dimensions of social capital, trust and reciprocity, display the highest levels of sensitivity to socioeconomic resources.

Moreover, the present research offers evidence that during early adolescence – a context characterised by relative equality – socioeconomic resources do not directly relate to social capital formation. Instead, adolescents build their social capital by relying strongly on the behavioural example of their parents. However, it is through parents' behaviour that the significance of socioeconomic background extends to adolescents. Combined with the results of previous research, it appears plausible to assume that greater societal inequality increases the importance of socioeconomic resources in shaping social capital acquisition, even at a young age.

This dissertation advances the literature by substantiating a robust link between social capital and subjective well-being. It shows that trust and reciprocity are pivotal dimensions of social capital that are strongly associated with well-being in both adult and adolescent populations. Furthermore, the findings suggest that adolescents with lower levels of well-being experience more significant improvements for each unit increase in social capital. However, among adults who experience scarcity of primary resources such as food, money, and education, other factors alongside social capital appear to play a significant role in their well-being. Finally, after several years of research on social capital and well-being, I have come to the obvious conclusion that what matters for well-being is not the quantity of social relationships but their quality. It is this qualitative dimension that makes social capital significant, and where its real value resides. For 'work ergonomics', it may be tempting, sometimes even unavoidable, to simplify complex mechanisms. However, in the real world, these elements exist as compounds because life is complex.

Abbreviations

AIC	Akaike information criterion
BIC	Bayesian information criterion
CFI	Comparative fit index
ESeC	European Socio-Economic Classification
ESS	European Social Survey
FinMonik	Survey on Well-being among the Foreign-born Population in Finland
ISCWeB	International Survey of Children's Well-being
RMSEA	Root mean square error of approximation
SEM	Structural equation method
SES	Socioeconomic status/background/resources
SLSS	Student's life satisfaction scale
SPFT	Social production function theory
SRMR	Standardised root mean square residual
TENK	National Research Ethical Board in Finland
TLI	Tucker Lewis index
UQR	Unconditional quantile regression

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	Article I	Article II	Article IV
ς χιοκί Ι	How many people are there with whom you can discuss intimate and personal matters? (1 'with no one', 7 'with 10 or more')	How many good friends do you have who live in Finland? Consider all those whom you can trust and who can help you when you are in need	How many people are there with whom you can discuss intimate and personal matters? (0, 1, 2, 3, 4-6, 7-9, 10 or more)
iən lamıdı	How often do you meet socially with friends, relatives or work colleagues? (1 'never', 7 'every day')		How often do you meet socially with friends, relatives or work colleagues? (1 'never', 7 'every day')
4			Lives with husband/wife/partner ('yes' vs. 'no')
томовкя	During the past 12 months, how often did you involve in work for voluntary or charitable organisations? (1 'not at all', 6 'at least once a week')		During the past 12 months, how often did you involve in work for voluntary or charitable organisations? (1 'at least once a week', 6 'hever')
<i>ţmorks</i> SOCI∕AL NE	During the past 12 months, how often did you participate in the activities of another organisation or association? (1 'not at all', 6 'at least once a week')	During the past 12 months, how often did you participate in the activities of another association or group? (1 'not at all', 5 'participated three or more times a week')	During the past 12 months, have you worked in another organisation or association? ('yes' vs.'no')
Formal ne	During the past 12 months, how often did you participate in organised hobbies? (1 'not at all', 6 'at least once a week')	During the past 12 months, how often did you participate in the activities of a hobby group? (1 'not at all', 5 'participated three or more times a week')	
	During the past 12 months, how often did you take part in courses, lectures or conferences to increase your knowledge or professional skills? (1 'not at all', 6' at least once a week')		

Appendices

During the past 12 months, how often did you participate in the activities of: your own language or culture group? (1 'not at all', 5 'participated three or more times a week') During the past 12 months, how often did you participate in the activities of a political association? (1 not at all', 5 'participated three or more times a week') During the past 12 months, how often did you participate in the activities of sports associations? (1 'not at all', 5 'participated three or more times a week') During the past 12 months, how often did you participate in the activities of a labour union? (1 'not at all', 5 'participated three or more times a week') During the past 12 months, how often did you participate in the activities of a religious or spiritual society? (1 'hot at all', 5 'participated three or more times a week')

During the past 12 months, how often did you participate in the activities of associations for children, youth, or families? (1 'not at all', 5 'participated three or more times a week') During the past 12 months, how often did you participate in the activities of associations for older people? (1 'not at all', 5 'participated three or more times a week') Are you currently in full-time job/part-time job? ('no' vs. 'yes')

	Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? (0 'you cannot be too careful', 10 'most people can be trusted')	Do you think that most people would try to take advantage of you if they had the chance, or would they try to be fair? (0 'Most people would try to take advantage of me', 10 'most people would try to be fair')	Would you say that people try to be helpful most of the time or that they are mostly looking out for themselves? (0 'people mostly look out for themselves', 10 'people mostly try to be helpful')
To what extent do you feel belonging toward: your municipality?' (1 'totally', 4 'hot at all'; multiple choices allowed) To what extent do you feel belonging toward: Finns?' (1 'totally', 4 'hot at all'; multiple choices allowed) To what extent do you feel belonging toward: Europeans?' (1 'totally', 4 'hot at all'; multiple choices allowed) To what extent do you feel belonging toward: people of your country of origin?' (1 'totally', 4 'hot at all'; multiple choices allowed) To what extent do you feel belonging toward: people of your country of origin?' (1 'totally', 4 'hot at all'; multiple choices allowed) To what extent do you feel belonging toward: citizens of the world?' (1 'totally', 4 'not at all'; multiple choices allowed)			
	Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? (0 'you cannot be too careful', 10 'most people can be trusted')	Do you think that most people would try to take advantage of you if they had the chance, or would they try to be fair? (0 'Most people would try to take advantage of me', 10 'most people would try to be fair')	Would you say that people try to be helpful most of the time or that they are mostly looking out for themselves? (0 'people mostly look out for themselves', 10 'people mostly try to be helpful')
		Social trust	
		TRUST	

you receive help and	you provide help and					
ou are close to when you	i are close to when they					
6 'completely')	6 'completely')					
To what extent do	To what extent do					
support from people yo	support to people you					
need it? (0 'not at all',	need it? (0 'not at all',					
When you are in need, from whom do you receive practical help? (1 = spouse/other close family members, 2 = close friends, 3 = close colleagues, 4 = close neighbours, 5 = other close people, 6 = nobody)						
To what extent do you receive help and	To what extent do you provide help and					
support from people you are close to when you	support to people you are close to when they					
need it? (0 'not at all', 6 'completely')	need it? (0 'not at all', 6 'completely')					
help	help					
Receiving	Providing					
КЕСІРROCITY						

		Article I	Article III
	<i>с</i> ү		Do you currently have any person you are close to, with whom you can talk about almost any personal matter? (0 'none', 3 'several close persons')
SXS	nowiai		How often do you spend time relaxing, talking, or having fun with your family? (0 'never', 5 'every day')
IOWT	אנשפן ע	How often do you see your friends when not at school? (1 = never, 4 = every day)	How often do you see your friends when not at school? (0 'never', 5 'every day')
AL NE	ojul	How often do you play or spend time with others of your age? (1 = never, 4 = three or more times a week)	How often do you play or spend time with other kids? (0 'never', 5 'every day')
100		How many friends do you have? (1 = none, 4 = 4 or more)	
S	Formal Formal		How often do you usually participate in hobbies or leisure activities in group? (0 'never', 5 'every day')
			How strongly do you trust your family members? (1 'not at all', 5 'very strongly')
-	ţsr		How strongly do you trust your friends? (1 'not at all, 5 'very strongly')
ารบรา	כושן נגר	How strongly do you trust your neighbours? (1 'not at all', 5 'very strongly')	How strongly do you trust your neighbours? (1 'not at all', 5 'very strongly')
L	oS	How strongly do you trust your schoolmates? (1 'not at all', 5 'very strongly')	How strongly do you trust your schoolmates? (1 'not at all', 5 'very strongly')
		How strongly do you trust Finns in general? (1 'not at all', 5 'trust strongly')	

Appendix 2. Original variables used for measuring the dimensions of social capital – Adolescent respondents.

	d	If I have a problem, people in my family will help me (1 'disagrees', 5 'fully agrees')	If I have a problem, people in my family will help me (1 'disagrees', 5 'fully agrees')
	ləd bu	If I have a problem, I have a friend who will support me (1 'disagrees', 5 'fully agrees')	If I have a problem, I have a friend who will support me (1 'disagrees', 5 'fully agrees')
YTIC	iviəcə§	If I have a problem at school, other children will help me (1 'disagrees', 5 'fully agrees')	If I have a problem at school, other children will help me (1 'disagrees', 5 'fully agrees')
0291	J		If I have a problem at school, my teachers will help me (1 'disagrees', 5 'fully agrees')
ЗЕС	dlər	If a family member of mine encounters a problem, I try to help them (1 = totally disagree, 4 = totally agree)	
	l gnibiv	If a friend of mine encounters a problem, I try to help them (1 = totally disagree, 4 = totally agree)	
	Ριον	If a class mate of mine encounters a problem at school, I try to help them (1 = totally disagree, 4 = totally agree)	

	Article III (adolescent respondents)	Article IV (adult respondents)
	How satisfied are you with your life as a whole? (0 = completely dissatisfied, 10 = completely satisfied)	All things considered, how satisfied are you with your life as a whole nowadays? (0 = Extremely dissatisfied, 10 = Extremely satisfied)
NG AE	My life is going well (0 = does not agree at all, 10 = fully agrees)	
BEI	My life is just right (0 = does not agree at all, 10 = fully agrees)	
ברר- פרפ	I have a good life (0 = does not agree at all, 10 = fully agrees)	
ME NS	I have what I want in life (0 = does not agree at all, 10 = fully agrees)	
	The things in my life are excellent (0 = does not agree at all, 10 = fully agrees)	
		Taking all things together, how happy would you say you are? (0 = extremely unhappy, 10 = extremely happy)

Appendix 3. Original variables used for measuring subjective well-being – Adolescent and adult respondents.

:	,	,		
	Article I (adults)	Article II (adults)	Article III (adolescents)	Article IV (adults)
SOCIOECONOMIC KESCONKCES	What is the highest education level you have actieved? (1 = lower than comprehensive schooling, 14 = doctoral degree) schooling, 14 = doctoral degree) How would you describe the current level of your household income (1 = very difficult to cope, 4 = comfortable) If you sum all sources of income for your household, how much is your combined net income per month (1 = less than 1 010€, 10 = at least 5 361€)	What is the highest education degree you have attained in Finland (0 = not attended education in Finland, 1 = parts of comprehensive school, 2 = comprehensive school, 3 = high school, 4 = professional education, 5 = degree from polytechnic university, 6 = lower tertiary degree, 7 = upper tertiary degree, 9 = does not know) What is the highest education degree, 9 = does not know) What is the highest education degree you have attained abroad (0 = not attended education in Finland, 1 = parts of comprehensive school, 2 = comprehensive school, 3 = high school, 4 = professional education, 5 = degree, 9 = does not know) Do you have enough money to cover your needs? (1 = not at all, 2 = a little, 3 = somewhat, 4 = nearly enough, 5 = enough)		
				Current occupation (open)

Appendix 4. Original variables used for measuring socioeconomic resources – Adult and adolescent respondents

Employment relation (1 'employee' 2 'self-employed' 3 'working for family business') How many employees (if any) do/did you have?	In your main jop, do/did you nave any responsibility for supervising the work of other employees? ('yes' vs. 'no')								
	Which of the following do you	have: clothes in good condition (yes vs. no)	Enough money for school trips and activities (yes vs. no)	Access to the Internet at home (yes vs. no)	The equipment/things you need for sports and hobbies (yes vs. no)	Pocket money/money to spend on yourself (yes vs. no)	Two pairs of shoes in good condition (yes vs. no)	A mobile phone (yes vs. no)	The equipment/things you need for school (yes vs. no)

Original Publications

Tikkanen M & Tikkanen J (2023) Adolescent social capital: An intergenerational resource? Journal of Adolescence

RESEARCH ARTICLE



Adolescent social capital: An intergenerational resource?

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Abstract

Introduction: There is abundant literature about the benefits of social capital in youth, but less is known of the origins of social capital. This study explores whether adolescents' social capital is shaped by their parents' social capital, their family's socioeconomic status (SES), and the socioeconomic profile of their neighborhood. Methods: The study uses cross-sectional survey data gathered from 12 to 13-year-old adolescents and their parents (n = 163) in Southwest Finland. For the analysis,

adolescents' social capital was disaggregated into four dimensions: social networks, social trust, tendency to receive help, and tendency to provide help. Parents' social capital was measured both directly (parents' self-reports) and indirectly (adolescents' perceptions of their parents' sociability). The associations with the hypothesized predictors were analyzed using structural equation modeling.

Results: The results suggest that social capital is not directly intergenerationally transmissible the way some biologically heritable traits are. Yet, parents' social capital shapes youngsters' perception of their sociability, and that, in turn, predicts each dimension of adolescents' social capital. Family SES is positively related to young people's reciprocal tendency, but the pathway flows indirectly through parents' social capital and adolescents' perception of parents' sociability. Conversely, a disadvantaged socioeconomic neighborhood is directly negatively associated with adolescents' social trust and tendency to receive help.

Conclusions: This study suggests that, in the studied Finnish, relatively egalitarian context, social capital is (at least partly) transmissible from parents to children, not directly, but indirectly through the mechanism of social learning.

KEYWORDS

intergenerational transmission, reciprocity, social capital, social networks, socioeconomic status, trust

INTRODUCTION 1

Social capital is an asset with multiple benefits, including better school performance (Lindfors et al., 2018), enhanced health status (Novak et al., 2018), and higher level of well-being (Ferguson, 2006). Research has focused mainly on the outcomes of social capital while less is known of its origins. According to previous research, social capital tends to accumulate among youth from better-off families (e.g., Lannoo et al., 2012; Verhaeghe et al., 2013), but most of these studies have focused only on one dimension of social capital, namely social networks.

In this study, we use a broader definition of social capital formulated by Putnam (2000), which includes social networks, reciprocity, and trust in other people. We assess, in a Nordic context (see Sivesind & Selle, 2010), whether adolescents "inherit" these characteristics from their parents and to what extent socioeconomic conditions relate to each of these elements. We have gathered survey data from adolescents aged 12-13-years and their parents from Southwest Finland. This is, to our knowledge, one of the few attempts to study social capital at such young age (see also Tuominen & Haanpää, 2022). Early adolescence is, however, an interesting phase to study social capital as it is during this period that relationships expand

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beyond the family circuit (Choudhury et al., 2006), the ability to consider other persons' perspectives strengthens (Fett et al., 2014; Padilla-Walker et al., 2018; Stolle & Hooghe, 2004), and trust, trustworthiness, and prosocial and reciprocal behaviors toward others increase due to intensified intimacy and time spent with friends (Carlo, 2006; in Padilla-Walker et al., 2018).

2 | THEORETICAL FRAMEWORK

2.1 | Social capital and its measurements

Social capital literature is dominated by three theoretical schools. Bourdieu (1986) defines social capital as a resource that yields benefits. It is obtained through networks of friends and acquaintances, and its value is determined by the resources of network members. For Bourdieu and Wacquant (2013), the social world is hierarchical, with an individual's position determined by their economic, cultural, and social capital, and the symbolic value of each. These resources are interrelated, but "economic capital is at the root of all the other types of capital" (Bourdieu, 1986, p. 252).

Although Bourdieu makes no claims about causality, he suggests an individual's behavior is guided by their hierarchical position, which is shaped by their habitus, a durable way of being developed through socialization in childhood (Bourdieu, 2005; Bourdieu & Wacquant, 1992). Similar life experiences create a shared "stylistic affinity" within a social group and establish a norm that guides the group's behavior distinguishing it from other groups (Bourdieu, 1984, p. 173; 1990, pp. 53–59).

Accumulating social capital requires frequent interaction and exchange of favors with network members, which demands time, effort, and ultimately economic capital (Bourdieu, 1986, p. 250). However, people from influential families can effortlessly reproduce social capital. Their company is inherently valued and sought after, without requiring significant investment of their own.

Putnam's (2000) school understands social capital more broadly as the way people relate to others expressed in three forms: social networks, reciprocal behavior, and social trust. The three dimensions are tightly interrelated. Frequent interaction cultivates trust and cherishes help provision toward those who are close to us. Reception of help, on the other hand, builds a moral obligation to also return a favor, which on its turn strengthens further the trust between people. However, in empirical research, these three dimensions of social capital are seldom measured together in one study (e.g., Addae, 2020; Lau & Li, 2011; Lindfors et al., 2018).

Putnam observes social capital is unequally distributed across population groups; informal social relationships are common across social hierarchies, but distant or formal relationships are more common among the better-educated higherearners (Putnam, 2000, pp. 93–94). While Putnam considers social capital as a generally valuable resource, he claims that children who grow up in family circumstances with low stocks of social capital can gain the most if the volume of their social capital increases.

In Coleman's (1988) (Coleman & Hoffer, 1987) school, social capital is taken as a characteristic of social structures, not of individuals. It is expressed in social norms, sanctions, obligations, expectations, trust, and information flows. The denser the social structure, the more there is social capital that can facilitate the achievement of a common goal. In this sense, a "social closure," where all network members frequently interact with each other, is the most efficient structure.

In this paper, we seek to form an overall understanding of social capital among young adolescents in a Nordic context. We take Putnam's concept of social capital as our main object of research. It can be viewed to encompass Bourdieu's social capital, but it employs a more holistic view on human relationships. We also approach Coleman's perspective of structural social capital as we account for the context of interaction between adolescents and their parents. We understand the context as a frame within which social relationships develop and in which individual level social capital may be transmitted. However, if not otherwise specified, social capital here refers to the Putnamian three-dimensional concept.

The aim of this study is to test for potential intergenerational links of social capital. We also assess whether social capital as a multidimensional asset relates to socioeconomic resources. While we cannot establish causation, we assume that socioeconomic resources predict adolescent social capital, though the reverse may also be true.

A multidimensional approach to social capital is relevant not only for theoretical motives, but also because the different dimensions have found to be correlated (Helliwell & Putnam, 2004; Tuominen & Haanpää, 2022) and yet, they may have different origins. Below, we go through some often-referred mechanisms, which earlier research has associated with the shaping of young people's social relationships, trust, and reciprocal behaviors. However, to our knowledge, this is the first paper considering simultaneously the different dimensions of social capital and several possible origins of each at a young age.
2.2 | Influence of parents

According to social learning theory (Bandura, 1982), social interaction is a practice learned in early childhood through socialization, which is a complex, multidirectional process involving most importantly the family, but also the major institutions and social settings, including neighborhoods and communities (Peterson, 2005; see also Bronfenbrenner, 1986). As part of the socialization process, parents open their networks to their children and pass their values, perspectives, and examples onto them. This happens mainly through role modeling and verbal persuasion (Bandura, 1982), but it is also shaped by meanings, shared experiences, and individual interpretations (e.g., Kuczynski, 2003). Socialization is an important driver of intergenerational transmission, which refers to a process in which parents' characteristics are transferred to their children (Bowles et al., 2009; Liu et al., 2018). Indeed, previous research has extensively shown intergenerational associations regarding, for instance, attitudes, values, behaviors, and social emotions (e.g., Anger, 2012; Barni et al., 2013; Brenning et al., 2012; Meeus, 2016).

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Weiss (2012) studied intergenerational transmission of social capital (conceptualized as neighborhood attachment and participation, school attachment, and religious participation) in the US context, and found a significant association between middle- and high-school students' (mean age 16 years) social capital and that of their parents (operationalized as participation in organized social activities). Weiss suggests that the intensity of parents' participation in social activities influences the standard with which adolescents proportionate their own level of social participation.

Specific socialization mechanisms, such as observational learning and rewards, have been linked to children's acquisition of new skills, resources, and behaviors.

However, children's perceptions of their parents' behaviors can be more related to their adjustment than the actual behaviors of their parents (Richaud de Minzi, 2013; Schaefer, 1965). In fact, evidence shows that children's perception of their parents' attitudes and behavior can influence various child-level outcomes (e.g., Dinkelmann & Buff, 2016; Niermann et al., 2022; Wilk et al., 2018). For instance, children's perceptions of parents' behavior can shape their expectations of social relationships in general, which may, in turn, impact how children feel about and behave toward their peers and other people (Gaylord et al., 2003). Furthermore, there is evidence that parents' self-reports may systematically differ from children's reports about parents' attitudes and behavior (Gaylord et al., 2003; Liu et al., 2022; Niermann et al., 2022). This underscores the importance of addressing children's perceptions alongside parents' self-reports (Barr-Anderson et al., 2010; Wilk et al., 2018).

Based on the social learning theory (Bandura, 1982) and the intergenerational transmission proposition (Bowles et al., 2009), we hypothesize that the three dimensions of Putnamian social capital are all intergenerationally transmitted (H1). We approach this from two perspectives. First, we analyze a hypothesized direct relationship between parents and children's social capital (H1-a; Figure 1). Second, based on previous research revealing incongruencies between children's and parents' accounts of parents' behavior, we include children's perceptions of their parents' sociability in the analysis as a mediator between parents and children's social capital (H1-b; Figure 2).



FIGURE 1 Hypothesized model of adolescents' social capital (H1-a, H2, and H3); all associations expected to be positive with the exception of neighborhood socioeconomic disadvantage the associations of which are assumed to be negative.



FIGURE 2 Hypothesized model of adolescents' social capital (H1-b, H2, and H3); all associations expected to be positive with the exception of neighborhood socioeconomic disadvantage the associations of which are assumed to be negative.

2.3 | Influence of socioeconomic background

Empirical research suggests families' socioeconomic background may explain the volume of social capital possessed by adolescents (e.g., Addae, 2020; Andersson et al., 2018; Nygård & Behtoui, 2020). The operationalisation of both social capital and socioeconomic background, however, varies between the studies. Moreover, the causal mechanism is not very clear and the direction of the relationships may operate to both directions.

Bourdieu used the term "social class" to refer to family background, which he claimed manifests in one's lifestyle (Bourdieu & Wacquant, 2013). In this paper, we use "socioeconomic status" (SES), which is often taken as a more direct measure of parents' education, income, and occupation, which are associated with various child outcomes (Bradley & Corwyn, 2002).

Typically, youth from higher SES backgrounds report more resourceful networks than their lower SES peers (e.g., Verhaeghe et al., 2013). This is logical due to the principle of social homophily (Lin, 2001). For instance, Papapolydorou (2014) studied teenagers' friendship networks in London and noticed that young people could easily decode each other's socioeconomic origin by the language use, dress code, consumption patterns, and leisure activities. However, contrary to Bourdieu's (1986, pp. 250–251) assertion about the allure of glamorous family background, she found that friendships were mostly developed between "social equals." Socioeconomic sameness fostered like-mindedness and shared value structures, while a thought of befriending students with different socioeconomic background was mostly rejected. If anything, people with dissimilar backgrounds were distant acquaintances (Papapolydorou, 2014; see also Lin, 2001).

According to Hoff et al. (2002), parental education is the most influential element of family SES as it relates broadly to the development of children's social competences. Parental income plays also an important role. According to the family stress model, economic stress may upset parents' mental health and exacerbate their parenting practices, which can, in turn, deteriorate the well-being of the whole family and impact the child development (Hartas, 2011; Roy et al., 2019). While the effects of parental education and income on children are often indirect (Hartas, 2011; Hjalmarsson & Mood, 2015), they also have a more direct impact through their influence on the neighborhoods in which families live and the respective social surroundings of the children (Bronfenbrenner, 1986; Rakesh et al., 2022).

Childhood economic circumstances may also have a long-lasting influence on the level of social trust. Trust implies investing resources ahead of time and reaping the benefits later. This involves some level of uncertainty about the returns. Life-history theory suggests that a childhood home marked by resource scarcity spawns life strategies that prioritize fast returns of any investment to limit the risk of missing out a reward. Therefore, children in low-income families often exhibit lower levels of social trust (Stamos et al., 2019). Economic stress may also affect prosocial behavior, although the results are inconclusive regarding the direction of the effect. Some authors claim that economic stress reduces the tendency to help others (Davis & Carlo, 2019), while others suggest that people who experience hardships may demonstrate heightened sensitivity toward the hardships of others (McGinley et al., 2010).

The scarcity of literature on the effects of SES on *multidimensional* social capital leaves the discussion open. In the present study, we hypothesize that family SES relates positively to every dimension of adolescents' social capital (H2) but also to those of their parents (Figures 1 and 2).

2.4 | Influence of neighborhood

As mentioned above, neighborhoods are an important social setting influencing the socialization process (Bronfenbrenner, 1986; Peterson, 2005). Positive social relationships require trust that other people are generally well-intentioned (Coleman & Hoffer, 1987; Putnam, 2000; Ross et al., 2001), but mistrust is common in neighborhoods populated by people with fewer resources and where disorder, vandalism, and poor maintenance of public places are widespread (Ross et al., 2001). According to Laurence (2019), in disadvantaged neighborhoods, young people have fewer positive and more frequent negative interactions and lower levels of trust in their neighbors. Social disorganization theory (Sampson & Groves, 1989) posits that structural characteristics, such as residential mobility, ethnic heterogeneity, family disruption, and poverty, reduce social control in a community (Elliott et al., 1996; Sampson, 2012; Valdimarsdóttir & Bernburg, 2015). Reduced social control loosens the connections between people and decreases their involvement in joint activities (Veysey & Messner, 1999, p. 157).

Coleman understands social control as an expression of collective social capital. He asserts that when parents know their children's friends and their parents, it creates an' intergenerational closure' in the community, which is crucial for maintaining social control. In such closure, parents can jointly agree upon the set of rules they collectively impose on their offspring (Coleman, 1988; Coleman & Hoffer, 1987). Some studies have found evidence supporting Coleman's proposition; for example, in communities where parents know each other, adolescents are less often involved in delinquent behavior (Valdimarsdóttir & Bernburg, 2015).

Most research on neighborhood effects has focused on the highly stratified US society. The social landscape looks rather different in Europe, particularly in the more egalitarian Northern Europe with extensive welfare systems and high levels of social trust (Pichler & Wallace, 2009). Although there are disadvantaged neighborhoods in Northern Europe as well, the differences between the upper and lower ends of the socioeconomic ladder are less extreme, even if the gap has widened over the past decades (Erola, 2010). Therefore, we hypothesize that, in the Nordic context, neighborhoods' socioeconomic profile relates to adolescent social relationships, social trust, and reciprocity (Figures 1 and 2), but the associations are weak (H3).

3 | MATERIALS AND METHODS

As discussed above, this study explores whether adolescents "inherit" social capital from their parents, and to what extent the socioeconomic context may explain social capital accumulation. We hypothesize that all three dimensions of social capital (i.e., social networks, trust, and reciprocal tendencies) are intergenerationally transmitted (H1). We assume the transmission may occur directly like biologically inherited traits (H1-a) or indirectly through social learning (H1-b), or both. Additionally, we hypothesize that both family SES (H2) and neighborhood SES (H3) relate to every dimension of the adolescents' social capital, but the latter does so only weakly in a North-European context. Although the relationship between socioeconomic background and social capital and may be bidirectional, we model the former as a predictor of the latter as this is the dominant assumption in youth-related literature.

3.1 | Participants and procedure

This study uses the cross-sectional survey Social Capital of Children and Adults 2018 (Tuominen 2018). The survey was conducted among sixth-grade comprehensive school students (mean age: 12.47 years) and their parents or legal guardians in Southwest Finland.¹ Of the region's 62 comprehensive schools, 21 (34%) agreed to take part in the study, and of all the 626 sixth graders in these schools, 460 were authorized by their parents and consented themselves to participate in the survey. At the same time, 170 parents responded to a questionnaire addressing them.²

This study utilizes a subsample of 163 students (26% of sixth graders in the participating schools) who met two criteria: their parents participated in the study, and they had studied at the same school for at least the past two school years.³ The latter criterion is important for two reasons. First, schools are vital locations where young people build their social networks, and a change in school may cause a significant disruption in this process. Second, to build an indicator for neighborhood SES, we matched the postal code of the schools with the official postal code area statistics of Statistics Finland, which are from the year 2017 (i.e., from the year preceding our data collection). In Finland, most comprehensive school students attend neighborhood schools (i.e., public schools situated in the areas where they live). Therefore, the area surrounding the school typically equals the students' living area if they have not changed schools.

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¹The survey plan was previously reviewed and approved by the Ethical Review Board of the researchers' host institution and by municipal education authorities. ²See more details about the survey sample in the Supporting Information: Appendix I.

³As presented in the Supporting Information: Appendix, the demographic and capital measures of the youngsters in the subsample did not significantly differ from the full sample.

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The questionnaires were designed to capture comparable information from the adolescents and their parents regarding their social networks (family, friends, hobby networks, neighbors, and, in the case of adolescents, schoolmates, and school personnel), the level of trust, and the propensity to provide and receive help (i.e., reciprocal behavior). Students completed the questionnaire during school hours with guidance provided by either a teacher or the first author. Parents participated in the study in their own time following the instructions included in the questionnaire.

3.2 | Measures and data analyses

Data on adolescent social capital came directly from the students' survey. Information on parents' social capital came from two sources: directly from the parents' survey and indirectly from the students' survey who reported on their parents' social behavior (sociability) as they perceive it.

The analysis builds on factors measuring: (1) adolescents' social capital, (2) parents' social capital, and (3) adolescents' perception of their parents' sociability, as well as separately calculated factor scores of families' SES and neighborhood socioeconomic disadvantage. Two sets of confirmatory factor analysis (CFA) were conducted to examine the factor structure and validity of the measures of adolescents and parents' social capital. In the CFA models, residual errors were initially assumed to be uncorrelated, and the factors were allowed to correlate. Internal consistencies of the latent factors were further examined using Cronbach's α (Field, 2009). Due to the restriction caused by the ratio of the sample size to the number of free parameters (Kline, 2011), the factor scores of the two CFA models were saved and used as "observed" variables in the structural equation modeling (SEM) model.

The hypothesized connections (H1-H3) were tested using SEM.⁴ As illustrated in Figures 1 and 2, two hypothetical models were used, one with direct paths from parent's self-reported social capital to adolescents' social capital (H1-a), and another one with adolescents' perception of their parents' sociability mediating the paths from parents' self-reported social capital (H1-b). Both models included the two SES factors (H2 and H3).

The analyses were carried out on Mplus 8.4 with a maximum likelihood estimator with robust standard errors (MLR) (Muthén & Muthén, 2006).⁵ Regarding normality, the univariate distributions of the variables were within a reasonable range (skewness ±2, kurtosis ±7) (Curran et al., 1996), except for two variables.⁶

The fit of the CFA and SEM models was evaluated by χ^2 tests (the ratio of the χ^2 value to the degrees of freedom; Byrne, 2012; Hu & Bentler, 1995) and fit indices with the respective cut-off values: root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR) values under 0.08 (Hair et al., 2010; Hu & Bentler, 1998), and Tucker–Lewis index (TLI) and comparative fit index (CFI) values close to or greater than 0.90 (Bentler, 1992; Hair et al., 2010).

It is important to highlight that the relationships between the factors are likely much more complex than presented in the models. For instance, the association of parents and adolescents' social capital may well be bidirectional, and social capital can also produce economic returns (e.g., Aguilera, 2002; Drever & Hoffmeister, 2008), thus, impacting SES. Moreover, with a cross-sectional not-representative data, we are not able to verify causal relationships. Nonetheless, our models are informed by earlier research, and test some of the possible mechanisms for social capital transmission. However, the results can, at the best, only reflect correlations between the elements.

3.2.1 | Adolescents' social capital

The data did not fit well with the initially hypothesized three-factor CFA model; therefore, adjustments were made based on the modification indices. The dimension of reciprocity was separated into two factors (providing help and receiving help), one observed item was removed from the model because of strong cross-loadings, and one residual correlation was allowed (.32; SRH_2 and SPH_2).⁷ With these modifications, a good fit to the data was obtained. The latent factor items and standardized factor loadings of the final adolescents' social capital CFA model are presented in Table 1 along with descriptive statistics.

⁴Due to the hierarchical structure of the student data, a multilevel analysis would have been a sensible methodological choice, but the limited number of clusters (21 schools) did not enable this approach (see Maas & Hox, 2005). However, the intra-class correlations (ICC) of all variables related to adolescents' social capital were checked. The only variable with ICC >10% (nr of hobbies the adolescents participate in) was omitted from the analysis, as it would have required multilevel analysis (see Byrne, 2012, p. 354). ⁵There were few missing data on some observed variables (0.6%–3.0% per item), which were dealt with full information maximum likelihood.

⁶These items were "number of [student's] friends" (SSN_1; skewness -3.7; kurtosis 13.7), and "how often [student] receives help from family when they have a problem" (SRH_1; -2.3; 5.3).

⁷This correlation is likely to results from a higher importance of reciprocity in friendship relationships in comparison to those with family members or classmates.

Item codes	Measurements	Factor loadings	Range	М	SD
	Adolescents' social networks a (α .50)				
SSN_1	How many friends do you have	0.28	1-4	3.84	0.51
SSN_2	How often do you meet your friends outside school	0.62	1-4	3.27	0.81
SSN_3	How often do you spend time with other kids outside school	0.65	1-4	3.20	0.87
	Adolescents' trust in others ^b (α .65)				
SST_1	To what extent do you feel you can trust your classmates	0.73	1-5	3.41	0.95
SST_2	To what extent do you feel you can trust your neighbors	0.62	1-5	2.71	1.02
SST_3	To what extent do you feel you can trust Finns in general	0.50	1-5	2.12	1.03
	Adolescents' tendency to receive $help^{c}$ (α .64)				
SRH_1	If you encounter problems, your family tends to help you	0.36	1-4	3.75	0.55
SRH_2	If you encounter problems, your friends tend to help you	0.64	1-4	3.38	0.68
SRH_3	If you encounter problems, your classmates tend to help you	0.87	1-4	3.13	0.79
	Adolescents' tendency to provide help (α .78)				
SPH_1	If your family members encounter problems, you try to help	0.73	1-4	3.56	0.65
SPH_2	If your friends encounter problems, you try to help	0.71	1-4	3.65	0.60
SPH_3	If your classmates encounter problems, you try to help	0.78	1-4	3.25	0.69

TABLE 1 Latent factor items, standardized factor loadings, and descriptive statistics of adolescents' social capital.

Note: Higher values indicate higher levels of social capital; correlations between SSN and SST .28*, SSN with SRH .35*, SSN with SPH .32*, SST with STR .64***, SST with SPH .39***, and SRH with SPH .81*** (*p < .05; ***p < .001).

^aThe questions on adolescents' social networks followed the formulation used previously in the International Survey of Children's Well-being: isciweb.org and School Health Promotion in Finland.

^bQuestions about social trust proved to be absent in all available surveys targeting young people. We used the trust question applied often to adults ("Do you think that people can generally be trusted, or that you cannot be careful in dealing with people?") as the starting point and formulated 12 concrete questions—six positive and six negative—about the level of trust/mistrust in specific people (family, friends, teachers, class mates, neighbors, unknown Finns, unknown foreigners). The best goodness-off timeasures were obtained when including only the three positive questions (referring to class mates, neighbors, and Finns) even when the negative ones were reversed.

^oThe questions on the tendency of receiving and providing help followed the formulation used previously in the International Survey of Children's Well-being. Although questions about hypothetical situations of obtaining/providing support induce a risk of socially desirable answers (Van Der Gaag & Snijders, 2005), we prioritized question formulations tested and applied in other large-scale surveys.

3.2.2 | Parents' social capital

As mentioned above, two approaches were employed to measure parents' social capital: a direct and an indirect one (see Table 2). For the former, a three-factor CFA model was designed. After allowing a residual correlation (.25) between two variables (PSN_5 and PSN_6), the model fitted the data well. For the latter, the survey included three items that were added to the second SEM model directly, as it was not possible to separately test the factor structure without saturating the model.

3.2.3 | SES of family

Three variables were used to measure families' SES: parents' highest achieved level of education, parents' own subjective assessment of the adequacy of household income, and net monthly income equivalised to household size (see Table 3).⁸ The original level of household income was given using 10 income brackets following the practice applied in, for example, the European Social Survey (ESS Round 6). The obtained values for income were divided by the squared number of household members to obtain the equivalent income level that is sensitive to household size and composition, following a practice also used, for instance, by the Organization for Economic Co-Operation and Development OECD (2019).

⁸Originally, parents' occupation was also included in the model but it was dropped to improve the model fit.

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Item	Measurements	Factor	Range	М	SD
	Parents' social capital (α .70)				
	Parents' social networks (α .61)				
PSN_1	How often do you participate in hobbies	0.56	1-6	4.43	1.77
PSN_2	How often do you participate in voluntary work	0.46	1-6	2.22	1.55
PSN_3	How often do you participate in associations' activities	0.43	1-6	2.48	1.56
PSN_4	How often do you take part in courses outside work	0.52	1-6	2.99	1.42
PSN_5	How often do you meet your friends	0.36	1-7	4.36	1.36
PSN_6	How many close, trusting relationships do you have	0.33	1-7	3.91	1.36
	Parents' level of trust in others (α .83)				
PST_1	To what extent do you find people trustworthy	0.78	1-10	7.23	1.76
PST_2	To what extent do you find people fair	0.79	1-10	7.69	1.76
PST_3	To what extent do you find people helpful	0.80	1-10	7.07	1.62
	Parents' tendency to reciprocate (α .70)				
PRB_1	How often do you offer help to people who are close to you	0.64	0-6	4.98	0.84
PRB_2	How often do people who are close to you offer to help you	0.87	0-6	4.74	1.08
	Parents' perceived sociability ^a (α .60)				
PPS_1	How often do you chat with your parents about your school day	0.65	1-3	2.42	0.65
PPS_2	How often do your parents chat with your friends	0.66	1-3	2.31	0.67
PPS_3	How often do your parents chat with your friends' parents	0.46	1-3	1.91	0.73

TABLE 2 Items of latent factors of parental social capital (with standardized factor loadings), a values, and descriptive statistics

Note: Correlations between parental social capital factors PSN with PST .40***, PSN with PRB .19, PST with PRB .20 (***p < .001). ^aBased on the student data.

TABLE 3	Items of sum scores measuring family SES and neighborhood socioeconomic profile, α values of the sum scores, and descriptive statistics
per item.	

Item codes	Measurements	Range	М	SD
	Family socioeconomic status (a .71)			
SES_1	Respondents' highest achieved education level	1-14	7.36	2.94
SES_2	Subjective assessment of the household income level	1-4	3.01	0.77
SES_3	Equivalised per person gross monthly income (based on household gross monthly income)	451-3791	1880.07	657.37
	Neighborhood socioeconomic profile ^a (a .92)			
NSP_1	% of adult population (18+ years) in the postal code area whose annual income is within two lowest income deciles (max. 13,287 €/year)	12.28-32.38	20.28	6.26
NSP_2	% of adult population (18+ years) in the postal code area whose annual income is within two highest income deciles (more than 31,874 €/year) (reversed)	9.36-29.23	18.63	6.14
NSP_3	% of adult population (18+ years) who were unemployed on the last working day of the year	5.02-24.03	11.97	5.80

Abbreviation: SES, socioeconomic status.

^aHigher values indicate higher levels of socioeconomic disadvantage.

3.2.4 | Socioeconomic disadvantage of neighborhood

Publicly available postal code area statistics were used to define the SES of the neighborhoods where the participating schools were located. For this purpose, three variables were used: proportion of adult residents in the two lowest income deciles, proportion of adult residents in the two highest income deciles (reverse-coded), and the proportion of adult residents who

were unemployed (see Table 3). Jointly, the three variables measure the level of socioeconomic disadvantage of the neighborhood.

4 | RESULTS

As presented in Table 1, the mean values of adolescents' and their parents' social capital were high for nearly all social capital variables. Apart from the gender bias among both adults and adolescents (see Table 4), we find no other indication of significant selection bias in the sample. Compared to the national data (Table 4), our sample appears comprising Finnish mid-range SES households with somewhat better educated but slightly lower earning parents than the country's average.

We had two alternative hypotheses for the intergenerational transmission of social capital, assuming either a direct relationship between parents' self-reported social capital and adolescents' social capital (H1-a), or an indirect relationship mediated through adolescents' perception of their parents' sociability (H1-b). Family's SES (H2) and the degree of socioeconomic disadvantage in the neighborhoods (H3) were assumed to relate to adolescents' social capital both directly and through parental social capital. All associations were hypothesized to be positive apart from neighborhood's socioeconomic disadvantage, which was assumed to contribute negatively to both adolescents and parents' social capital.

As illustrated in Figure 3, hypothesis H1-a was not supported by our results. Although a relatively good fit was reached between the model and the data ($\chi^2(97)$: 129.14, p: .02; RMSEA: 0.05; SRMR: 0.06; CFI: 0.91; TLI: 0.94), no statistically significant direct associations were found between the social capital dimensions of the parents and adolescent.

The alternative hypothesis, H1-b, obtained partial support (Figure 4). According to the model fit indices, it was necessary to add an un-hypothesized path from parent's trust to parent's social networks to attain a good fit: $\chi^2(34)$: 40.01, p: .22; RMSEA: 0.03; SRMR: 0.05; CFI: 0.98; TLI: 0.96. Parent's social networks and trust in others were positively associated with adolescents' perception of parents' sociability, which, in turn, was connected to all the four dimensions of adolescents' social capital. However, there was no significant path from parent's self-reported reciprocal behavior to the adolescents' perception of their sociability. It is possible that such acts as exchange of favors are less perceptible to the adolescents in comparison to the more directly interlinked social networks and trust.

Family's SES was directly associated with parents' trust and reciprocity behavior, and indirectly with parent's social networks through social trust. Contrary to the hypothesis (H2), family SES had no direct associations with adolescent social capital. However, one statistically significant indirect association through parental social capital and adolescents' perception of their sociability was detected with adolescent's tendency to providing help to others (0.04; p = .03).

Demographics	Survey sample (n: 163)	National population (2018) ^a
Students		
Girls (%)	54.6	
Age (mean)	12.5 years	
Parents		
Women (%)	85.3	
Age (mean)	43.6 years	
Basic education (%)	1.9	13.5
Higher education (%)	44.4	43.1
Equivalised net yearly income (median)	23,787.0 euros/person	24,752.0 euros/person
Postal code area statistics	Areas around sample schools (2017) ^a	All postal code areas in the country (2017) ^a
% of adult population (18+ years) in the postal code area whose annual income is within two lowest income deciles (max. 13,287 €/year)	20.3	20.4
% of adult population (18+ years) in the postal code area whose annual income is within two highest income deciles (more than 31,874 €/year)	18.6	19.8
% of adult population (18+ years) who were unemployed on the last working day of the year	12	11.3

TABLE 4 Descriptive statistics on sample versus overall population.

^aSource: Official Statistics of Finland (2017, 2018a, 2018b).



FIGURE 3 Structural model of adolescents' social capital (H1-a, H2, and H3) with standardized coefficients and R^2 values Only statistically significant paths depicted; *p < .05; **p < .01; ***p < .001.



FIGURE 4 Structural model of adolescents' social capital (H1-b, H2, and H3) with standardized coefficients and R^2 values. Only statistically significant paths depicted; *p < .05; **p < .01; ***p < .001.

Lastly, as hypothesized (H3), the neighborhood's socioeconomic disadvantage was found to be weakly negatively associated with adolescents' social trust and their tendency to receive help from others, but no relationship was found with their social networks or tendency to help others. No associations were detected with parents' social capital (self-reported or the one reported by adolescents).

To sum up, according to these results, all adolescent social capital dimensions relate to their perception of their parents' sociability. Their tendency to provide help relates indirectly to their family SES, and their trust and tendency to receive help relates to the neighborhood SES. Detailed results with all coefficients are presented in Supporting Information: Appendix II.

5 | DISCUSSION

This study delved into the origins of adolescent social capital and assessed the extent to which it is transmitted intergenerationally by parents, and associated with the SES of their families and the SES of their neighborhoods. Regarding the intergenerational transmission, two potential pathways were considered, a direct and an indirect one. The former refers to direct heritability while the latter builds on the assumption of a cognitive process where children are influenced by their

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perception of the parents' behavior, which may differ from the parents' actual conduct, particularly if their respective social circuits are disconnected (Gaylord et al., 2003; Liu et al., 2022; Niermann et al., 2022).

To our knowledge there is only one earlier study on intergenerational transmission of social capital that focuses on US adolescents (mean age: 16 years). Weiss (2012) observed a direct correlation between adolescents and their parents' social capital even though he operationalised social capital differently for the two generations.

Our data was collected among early adolescents (mean age: 12–13 years) in Finland, a Nordic universalistic welfare state with more moderate social stratification. We conceptualized social capital in line with Putnam (2000) as networks, trust, and reciprocity, and measured these dimensions in a similar way among adolescents and their parents.

In our sample, both generations exhibited a high average level of social capital. This is not surprising as several earlier studies have observed that the volume of social capital is significantly higher in the Nordic countries than in most other parts of the world (e.g., Bjørnskov, 2003; Ferragina, 2017). Contrary to Weiss (2012), we found no significant direct relationships between parents' social capital as they reported it and their children's social capital. Nonetheless, we observed that the parents' reported social capital was strongly related to the perception that the children formed of their sociability, and that in turn related to each dimension of the children's own social capital. Deemed by the magnitude of coefficients, providing and receiving help appear to be the dimensions most sensitive to the parental influence.

These findings are interesting also from a theoretical point of view. The indicators used to assess adolescents' perception of parents' sociability approximate a measure of an intergenerational closure that Coleman wrote about. Our results suggest that in contexts where the parents know each other and each other's children, young people develop more extensive social ties, higher levels of social trust, and more intense reciprocal tendencies. In other words, intergenerational closure provides a favorable structure for the development of individual level social capital. This is logical; in intergenerational closures, relationships between parents and children likely grow more intense, and adolescents' exposure to their parents' example of social behavior is likely to be greater. By contrast, in contexts where parents and their children engage with separate social circuits, parents' role modeling probably remains vaguer, and their respective social practices develop more independently.

We are herewith inclined to draw two conclusions. First, parents' social conduct, which remains unseen or unperceived by their children, does not influence their offspring. This suggests social capital is not directly transmissible from parents to children the way some biologically heritable traits are. Second, and notwithstanding previous point, parents' social behavior that is perceived by their children predicts the volume of social capital accumulated by the youngsters. A shared social context enables the younger generation to learn from the parental example. Therefore, we conclude that social capital is (at least partly) transmissible from parents to children, not directly, but indirectly through the mechanism of social learning. Parents are critical role models for their adolescent children (see also Weiss, 2012; Wu, 2022).

Contrary to our hypothesis and some earlier research (Andersson et al., 2018; Nygård & Behtoui, 2020; Verhaeghe et al., 2013; Verhaeghe et al., 2013; Verhaeghe et al., 2015), we found no evidence of a direct association between families' SES and adolescents' social capital. It should be noted, though, that these earlier studies have defined social capital through the socioeconomic position of network members, which explains the intrinsic relationship between SES and social capital. Moreover, these studies have focused on older adolescents, who are likely more affected by socioeconomic differences, and on societies that are more socially stratified than Finland and the Nordic countries.

We conceptualized social capital in line with Putnam as an overall approach to other people. Such a qualitative perspective on social relationships appears to be less associated with family SES among early adolescents. This is in line with Hjalmarsson and Mood (2015), who found no significant relationship between family income and adolescent friend nominations.

Nevertheless, our findings suggest that, in the studied context, family SES is associated with parents' social capital and—through that and adolescents' perception of their sociability—it relates indirectly to young people's tendency to reciprocate with others. It is possible that the association of social capital with family SES intensifies as the adolescents grow older. The absence of a direct association between SES and adolescents' social capital may also be a consequence of the fact that the sample was dominated by families with mid-range SES in a rather egalitarian Nordic context. Moreover, our data did not include information on the availability of adolescents' own money, which could be more relevant than family SES (Hjalmarsson & Mood, 2015). Further research is needed to shed more light to the relationship between family SES and adolescents' social capital.

Our results showed that a disadvantaged socioeconomic context marked by a high level of unemployment and low average level of income is associated with a lower level of social trust and less frequent reception of help. Contrary to the findings of Laurence (2019), the present study did not find a relationship between neighborhoods' socioeconomic disadvantage and young people's social networks. However, Laurence did not consider parents' social capital as a predictor. Besides, his research focused on older youth (16-17 years old), who undoubtedly spend more time in their neighborhood and, consequently, may be more influenced by the surrounding environment than younger adolescents.

Previous research has shown that, already in early adolescence, social capital may contribute significantly to subjective well-being, overall health, and academic performance. The present study suggests that social capital is at least to a certain

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extent a learned resource, parents providing a powerful example. To support young people's well-being and positive development, home and school education should systematically strengthen young people's social networks, encourage their trust in other people, and accustom them in reciprocal practices. Schools may play a particularly vital role vis-à-vis children and adolescents, who acquire meager stocks of social capital at home. Some dimensions, such as social trust, are largely consolidated during the adolescent years (Stolle & Hooghe, 2004). Therefore, early and systematic investment in social capital is likely to yield valuable development results later in life.

5.1 | Limitations

Our study is among the first ones to explore how the multidimensional social capital may transmit during early adolescence. However, there are several limitations to our study. The sample size (n = 163) was relatively small and cross-sectional, collected only in Southwest Finland. Although we found no significant selection bias regarding parental education or income levels compared to the overall population, it is essential to note that the sample was not randomly selected and is not representative.

The schools that agreed to participate in the study may have some unique characteristics that distinguish them from other schools. Furthermore, it is possible the school personnel chose the participating classes based on specific criteria. However, as explained in the Supporting Information: Appendix, the sample is diverse in terms of school/ class size, language of education, and the percentage of migrant students, and there was no indication of a selection bias.

Often, individuals with higher education and better socioeconomic position are over-represented in survey data (c.f., Cheung et al., 2017). This was also the case in the present study. Additionally, those with high levels of social capital, particularly social trust, may be more likely to participate in surveys. Although such challenges are common in this type of study, they, nevertheless, impact the external validity of the study. It is also possible that the relationship between parents and children's social capital may differ based on the amount of parental social capital. Therefore, the relatively low variance related to socioeconomic background and social capital in our sample may limit further the external validity of our results. In any event, our findings are not generalizable at the national level, and even at the regional level the generalizability can be questioned.

While some of our solutions for the SEM models alleviate these problems to an extent, the relatively complex model requires statistical power that our sample might not fully satisfy. This in turn heightens the risk of type two error. Also, the sample was not sufficiently large for exploring the extent to which abundant parental social capital could compensate for the negative impact of the growth environment, or vice versa. Although demanding from the data perspective, these details would be important topics for future research.

Lastly, adolescents' social capital factors in our models focus almost exclusively on their close social circle. However, according to literature, more distant, heterogeneous social relationships are the ones that mostly relate to SES (Putnam, 2000). Possibly, with a broader scope of social capital factors, more direct associations between adolescents' social capital and SES would have been identified.

While all these limitations should be kept in mind, our study is to our knowledge the only one, thus far, to explore potential intergenerational linkages between children's and parents' social capital covering simultaneously the dimensions of social networks, trust, and reciprocity with similar measures in both generations. We hope to inspire other researchers to test our results with larger representative samples that are followed over a longer period.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available through the Finnish Social Science Data Archive for research, teaching, and study at: https://services.fsd.tuni.fi/catalogue/FSD3594?study_language=fi&lang=en

ETHICS STATEMENT

All procedures performed in the survey Social capital of children and adults 2018 were approved by the Ethical Board of the University of Turku, Finland (14/2018). Informed consent was obtained from all individual participants included in the study. Study participants' rights are protected.

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SUPPORTING INFORMATION

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Building social capital in a new home country. A closer look into the predictors of bonding and bridging relationships of migrant populations at different education levels

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Abstract

This article explores the factors that may facilitate or hinder the development of migrant social capital in a settlement country. We build on Robert Putnam's dyad of bonding and bridging social capital, which are here combined into a single categorical dependent variable. As earlier research shows that higher educated migrants tend to form more extensive social relationships, we explore whether they draw from different background factors to build social capital than those with less education. Separate multinomial regression analyses are conducted for the two education groups using data from the Survey on Well-Being among Foreign Born Population in Finland (n: 5,247). The study finds important differences but also similarities between the education groups. The higher educated group most commonly possesses abundant social capital (i.e. extensive bonding and bridging relationships), while in the lower education group, the proportion of people with scarce social capital (limited bonding and bridging relationships) outnumbers those with abundant capital by over twofold. A satisfactory level of income emerges as the single most important underlying factor that both education groups draw from to build abundant social capital, but it is a far more common characteristic in the higher education group. Yet, income is not enough to explain the disparity between the education groups. Furthermore, the migration-related characteristics shield the higher education group from scarce or one-sided social capital. The lower educated group derive

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benefits from education obtained in the new home country. Individual characteristics outweigh the importance of context-related factors for social capital development.

Keywords: bonding and bridging social capital, social relationships, social networks, migration, socioeconomic status, societal context

1. Introduction

Migration is often driven by a search for improved wellbeing for oneself and one's family. However, migration also breaks social relationships, separates people from their loved ones, and increases the risk of social exclusion. Linguistic barriers, cultural disorientation, lower socioeconomic status, and a sense of dislocation can reduce the motivation for social participation and give rise to feelings of isolation and loneliness (Hendriks et al. 2018). Loneliness, in particular, affects those whose culture and language of origin differ from the culture and language of the settlement country (de Jong Gierveld, van der Pas and Keating 2015).

Social relationships have been identified as playing an important role in improving wellbeing (e.g. Arpino and de Valk 2018), a sense of belonging (Schnell, Kohlbacher and Reeger 2015), social integration (Patulny 2015), and access to employment (e.g. Kanas et al. 2012). Generally, higher educated migrants tend to have broader and more diverse social contacts than those with less education (Martinovic, van Tubergen and Maas 2015; Patulny 2015; Koops, Martinovic and Weesie 2017). This is sometimes explained through their higher human and economic capital (Ryan 2011). They may have a job or a study place settled before migrating, which smooths their social engagement and integration. Some researchers suggest, however, that the development of social relationships largely depends on the length of stay in the host country (e.g. Facchini, Patacchini and Steinhardt 2014), or on one's age at the time of migration, as children adjust easier than adults to a new social environment (e.g. Eve 2010). Yet, other research focuses on the host country context and the presence of other migrants in the settlement area as critical determinants of the newcomers' social connectedness (e.g. Schnell, Kohlbacher and Reeger 2015). Each of these arguments have gained some empirical support, but their relevance is seldom tested systematically in one study.

As social networks are vital to various aspects of life, this study seeks to gain deeper insight into factors that may influence migrants' ability to establish social networks in a new home country. We employ a wide range of measures related to the migration background, socioeconomic status, and societal context, which earlier research has associated with the development of social relationships. We combine all these in one model to assess their respective relevance for social capital building. Given that the social networks of highly educated migrants have been shown to differ from those of less educated ones, we conduct separate analyses for different education groups. Our objective is to understand whether these groups employ distinct resources when creating new social relationships. Additionally, we seek to identify factors that may critically weaken or strengthen the networking capacity of each group. Ultimately, we aim to contribute to the social integration and well-being of migrants in their new settlement country, irrespective of their educational level.

This article analyses a representative sample of over 5,000 foreign-born people who have personally immigrated to Finland. Here, we use the term 'migrant' to refer to them. Throughout the article, we use the concepts of social relationships, social contacts, and social ties interchangeably. We apply the term 'social network' to refer to a larger set of relationships.

2. Predictors of social relationships among migrants

The migration literature includes some insightful descriptions of the manifold processes involved in building new social relationships in the settlement context. We summarise next some of the most pivotal quantitative and qualitative findings, beginning with factors directly related to migration and then proceeding to more general aspects.

2.1 Migration-related factors associated with the development of social relationships

Few people migrate voluntarily without having prior contacts in the target society (Eve 2010). In particular, when migration is economically motivated and is directed from poorer to wealthier countries, both the decision to migrate and the choice of destination are often guided by pre-existing social ties in different locations (e.g. Morad and Sacchetto 2020; Bilecen and Lubbers 2021; Varshaver and Rocheva 2021).

These pre-existing contacts assist in many ways, including with finding accommodation and employment, as well as helping the new arrivals navigate the unfamiliar setting (Varshaver and Rocheva 2021). Insufficient language skills often heighten newcomers' dependency on such contacts (Bilecen and Lubbers 2021). Furthermore, many social practices follow unspoken culture-specific norms, which can be difficult for newly arrived foreigners to decode (Linnanmäki-Koskela 2010). Logically, they turn to those whose language and behaviour they understand. The greater the difference between the culture and language of the origin country with those of the settlement country, the harder it is to cope (Portes and Rumbaut 2001; de Jong Gierveld, van der Pas and Keating 2015; Lynch et al. 2022), and, presumably, the stronger the reliance on co-ethnic contacts.

While established settlers may feel a moral obligation to support their newly arrived kin or ethnic group members, economic resources may limit their open-handedness. For example, refugees whose only social relationships are with other refugees likely encounter meagre sources to draw from when in need of support (Patulny 2015). Evidence has also suggested that the norm of generosity is less observed if the local context is hostile towards immigration (Engbersen, Snel, and Esteves 2016). The norms orienting generosity also vary culturally (Mauss 1990; Feng and Patulny 2021).

The literature often associates co-ethnic/-national ties to strong, bonding social relationships (e.g. Kanas et al. 2012). This may be valid when people share such attributes as values, attitudes, lifestyle, and areas of interest. However, sometimes co-ethnic ties are the only resource available to newcomers without representing particularly close relationships. For example, due to the challenges of the initial phase of resettlement, people who have nothing in common other than their nationality/ethnicity may end up sharing a residence.

Sometimes, migration pushes people into an uncomfortable social-class position that is profoundly different from what they identify with (Ryan 2011). People with advantaged backgrounds may end up in a low socioeconomic status due to cultural 'incapacity', limited language skills, non-transferrable qualifications, low income, or discriminatory settlement context; thus, migrants often have to renegotiate their social and professional standing in the host country (Csedő 2008). Inevitably, this affects their inclination to connect with new people.

Settlement circumstances can be radically different for skilled professionals or foreign exchange students who move from one country to another for career or school opportunities. These populations may not have pre-existing social relationships in the settlement society, but often they have a work or study place to set already in advance. Often, they also have previous international experience and the right kind of professional, social, and language skills, which help them to build social ties (Kennedy 2005). Thus, there is less need for co-ethnic relationships (Schnell, Kohlbacher and Reeger 2015).

While a higher education level has been associated with broader social relationships (Martinovic, van Tubergen and Maas 2015; Patulny 2015; Koops, Martinovic and Weesie 2017), some longitudinal evidence suggests that the effect of education only applies at the between-person but not the within-person level. In other words, the average volume of social contacts is higher in higher educated groups, but an increase in education at the individual level does not increase the size of his/her social network (Martinovic, van Tubergen and Maas 2015). Therefore, we assume that there are shared group-related characteristics that can, at least partly, explain the different social networking patterns between education groups.

The social context is again very different for people who migrated as children and experienced the settlement country's formal education system. They are likely to have internalised the local norms, values, and practices and are culturally more at ease. They are often able to develop social and professional relationships with greater confidence and skill than those who migrate as adults (Eve 2010; Linnanmäki-Koskela 2010). In many ways, the social and professional conduct of these childhood settlers resembles that of the local majority population (Eve 2010).

As language and cultural skills improve over time, migrants tend to gravitate towards new social circuits (e.g. Pratsinakis et al. 2017; de Guzman and Garcia 2018; Varshaver and Rocheva 2021). It has been shown that increasing language proficiency contributes positively to the formation of new social relationships, but also the formation of relationships contributes to greater language proficiency (Martinovic, van Tubergen and Maas 2015). Overall, we hypothesise that many migration-related factors, including local language skills and length of stay in the settlement country will matter essentially for the lower educated migrants' social connectedness, who need to make a greater effort to adjust to the new context.

In general, major life events (marriage, childbirth, the death of a spouse, etc.) tend to influence social networks of both migrant and non-migrant populations. Migration itself is an event that pulls people together. Foreigners often share an emotional deprivation, a need to build friendships, an absence of family commitments, and a feeling of being an outsider (Kennedy 2005). Therefore, ethnic/national heterogeneity is a typical characteristic of migrants' social networks (Patulny 2015; Pratsinakis et al. 2017). We expect that the presence of other foreigners in the living area relates positively to the development of social relationships both among the higher and lower education groups, but the latter may be more dependent on this resource than the former.

2.2 Other factors related to development of social relationships

Several individual, demographic, and contextual factors have been associated with social relationship building. First, people need opportunities to meet (Lubbers, Molina and McCarty 2021). Most friendship ties are formed in a limited number of locations, including schools, jobs, neighbourhoods, universities, military service (Eve 2010), and formal organisations (Ryan 2011). Overall, connecting with new people requires shared interests or experiences, such as work, hobbies, life events, family situations, living areas, and, to some extent, a common language. Often, new contacts are prompted through an existing friend or relative (Eve 2010; Lubbers, Molina and McCarty 2021).

Employment provides people with vital opportunities to find friends and acquaintances in the settlement country (Ryan 2011; Martinovic, van Tubergen and Maas 2015). Higher status jobs are related to more frequent interaction with the majority population (Martinovic, van Tubergen and Maas 2015; Koops, Martinovic and Weesie 2017). In general, even among non-migrants, a higher socioeconomic position relates to broader social networks with more diverse set of people (e.g. Lin, 2000, 2001; Kouvo 2010). We expect social standing to be related to social connectedness among both higher and lower educated migrants. However, this relationship may be even more relevant for the higher education group, who often migrate precisely thanks to their social standing.

A host country's policies, legal and economic environments, and sociocultural diversity establish and largely define the scope within which the migrant population can develop social relationships (e.g. Bilecen and Lubbers 2021; Klarenbeek 2021). Sometimes, structural issues may impede access to potentially strategic networks (e.g. job markets), for example, when a non-EU citizen is denied a work permit or when their foreign credentials are not recognised (Lubbers, Molina and McCarty 2021). Such challenges particularly affect people with low qualifications or qualifications that are not globally transferrable (Csedő 2008). In contrast, highly skilled foreigners with broad theoretical knowledge are sought after by the wealthiest nations and may be offered a facilitated access to the local labour market (OECD 2008). The term 'highly skilled' usually translates to tertiary education (e.g. EU Council directive 2009/50/EC, Article 2).

These elements are beyond migrants' influence and may explain why some are able to build broadly heterogeneous social networks while others only manage to connect with other foreigners. Therefore, it is important to consider structural elements along with individual level characteristics as predictors of network formation (Lubbers, Molina and McCarty 2021). Overall, we hypothesise that structural/contextual elements have more influence on the social network formation of the lower rather than the higher educated migrants. Another relevant, although often ignored element in this research field is gender. Evidence indicates that migrant men tend to use broader networks of acquaintances, for example, when looking for support, while migrant women rely more heavily on immediate and extended family (Lin 2000; Hoang 2011; Riosmena and Liu 2019). Also, being married and having children may contribute positively to more frequent interactions with new and existing social contacts (e.g. Ryan and Mulholland 2014b; Patulny 2015; Koelet, Van Mol and de Valk 2017; Lubbers, Molina and McCarty 2021). Ultimately, one's inclination for social interaction depends heavily on personality: some people are simply more sociable than others (Lubbers et al. 2010; Koelet, Van Mol and de Valk 2017; see also Lynch et al. 2022). As personality influences the self-selection of prospective migrants (Boneva and Frieze 2001; McKenzie, Stillman and Gibson 2010), it would be important to control for it. However, like most social surveys, our data do not include information about the different personality traits.

3. Conceptualisation of social capital

To distinguish between different types of social relationships, we use Putnam's (2000) conceptualisation of bonding and bridging social capital. The former comprises exclusive relationships involving family and close friends, whereas the latter refers to more inclusive relationships with more distant acquaintances. The categories of bonding and bridging build on Putnam's theory of social capital, which he understands as a multi-dimensional asset comprising social relationships, trust, and reciprocity (Putnam 2000: 19-24, 134-138). In his perspective, bonding social capital, by nature, grows within relationships that involve high levels of mutual trust and reciprocity. It boosts our self-worth and overall well-being. Bridging social capital requires less personal level involvement, but relies nonetheless on the belief that other people are generally well-intentioned. In line with the principle of homophily, bonding social capital develops typically between people who are similar to each other, while bridging social capital connects people from different backgrounds and can generate diverse identities. Migration researchers often associate bridging social capital with inter-ethnic relationships, particularly with local majority population. Therefore, bridging social capital is sometimes taken as an indicator of social integration (Nannestad, Svendsen and Svendsen 2008).

When introducing the concepts of bonding and bridging social capital, Putnam makes a reference to Granovetter's strong and weak ties. Despite striking similarities, there is nonetheless one fundamental difference. Granovetter (1983) considers social ties valuable only to the extent they generate direct benefits (228–229). Putnam, by contrast, considers positive social relationships valuable *per se* as they can contribute to various desirable outcomes, such as greater happiness, health, well-being, overall security, and social cohesion (Putnam 2000: 326–335; Helliwell and Putnam 2004).

However, Putnam (2000: 350–363) recognises that not all social relationships are positive. Because of homophily, some forms of bonding social capital may lead to hostility towards diversity and rejection of outsiders. Moreover, exclusive bonding relationships tend to reinforce social stratification as they hold people together with others similar to themselves. According to Putnam, the risk of harmful social capital is heightened by narrow bonding relationships without a blend of bridging social capital. Conversely, a combination of both bonding and bridging capital is what increases the likelihood of greater tolerance, healthier social interaction, and higher overall well-being.

Despite the referred contrasts, bonding and bridging are not mutually exclusive categories. An individual may bond with a group of people with whom she/he has some similarities (e.g. same ethnicity and/or religion) and bridge with the same group due to critical differences (e.g. socioeconomic statuses) (Putnam 2000: 23). It can be assumed that, just as with strong ties, also with bonding social capital, not all relationships are equally strong; some form a stronger bond than others. In addition, strong ties or bonding social capital can create opportunities for forming new bridging relationships, and over time, bridging relationships can occasionally develop into strong bonds (Kennedy 2005; Ryan and Mulholland 2014b; Lubbers, Molina and McCarty 2021).

In much of the social network literature, there is an implicit understanding that, over time, social networks grow or remain stable but they do not shrink. However, this is not always true. Friendships can wane when shared interests recede (Ryan and Mulholland 2014a), and some people deliberately retreat from their social networks when, for example, the moral obligation of helping a kin member becomes too draining or when the co-ethnic group poses overly stringent social control (Portes and Sensenbrenner 1993; Varshaver and Rocheva 2021). Sometimes, people drift away from their co-national groups after the first year but return later with a renewed need for the familiarity (Lubbers et al. 2010; de Guzman and Garcia 2018).

Overall, strong bonds are more stable and longer lasting; more distant relationships tend to wither if the connecting context (e.g. a job) disappears. However, the latter are easier to replace than the former (Lubbers, Molina and McCarty 2021). A longitudinal study by Lubbers et al. (2010) revealed a high turnover in migrants' social networks over time. In the long run, however, the overall structure of the networks remained stable. These findings seem to imply that time matters for the development of social networks, but not linearly.

Ryan (2011, 2014b) discourages the use of dichotomies (e.g. bonding vs. bridging, strong ties vs. weak ties), as they create an illusion of simplicity of intricate vibrant relationships. Instead, the author recommends focusing on the nature of the relationships and the quality of the resources they can provide (Ryan 2011). We can easily agree with this view; however, we argue that science still needs simple, somewhat artificial categories (e.g. native/immigrant, black/white, advantaged/disadvantaged, etc.) to make sense of the complex world. By simplifying things, we may be able to unravel patterns that would otherwise go unnoticed. While it is important to consider that social contacts form a complex, time-variant resource that evolves in a non-linear fashion, we, like many researchers before us, employ the simple dichotomy of bonding and bridging social capital, aiming to understand what fosters or hinders their development among migrants.

3.1 Spectrum of social capital

To study migrants' social relationships, Patulny (2015) has developed a spectrum of integration based on three characteristics: extension of bonding social capital, extension of bridging social capital, and the degree of ethnic diversity of social contacts. At one end of the spectrum is full integration characterised by broad and ethnically mixed bonding and bridging social capital. At the opposite end is 'ethnocentric segregation', referring to the lack of both types of capital or the existence of only some coercive and ethnically homogeneous relationships. Between these extremes, Patulny (2015) identified six different combinations of high versus low bonding and bridging social capital of ethnically homogeneous versus heterogeneous relationships.

The current study employs a simplified version of Patulny's spectrum. Our dataset does not include information about the ethnicity/nationality of the respondents' friends or families; therefore, the dimension of the ethnic heterogeneity of their social relationships is beyond our reach. Consequently, we do not measure integration as such; rather, we assess the scope of migrants' social relationships to compose four categories of social capital (see Table 1). For simplicity, these are referred to as *abundant social capital* (extensive bonding and bridging relationships), *scarce social capital* (limited bonding and bridging relationships), *mainly bonding social capital* (extensive bonding but scarce bridging relationships), and *mainly bridging social capital* (scarce bonding but extensive bridging relationships).

3.2 Research questions

This article seeks to understand the resources and contexts that shape social capital formation of migrant populations in their settlement country. More specifically, the study explores whether the migration context (motive for migration, age at the time of migration, years lived in Finland, Finnish citizenship, and local language skills), socioeconomic status (education attained in Finland and self-reported level of income), or social context (degree of urbanity of the living area, proportion of migrants living in the neighbourhood, and experiences of discrimination) predict the accumulation of social capital while controlling for a range of other background factors. Since earlier research indicates that highly skilled migrants tend to build more extensive social relationships (Martinovic, van Tubergen and Maas 2015; Patulny 2015; Koops, Martinovic and Weesie 2017), we examine whether the tertiary educated migrants use different resources than those with a lower level education to build social relationships. Based on earlier literature, we hypothesise the following differences between education groups:

		Bridging social capital	
		Extensive	Limited
Bonding social capital	Extensive	Abundant social capital Mainly bridging social	Mainly bonding social capital
	Lillited	capital	Scarce social capital

Table 1. Spectrum of social capital (a modified version of Patulny's (2015) spectrum of integration)

- (1) Migration-related factors are mainly relevant for social capital formation among lower educated migrants (H1).
- (2) Factors related to social standing matter more, or at least as much, for social connectedness among higher educated migrants as they do for lower educated migrants (H2).
- (3) Social context-related elements are more important for social connectedness among lower educated migrants (H3).

4. Finland as the settlement context

Between 2000 and 2020, the share of migrants¹ in Finland grew from 2 to 8 per cent corresponding to approximately 444,000 people by the end of this period. Until 2022, when the war broke out in Ukraine, the largest migrant groups came from the former Soviet Union, Estonia, Iraq, Somalia, and former Yugoslavia (Statistics Finland, n.d.).

In 2015, the number of asylum seekers rose to a then all-time high of 32,477 but dropped quickly in the following years, settling at 2,500–3,200 per year in 2020–1 (Finnish Immigration Service 2022). In 2019–20, the most common reasons to move to Finland were work, family relationships, and studies. During these years, the government has recognised increasingly that immigration opens up an opportunity to increase employment and reduce the overall dependency ratio (Programme of Prime Minister Sanna Marin's Government 10 December 2019).

According to the international Migrant Integration Policy Index, Finland is among the world's top-10 countries with the most favourable policy environments regarding immigration (Migrant Integration Policy Index 2021). Finland's Act on the Promotion of Immigrant Integration (1386/2010) seeks to enable migrant settlers to achieve equality in terms of rights and obligations. The act recognises that integration is a two-way process; it seeks not only to integrate foreign citizens into Finnish society, but also to integrate native Finns into a more multicultural and multi-ethnic society (see also Saukkonen 2013).

In practice, newcomers are provided with support services for integration as needed, including local language training (Finnish or Swedish); social, cultural, and life skills training; and help accessing the labour market or further education (Ministry of Economic Affairs and Employment of Finland n.d.). School-aged children are integrated into the national education system with local language training combined with education on their mother tongue. Associations of ethnic minorities are provided with public funding to promote their cultures and languages of origin. Overall, these processes are said to promote strong identities and self-confidence to facilitate healthy integration into and interaction with the majority population (Saukkonen 2013).

The implementation of integration services relies on the municipalities. A recent assessment showed that there is a disparity in the preparedness and capacities of the municipal authorities in terms of providing such services. A dimension often overlooked by the implementers is that of preparing the majority population to embrace the multicultural social context (Koskimies and Kettunen 2022).

Several studies have indicated that migrants, particularly people coming from countries outside of the European Union, continue to face difficulties in achieving equal status in many areas of Finnish society, including the labour market (Ahmad 2020) and the education system (e.g. Kilpi-Jakonen 2011; Harju-Luukkainen et al. 2014). A striking 40 per cent of migrants have reported experiencing some form of discrimination (Rask and Castaneda 2019): men of African or Middle Eastern origins are discriminated against the most.

5. Data and methods

We used data from the Survey on Well-Being among Foreign Born Population (FinMonik) collected by the Finnish Institute for Health and Welfare (THL) in 2018–9 (Kuusio et al. 2021). FinMonik is a cross-sectional survey targeting migrants (18–64 years) who were born abroad and whose parents were also born abroad, but who have lived in Finland for at least a year. The survey was granted an ethical approval by the Institutional Review Board of THL (Decision number: THL/271/6.02.01/2018 §783). The study is exceptional in that it was conducted not only in the official languages of the country (Finnish and Swedish) but also in the 16 foreign languages² most commonly spoken in Finland. This enabled gathering data from people who have not been reached by most other surveys.

According to official statistics, the migrant population in Finland in 2020 comprised 444,031 people. The FinMonik target sample was drawn by Statistics Finland from the population register using regional stratification (24 regions), and it consisted of 12,877 people (after removing over-coverage). Of these, 53 per cent (6,836 people) responded to the survey. Subsequently, the data were complemented with demographic and socioeconomic information from official registers obtained from Statistics Finland (THL 2020).

Our analytical sample consisted of 5,247 people who had no missing data in the variables included in our analyses. An examination of the missing cases revealed that our analytical sample had a slight over-representation of people who had tertiary education,³ who were employed, who spoke Finnish/Swedish at an advanced level, and who were married/ partnered. At the same time, there was a narrow under-representation of people with the origin in the Middle East or Northern-Africa, but a slightly over-representation of people from Russia and Europe, North-America, or Oceania. However, the differences to the full sample were narrow, all less than two percentage points. To account for non-participation and stratified random sampling, we apply sampling weights in our analyses.

5.1 Dependent variable

Inspired by Patulny's (2015) spectrum of integration, we composed a new variable measuring migrants' social capital that has four categories as displayed in Table 1. While there is no standard way to measure bonding and bridging social capital, our attempt is to formulate a simple indicator that would measure the quality of social relationships as precisely as possible. To measure the extent of bonding social capital, we used two survey questions: (1) 'How many good friends do you have living in Finland? Consider all those whom you can trust and who can help you when you are in need.' and (2) 'When you are in need, from whom do you receive practical help?'. Regarding the latter, the original response categories allowed for multiple choices, including spouse/other close family members, close friends, close colleagues, close neighbours, other close people, or nobody. With these questions, we built a new measure distinguishing between extensive versus limited bonding relationships. Extensive bonding social capital was operationalised as reporting at least two good friends in Finland *and* at least two different source categories of help. Otherwise, the respondent was considered as having limited bonding social capital.

For bridging social capital, we used likewise two questions: (1) 'During the past 12 months, how often did you participate in the activities of: sports associations; own language or culture group; a hobby group; political association; labour union; religious or spiritual society; associations for children, youth, or families; associations for older people; other association or group?' For each association/group, the original response alternatives ranged between 1 and 5 ('did not participate' to 'participated three or more times a week'). In addition, given that work environment forms an important arena for establishing more distant contacts (Granovetter 1983; Putnam 2000), we also considered 'being employed' as participation in one type of group. (2) 'To what extent you feel belonging to: your municipality, Finns, Europeans, people of your country of origin, citizens of the world?' Multiple choices were allowed, and for each option the response alternatives ranged from 1 to 4 ('totally' to 'not at all'). With these questions, we composed a new measure to distinguish between extensive and limited bridging social relationships. Extensive bridging social capital was operationalised through the following criteria: participating regularly (at least once a month) in at least two types of groups and feeling belonging to at least two different groups. Otherwise, the respondent was considered as having limited bridging social capital.

As described above, we combined the measures of bonding and bridging into a single indicator with four categories (Table 1): (1) extensive bonding and bridging relationships (abundant social capital), (2) extensive bonding but limited bridging relationships (mainly bonding social capital), (3) limited bonding but extensive bridging relationships (mainly bridging social capital), and (4) limited bonding and bridging relationships (scarce social capital). This was used as the dependent variable in the analyses.

5.2 Independent variables

Initially, our analyses included three groups of key predictors: those related to migration background, socio-economic status, and contextual aspects. However, as explained below, the goodness-of-fit indices did not support the inclusion of context-related variables. Therefore, these were ultimately excluded from the final models.

We used five migration-related variables: the primary motive of migration (family, job, studies, asylum seeking, or Ingrian Finn or other returnees⁴), age at the time of migration (under 12, 12–19, 20–29, 30–39, or 40+ years), number of years lived in Finland (1–4, 5–10, or 10+ years), whether the respondent had Finnish citizenship (no/yes), and self-reported Finnish/Swedish language skills (not at all/beginner, intermediate, or advanced).

Respondents' socio-economic status was measured through the self-rated income level (not sufficient, reasonable, or sufficient) and whether they had acquired some education in Finland. We recognise that income level relates directly to the employment status, which is included in the dependent variable, but in reverse temporal order. However, we found it theoretically relevant to keep both variables in the model. To test for the robustness of the results, we ran the same models on a modified dependent variable that excluded employment. The results of the robustness check are discussed below.

The contextual dimension is more challenging to capture with a survey. In our data, three variables were available for this purpose: the degree of urbanity of the municipality of residence (urban, semi-urban, or rural), the proportion of people with foreign back-ground⁵ living in the same municipality, and whether a respondent had experienced any form of discrimination from a non-family member in the past 12 months.⁶ However, based on the model fit indices, these were excluded from the final models (see below).

All models included controls for gender (man/woman), age (in years), marital/partnership status (no/yes), whether the respondent lives alone (no/yes), self-rated health status (poor, average, or good), and the region of origin (Europe/North America/Oceania, Russia/ex-Soviet Union, Estonia, Middle East and North Africa, Africa [excluding North Africa], Southeast Asia, East Asia, South and Central Asia, or Latin America). Models including the full sample were also adjusted for education level (secondary or less vs. tertiary). Of all these, the following are register-based: gender, age, age at the time of migration, years lived in Finland, Finnish citizenship, country of origin, degree of urbanity of the municipality, and the proportion of migrants in the neighbourhood.

Table 2 presents weighted statistics for the independent variables separately for the full sample and the two education levels. Noticeably, there are considerable differences between the education groups in virtually all independent variables.

5.3 Analysis method

We used multinomial logistic regression⁷ with sampling weights to analyse our data, running separate analyses for the full sample and the two education levels (secondary or less vs. tertiary). To specify the final analytical model, we employed a stepwise approach initially considering only the education level and control variables, and subsequently adding predictors one set at a time (migration-related, socioeconomic status (SES), and contextrelated predictors). The selection of the better-fitting model was oriented by adjusted McFadden's pseudo R^2 , Akaike information criterion (AIC), and Bayesian information criterion (BIC)⁸ indices. The chosen model was then again compared with a more complex model. The results of the comparison are discussed below.

To facilitate interpretation, all results from the multinomial logistic regression models were converted into average marginal effects (AMEs). This produces estimates for each outcome category, including the original reference category, where all the other categories are the reference group. AMEs can be interpreted as a change measured in percentage points in the probability of a given outcome category associated with a one-unit change in the predictor while holding all other variables constant.

6. Results

6.1 Descriptive statistics

Table 3 presents the descriptive statistics for the dependent variable. Overall, nearly one of every four migrants had abundant social capital, whereas roughly one-third reported

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	Full sa	mple	Seco educa or l	ond. ation ess	Tert educa	iary ation
	%/Mean	CI	%/Mean	CI	%/Mean	CI
Migration-related						
predictors						
Motive for migration						
Family-related reasons	43.78		44.98		42.22	
Job	22.49		23.58		21.08	
Studies	11.41		3.19		22.04	
Asylum seeking	13.30		19.19		5.68	
Returnee from Western	9.02		9.06		8.98	
Russia						
Age at the time of						
migration						
<12	8.64		11.82		4.51	
12–19	14.21		18.49		8.68	
20–29	43.32		36.64		51.94	
30–39	22.80		20.85		25.31	
40+	11.04		12.19		9.55	
Years lived in Finland						
1-4	18.73		14.89		23.70	
5–10	31.80		31.70		31.92	
<10	49.47		53.41		44.37	
Finnish citizenship	36.92		38.02		35.49	
Finnish/Swedish language						
skills						
Not at all/beginner	32.43		27.99		38.17	
Intermediate	33.11		36.20		29.12	
Advanced	34.46		35.82		32.71	
Socioeconomic status-						
related predictors						
Some education attained	57.84		56.11		60.07	
in Finland						
Self-rated level of income						
Not sufficient	23.84		28.98		17.18	
Reasonable	33.52		34.99		31.62	
Sufficient	42.64		36.02		51.19	

Table 2. Sample-weighted statistics (% or mean and confidence interval [CI] for continuous variables) for the independent variables of the full sample and the sub-samples by education level (statistically significant differences between the groups in bold)

	Full	sample	Sed	Second. lucation or less	T ed	ertiary ucation
-	%/Mean	CI	%/Mear	n CI	%/Mean	CI
Context-related predictors						
Level of urbanity						
Urban	89.28		86.84		92.44	
Semi-urban	5.59		6.95		3.83	
Rural	5.13		6.21		3.72	
Mean % of foreigners in	9.71	9.60–9.83	9.53	9.35–9.71	9.95	9.83-10.08
living area						
Experienced discrimination in past 12 months	40.07		38.64		41.91	
Control variables						
Woman	48.61		45.70		52.36	
Mean age (years)	38.91	38.41-39.42	2 38.66	37.90-39.42	2 39.25	38.62-39.88
Married/in reg. partnership	69.87		66.96		73.64	
Lives alone	22.93		24.57		20.80	
Self-rated health status						
Poor	6.84		7.76		5.65	
Average	24.17		25.97		21.85	
Good	68.99		66.26		72.50	
Country of origin						
Europe, North America, and Oceania	19.62		15.32		25.18	
Russia and ex-SU	23.09		21.54		25.08	
Estonia	13.94		19.03		7.36	
Middle-East and Northern Africa	14.70		18.55		9.72	
Africa (excluding	8.70		9.57		7.57	
Northern Africa)						
South-East Asia	7.55		8.82		5.91	
East Asia	4.49		2.27		7.36	
South and Central Asia	4.20		1.77		7.35	
Latin-America	3.72		3.12		4.49	
Sample size (<i>n</i>)	5,247		2,695		2,552	
Sample size (%)	100.0		56.38		43.62	

Table 2. Continued

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	Full sample	Secondary education or less	Tertiary education
	%	%	%
Social capital			
Abundant social capital	23.50	18.73	29.66
Mainly bonding social capital	21.69	20.54	23.16
Mainly bridging social capital	19.43	19.57	19.25
Scarce social capital	35.38	41.15	27.93
Sample size (<i>n</i>)	5,247	2,695	2,552
Sample size (%)	100.0	51.36	48.64

Table 3. Sample-weighted descriptive statistics for the dependent variable of the full sample and the sub-samples by education level (statistically significant differences between the groups in bold)

scarce social capital. The differences between the education groups were notable. Among those with a higher level of education, the share of both abundant and scarce social capital ranged between 28 and 30 per cent, the former narrowly exceeding the latter. Among those with a lower education level, scarce social capital was by far the most common category characterising over 40 per cent of this population, and outnumbering those with abundant social capital by more than twofold.

6.2 Main findings about social capital

We started the modelling with a base-model including only the education level and control variables and added one set of predictors at a time to find the best-fitting models. The best fit for the full sample and the tertiary education group included controls, migrationrelated and SES-related variables, but excluded the context-related variables. For the lower education group, the indices were less clear; models with and without context-related variables obtained similar test statistics. However, as none of the context-related variables turned statistically significant, we excluded them from the final models for the lower education group as well. Table 4 shows the detailed estimates of the final multinomial regression models on the spectrum of social capital. For space limitation, the detailed fit indices of the partial models are displayed in the Supplementary Appendix.

6.2.1 Association of migration-related characteristics with social capital. Fig. 1a–d illustrates multinomial regression estimates for the migration-related predictors on each category of social capital. Overall, migration motives revealed limited statistical significance. However, the direction and the magnitude of the estimates hint of possible underlying patterns. First, migration for work-related reasons instead of family-related motives (reference category) appeared to relate to a reduced probability of remaining with scarce social capital among both education groups, although the result was statistically

Table 4. Sample-weighted	d multinomi.	al regression	results for ti	he full sam	ple and th	e sub-sam	ples defined	by educati	on level in <i>i</i>	AMEs		
	Α	bundant soc.	cap.	Μ	ainly bond	ing	Μ	ainly bridgi	gu		Scarce soc.ca	p.
	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary
Migration-related												
predictors												
Motive for migration												
(ref. family)												
Job	-0.001	-0.019	0.017	0.010	0.032 -	-0.009	0.050	0.041	0.062	-0.059^{*}	-0.054	-0.069
	(0.027)	(0.037)	(0.036)	(0.026)	(0.040)	(0.034)	(0.030)	(0.042)	(0.039)	(0.028)	(0.042)	(0.036)
Studies	0.010	-0.036	0.072	0.070	0.010	0.072	-0.029	-0.029	-0.005	-0.051	0.055	-0.139^{***}
	(0.036)	(0.082)	(0.045)	(0.037)	(0.078)	(0.042)	(0.030)	(0.068)	(0.033)	(0.036)	(0.088)	(0.035)
Asylum seeking	-0.020	-0.036	0.040	-0.052	-0.056 -	-0.076	0.016	-0.006	0.075	0.055	0.098	-0.038
	(0.036)	(0.037)	(0.079)	(0.034)	(0.040)	(0.046)	(0.037)	(0.042)	(0.063)	(0.041)	(0.052)	(0.063)
Returnee (from	0.015	-0.009	0.028	-0.007	0.004 -	-0.027	-0.013	0.025	-0.034	0.004	-0.019	0.032
Western Russia)												
	(0.033)	(0.042)	(0.049)	(0.032)	(0.042)	(0.047)	(0.035)	(0.049)	(0.047)	(0.036)	(0.050)	(0.052)
Age at migration												
(ref. 20–29 years)												
<12 years	0.013	-0.033	0.130	0.055	-0.018	0.148	-0.022	0.041	-0.104^{**}	-0.046	0.010	-0.173^{***}
	(0.055)	(0.060)	(660.0)	(0.056)	(0.057)	(0.100)	(0.057)	(0.087)	(0.040)	(0.054)	(0.080)	(0.044)
12–19 years	-0.048	-0.052	-0.052	0.048	0.004	0.098	0.026	0.061	-0.028	-0.026	-0.013	-0.017
	(0.038)	(0.043)	(0.065)	(0.038)	(0.045)	(0.061)	(0.039)	(0.053)	(0.047)	(0.036)	(0.050)	(0.052)

Continued

	Al	oundant soc.	cap.	Μ	ainly bonding		Μ	lainly bridgi	ng		Scarce soc.ce	ıp.
	Full sample	Second or less	Tertiary	Full sample	Second T _t or less	ertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary
30–39 years	-0.025	-0.014	-0.044	-0.008	0.018 -0.	.035	-0.004	-0.068	0.083^{*}	0.037	0.064	-0.004
	(0.027)	(0.039)	(0.038)	(0.026)	(0.040) (0.	.032)	(0.029)	(0.037)	(0.040)	(0.032)	(0.046)	(0.041)
40+ years	-0.058	-0.041	-0.089	0.026	0.072 - 0.	.030	-0.024	-0.052	0.040	0.055	0.021	0.079
	(0.042)	(0.054)	(0.064)	(0.050)	(0.076) (0.	.058)	(0.046)	(0.056)	(0.070)	(0.054)	(0.069)	(0.083)
Years lived in Finland												
(ref. 10+ years)												
1-4 years	0.011	0.040	-0.010	-0.033	-0.065 0.	.017	-0.003	0.027	-0.085	0.026	-0.002	0.077
	(0.038)	(0.052)	(0.058)	(0.039)	(0.053) (0.	.050)	(0.040)	(0.056)	(0.053)	(0.042)	(0.058)	(0.059)
5–10 years	0.019	0.008	0.032	-0.003	-0.022 0.	.027	-0.028	0.028	-0.123^{**}	0.012	-0.013	0.064
	(0.029)	(0.036)	(0.044)	(0.031)	(0.043) (0.	.040)	(0.030)	(0.042)	(0.040)	(0.032)	(0.045)	(0.044)
Finnish citizenship (ref.	0.038	0.023	0.067	-0.041	0.003 - 0.	.087**	-0.008	-0.011	-0.033	0.012	-0.014	0.053
(ou												
	(0.024)	(0.029)	(0.037)	(0.023)	(0.032) (0.	.032)	(0.028)	(0.037)	(0.034)	(0.026)	(0.038)	(0.034)
Finnish/Swedish lan-												
guage skills (ref. not at												
all/beginner)												
Intermediate	0.031	-0.010	0.090^{*}	-0.018	0.018 - 0.	.051	0.011	-0.004	0.018	-0.024	-0.004	-0.057
	(0.024)	(0.031)	(0.037)	(0.024)	(0.031) $(0.$.034)	(0.025)	(0.037)	(0.033)	(0.028)	(0.041)	(0.036)

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Table 4. Continued											
	Abi	undant soc.c.	ap.	Ma	inly bonding	A	lainly bridgin	ß	S	carce soc.caj	
	Full sample	Second or less	Tertiary	Full sample	Second Tertiar or less	/ Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary
Advanced	0.095** (0.029)	0.076 (0.040)	0.098* (0.040)	0.021 (0.031)	$0.084^{*} - 0.018$ (0.040) (0.045)	-0.017 (0.028)	-0.046 (0.042)	0.008 (0.037)	-0.098^{**} (0.031)	-0.115^{*} (0.046)	-0.089* (0.039)
Socioeconomic status-	~	~	~	~	~	~	~	~	~	~	~
related predictors Some education attained in Finland	0.032	0.060*	- 0.009	-0.013	-0.027 -0.008	0.044	0.050	0.045	-0.063*	-0.083*	-0.027
(ref. no)	(0.024)	(0.028)	(0.037)	(0.023)	(0.030) (0.033)	(0.023)	(0.032)	(0.030)	(0.025)	(0.037)	(0.030)
Self-rated level of income (ref not sufficient)											
Reasonable	0.074^{**}	0.078^{*}	0.067	0.041	0.058 0.005	-0.055	-0.087^{*}	0.018	-0.060*	-0.049	-0.090*
Sufficient	(0.025) 0 130***	(0.031) 0.106***	(0.042) 0.155***	(0.025) 0.042	(0.031) (0.039)	(0.028) 0.039	(0.036) -0.041	(0.038) 0.002	(0.029) -0 133***	(0.039)	(0.041) -0.155***
	(0.025)	(0.032)	(0.041)	(0.024)	(0.030) (0.037)	(0.028)	(0.037)	(0.035)	(0.029)	(0.039)	(0.040)
Control variables Woman (ref. man)	-0.042^{*}	-0.069**	-0.008	0.025	0.045 - 0.003	-0.019	-0.045	0.019	0.036	0.068^{*}	-0.008
	(0.020)	(0.026)	(0.030)	(0.020)	(0.029) (0.027)	(0.020)	(0.027)	(0.028)	(0.022)	(0.032)	(0.027)

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Continued

	Ы	bundant soc.	cap.	Má	inly bond	ing	Ma	iinly bridgin	8		Scarce soc.cal	
	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary
Age (in years)	0.001	0.001	0.001	-0.001	-0.004	0.002	0.000	0.002	-0.003	0.000	0.001	-0.000
	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)
Married/in reg. part- nership (ref. no)	0.034	0.019	0.026	-0.011	-0.038	0.031	0.036	0.070*	0.001	-0.058^{*}	-0.051	-0.058
	(0.025)	(0.029)	(0.045)	(0.026)	(0.035)	(0.039)	(0.026)	(0.033)	(0.037)	(0.029)	(0.038)	(0.041)
Lives alone (ref. does	-0.024	-0.028	-0.024	-0.038	-0.014 -	-0.063	0.080^{*}	0.085^{*}	0.065	-0.018	-0.043	0.021
not)												
	(0.029)	(0.034)	(0.046)	(0.026)	(0.034)	(0.038)	(0.034)	(0.043)	(0.045)	(0.029)	(0.040)	(0.040)
Self-rated health status												
(ref. poor)												
Average	0.042	0.010	0.083	0.077*	0.042	0.140^{**}	0.114^{***}	0.134^{***}	0.084	-0.234^{**3}	$^{*}-0.186^{**}$	-0.306^{***}
	(0.041)	(0.051)	(0.063)	(0.032)	(0.046)	(0.043)	(0.028)	(0.031)	(0.050)	(0.048)	(0.063)	(0.072)
Good	0.093^{*}	0.061	0.134^{*}	0.084^{**}	0.046	0.134^{***}	0.142^{***}	0.165^{***}	0.115^{*}	-0.319^{**3}	*-0.272***	-0.384^{***}
	(0.039)	(0.051)	(0.059)	(0.030)	(0.044)	(0.036)	(0.025)	(0.028)	(0.046)	(0.047)	(0.062)	(0.069)

Table 4. Continued												
	A	bundant soc.	cap.	M	ainly bond	ling	Μ	ainly bridgiı	gu	Š	carce soc.cap	·
	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary
Country of origin (ref.												
Europe, N. America,												
Oceania)												
Russia and ex-SU	-0.065^{*}	0.004	-0.131^{**}	-0.012	-0.059	0.033	0.009	-0.054	0.072	0.068^{*}	0.109^{*}	0.025
	(0.029)	(0.039)	(0.041)	(0.029)	(0.046)	(0.034)	(0.032)	(0.048)	(0.042)	(0.032)	(0.050)	(0.038)
Estonia	-0.026	0.041	-0.087	0.001	-0.046	0.027	-0.039	-0.084	0.020	0.064	0.089	0.040
	(0.040)	(0.050)	(0.058)	(0.036)	(0.049)	(0.059)	(0.034)	(0.046)	(0.053)	(0.042)	(0.056)	(0.066)
Middle-East and	-0.140^{**}	**-0.066	-0.238^{***}	-0.022	-0.092	0.083	0.012	0.004	-0.008	0.151^{***}	0.154^{**}	0.162^{**}
Northern Africa												
	(0.033)	(0.039)	(0.051)	(0.037)	(0.049)	(0.052)	(0.041)	(0.060)	(0.039)	(0.043)	(0.059)	(0.060)
Africa (excluding	-0.086	-0.009	-0.182^{*}	0.011	-0.014	0.038	0.095	0.074	0.116	-0.020	-0.050	0.028
Northern Africa)												
	(0.050)	(0.059)	(0.076)	(0.052)	(0.074)	(0.062)	(0.055)	(0.078)	(0.063)	(0.048)	(0.068)	(0.065)
South-East Asia	-0.090^{*}	-0.023	-0.158^{**}	0.036	-0.003	0.101	-0.024	-0.054	0.005	0.078	0.080	0.052
	(0.037)	(0.046)	(0.060)	(0.043)	(0.059)	(0.066)	(0.037)	(0.050)	(0.056)	(0.043)	(0.058)	(0.067)
East Asia	-0.009	-0.005	-0.038	0.057	0.023	0.091	-0.100^{**}	-0.139	-0.079^{*}	0.052	0.120	0.025
	(0.045)	(0.068)	(0.060)	(0.043)	(0.084)	(0.051)	(0.035)	(0.072)	(0.036)	(0.044)	(0.082)	(0.048)
												Continued

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	At	oundant soc.	cap.	M.	ainly bond	ing	Μ	lainly bridgin	ßı	5	Scarce soc.ca	p.
	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary	Full sample	Second or less	Tertiary
South and Central Asia	(0.055)	0.136 (0.111)	-0.042 (0.067)	0.029 (0.047)	0.053 (0.113)	0.021 (0.048)	-0.023 (0.042)	-0.042 (0.095)	0.013 (0.044)	-0.018 (0.047)	-0.146 (0.077)	0.008 (0.053)
Latin America	-0.117^{*}	-0.092	-0.135	-0.010	-0.104	0.050	0.115	0.067	0.174*	0.011	0.129	-0.089
	(0.054)	(0.056)	(060.0)	(0.053)	(0.074)	(0.069)	(0.068)	(0.110)	(0.082)	(0.058)	(0.108)	(0.052)
Highest educ. (ref. sec- ondary sch. or less)												
Tertiary	0.065^{**}			0.005			0.009			-0.079^{***}	~	
	(0.021)			(0.021)			(0.021)			(0.022)		
Ν	5,247	2,695	2,552	5,247	2,695	2,552	5,247	2,695	2,552	5,247	2,695	2,552

Table 4. Continued

Note: Standard errors in parentheses. p < 0.05, p < 0.01, p < 0.001.



Figure 1. (a). Association of migration-related elements with abundant social capital (b) Association of migration-related elements with dominantly bonding social capital. (c) Association of migration-related elements with dominantly bridging social capital. (d) Association of migration-related elements with scarce social capital.

significant only in the full sample. Second, among the tertiary educated foreigners, migration for studies appeared to relate to a somewhat higher probability of abundant social capital and lower probability of scarce social capital, although only the latter relationship was statistically significant. Third, the overall tendency of estimates suggests that familyrelated motives could provide the lower education group the best setting for developing broad social relationships. By contrast, for the higher education group any other motive than family seemed somewhat more advantageous in relation to social capital accumulation. Yet, these patterns need to be approached cautiously given the low and nonsignificance of the estimates.

Regarding the age at the time of migration, for the higher education group migration that happened before teenage years (as opposed to migration at 20–29 years) was related to a reduced probability of remaining with scarce or mainly bridging social relationships. At the same time, even if not statistically significant, it seemed to relate to a higher probability of abundant or mainly bonding relationships in this group. Conversely, migration at the age of 30–39 years related to an increased probability of the tertiary educated migrants developing mainly bridging social capital. Among the lower education group, age at migration did not reveal any significant or systematic relationship with social capital.

Surprisingly, the length of stay in Finland did not seem to matter much for either education group. However, deemed by the magnitude of the estimates, it seemed that among the tertiary educated those who had stayed in the country for less than 10 years had a somewhat higher probability of scarce social capital and a lower probability of bridging social capital in comparison to those who had stayed in the country for more than a decade (reference category). Yet, only the negative relationship between 5 and 10 years of stay and mainly bridging social capital were statistically significant.

Similarly, Finnish citizenship revealed little importance for social capital accumulation. Only among the tertiary educated, those who had obtained Finnish citizenship had a significantly lower probability of remaining with mainly bonding social capital in comparison to those who did not have citizenship.

Of all migration-related predictors, local language proficiency was the only one with a significant association with abundant social capital. Compared to beginners or those with no knowledge of Finnish/Swedish, people with advanced-level language skills had an almost 10 percentage points higher probability of acquiring extensive social relationships and a 9–12 percentage points lower probability of having limited relationships. Both education groups revealed this pattern, although the relationship with abundant social capital was statistically significant only for the tertiary educated.

6.2.2 Association of socioeconomic status-related characteristics with social capital.

Having accomplished some level of education in Finland appeared as a significant predictor of abundant social capital and a protector against scarce social capital among the lower educated migrants (see Fig. 2a–d). In fact, the protective effect was visible also among the tertiary educated ones (and in the full sample), although for this group, the effect size was smaller and non-significant.

Of all independent variables, having a sufficient level of income turned out to be the strongest and most systematic predictor of social capital. For both education groups and the full sample, sufficient income (as opposed to insufficient) was related to 11–16 percentage point higher probability of developing abundant social capital and 13–16 percentage point lower probability of remaining with limited social relationships. All estimates were strongly significant (p < 0.01).

6.3 Robustness check

The above results are based on the models that included employment as part of the bridging relationships in the dependent variable and self-rated income level as one of the independent variables. Considering the direct reverse association between these two, we tested the robustness of our results with the same models but excluding employment from the dependent variable. The results of the robustness test (available upon request) produced similar results in terms of the relevance of sufficient income levels for the development of extensive and the avoidance of scarce social capital, even if the strength of the statistical significance weakened slightly. Regarding the local language skills, the estimates for the lower education group remained similar as in the main models, but those for the higher education group turned non-significant. For most other predictors, the direction of the



Figure 2. (a) Association of socioeconomic status-related elements with abundant social capital. (b) Association of socioeconomic status-related elements with dominantly bonding social capital. (c) Association of socioeconomic status-related elements with dominantly bridging social capital (d) Association of socioeconomic status-related elements with scarce social capital.

estimates remained the same as in the main analyses, but the statistical significance differed to some extent.

7. Discussion

In this article, we examined which aspects may facilitate or hinder the development of abundant bonding and bridging social capital among the migrant population in their new home country—in this case, Finland. Our main aim was to identify effective ways of building social networks, hoping that such findings could inform efforts of supporting migrants' social integration and well-being in their settlement country.

Earlier research has shown that a higher education level tends to relate to broader social networks (Martinovic, van Tubergen and Maas 2015; Patulny 2015; Koops, Martinovic and Weesie 2017). To identify potential differences in networking strategies, we conducted separate analyses for highly educated migrants and those with lower education. Building on earlier research, we hypothesised that individuals with lower education levels would be more influenced by migration and context-related circumstances to build social capital, but socioeconomic status would be more relevant for those with tertiary education whose migration is often related to their social standing.

Previous literature has mainly looked into the relevance of these characteristics for integration and ethnic heterogeneity of social relationships, whereas our focus was on their association with the composition of bonding and bridging social relationships as per Putnam's (2000) theory. To measure different combinations of social relationships, we simplified Patulny's (2015) spectrum of social integration and composed a spectrum of social capital with four categories: (1) abundant social capital, (2) mainly bonding, (3) mainly bridging, and (4) scarce social capital. Of these, the first category was considered the most favourable outcome.

Our results are in line with previous studies, which have observed that the composition of social capital differs by education level and/or socioeconomic status (e.g. Bourdieu 1986; Lin 2001; Kouvo 2010; Patulny 2015; Schnell, Kohlbacher and Reeger 2015). Overall, our study indicates that nearly one of every four migrants has abundant social capital, and roughly one-third has scarce social capital. Among the tertiary educated, abundant social capital was the most common category, while in the lower education group, the proportion of people with limited social relationships outnumbered those with abundant social capital by more than twofold.

The results revealed more similarities between the education groups than expected. We also found more elements related to avoidance of scarce rather than accumulation of abundant social capital. Possibly, our models were missing some relevant variables, such as personality, and/or more precise measurements of the socioeconomic status or context-ual characteristics.

According to our results, and contrary to our hypotheses, socioeconomic status (satisfactory income and education acquired in Finland) and local language proficiency matter most for the overall composition of social capital among lower educated migrants. Sufficient income and (at least) some studies accomplished in the new home country facilitate the creation of abundant social capital and protect against scarce social relationships. A decent income also increases the likelihood of mainly bonding and reduces the likelihood of mainly bridging social capital. Advanced skills in local languages shield the lower education group against limited social relationships, but simultaneously increase the probability of developing mainly bonding social capital. Surprisingly, none of the migration-related characteristics appeared relevant for this group.

For the higher educated migrants, education acquired in Finland did not seem relevant. Instead, satisfactory income and good local language skills were the key resources facilitating abundant social capital accumulation and protecting them against limited social relationships. Contrary to our hypotheses, other migration related characteristics also appeared relevant for this group; migrating before teenage years and migrating for studies protected them from scarce social capital. Furthermore, they benefitted from several migration-related characteristics to avoid one-sided (dominantly bonding or dominantly bridging) social capital. Migration before teen years and having lived in the country for a shorter rather than a longer period (5–10 years vs. 10+ years) related to a reduced probability of mainly bridging social capital. In contrast, Finnish citizenship reduced their probability of forming mainly bonding social capital. Only migration during early middle age (30–39 years) increased the likelihood of mainly bridging social capital within the high education group. Contrary to our hypothesis, context-related predictors did not improve the models that already included migration and SES-related variables, and therefore, this set of predictors was left out from the final models. This does not necessarily mean that the context would not matter for social capital accumulation, but it matters less than the individual characteristics.

In sum, the most relevant element for social capital accumulation appears to be socioeconomic status. Within both higher and lower education groups, a sufficient income presents the strongest and most consistent resource facilitating the development of abundant social capital and protecting against scarce social capital. The finding was confirmed by the robustness test. A sufficient income is, however, a far more common characteristic among the tertiary educated migrants than among those with less education (51% vs. 36%, respectively). Yet, it was not enough to explain the disparity between the education groups.

Earlier literature has suggested that social networks do not increase linearly over time (Lubbers et al. 2010; Lubbers, Molina and McCarty 2021). In our study, the length of stay in the host country did not reveal major importance for social capital development. It may be that the most intense development of social relationships occurs in the first years after arrival when many other adjustments are also taking place (Hendriks et al. 2018). However, with cross-sectional data, we are unable to make any suppositions in this regard. To increase the understanding of the mechanisms behind social capital formation, these processes should be explored with longitudinal data comparing migrant and non-migrant populations with different education levels.

Overall, our results suggest that roughly one in three migrants in Finland relies on limited social capital. There is a risk of these people becoming marginalised in the new society unless they are supported in building social relationships. In the context of the initial integration training, the national authorities should offer diverse possibilities for newly arrived settlers to interact with a wide range of actors in the public, private, and third sectors with whom the migrants could eventually find an area of common interest and start building social relationships. Authorities should also make every effort to expedite access to local language training and complementary education, as needed, to enhance the employability of migrants and to boost their capacity to build extensive bonding and bridging social capital.

7.1 Limitations

To put together the four categories of our dependent variable (abundant social capital, mainly bonding, mainly bridging vs. limited social capital), we used a criterion that was most stringent in relation to abundant social capital, but allowed more heterogeneity within other categories. In particular, we did not make a distinction between people who had a few social relationships and those who had none. While the latter group would need targeted attention, the group proved too small to be handled separately. Therefore, the results related to abundant social capital should be taken as the most reliable ones, while more caution should be used in relation to the remaining categories.

Our analytical sample had a slightly over-representation of migrants with tertiary education (48.6%) compared with the full original sample (46.7%). To evaluate the impact of this difference, we regressed social capital only on education using the full original sample and the analytical sample (both with weights) separately. The differences in the estimates ranged around 0.004 percentage points across outcome categories. While we consider these differences too small to significantly affect the study results, we cannot fully verify this.

One clear limitation of our study is its reliance on cross-sectional data, which did not allow us to confirm the direction of the relationships or make causal inferences. According to earlier research, there may be a two-way relationship between local language skills and social relationships (Martinovic, van Tubergen and Maas 2015). Likewise, a two-way relationship may exist between social capital and some control variables, such as health status.

Despite the relatively large representative dataset available, we obtained only a snapshot of the dynamic social relationships without being able to fully uncover what explains the differences in social capital accumulation between the education groups. Future studies could delve further into the processes of social selection taking also into consideration personalityrelated characteristics to try to gain further insights on social capital development.

A longer time perspective could offer a more nuanced picture, as earlier research has found that there may be a high turnover in migrants' social networks (Lubbers et al. 2010; Lubbers, Molina and McCarty 2021). However, researchers have also observed that the overall structures of the networks tend to remain rather stable over time (Lubbers, Molina and McCarty 2021: 545). Therefore, even a cross-sectional snapshot may be enough to produce a consistent profile of the structure of social capital. However, this is an area for future studies to explore.

7.2 Conclusion

Our study highlights the importance of income and language skills in the development of migrants' social capital. While a sufficient income level is relevant for both education groups, it is more common among tertiary-educated migrants. Proficiency in local language(s) protects both groups from scarce social capital but is particularly related to abundant social capital among tertiary-educated migrants. It is important to recognise, however, that the relationship between language skills and social capital is usually bidirectional. In addition to a decent income, education acquired in the new home country supports the development of abundant social capital among lower educated migrants. Surprisingly, migration-related factors did not contribute to social capital development in this group, whereas among the tertiary-educated, several migration-related characteristics played to their advantage. Although our models identified several important predictors, they were not able to explain the social capital gap between higher and lower-educated migrants, emphasising the need for continued research in this field.

Notes

- 1. The official statistics refer to 'people with a foreign background' meaning people whose parents (either both or the only known parent) were born abroad.
- 2. Albanian, Arabic, Dari, English, Estonian, Farsi, French, Kurdish, Mandarin, Polish, Russian, Somalian, Soran, Spanish, Thai, Turkish, and Vietnamese.

- 3. Our analytical sample comprised 48.6% tertiary-educated migrants, compared to 46.7 % in the full sample. As education is the key grouping variable in this study, we evaluated the impact of this difference by regressing social capital with education as the sole predictor in both the original and analytical sample (both with weights). The estimates produced by the two samples presented small differences, ranging approximately 0.004 pp across outcome categories. The results indicate that the slight overrepresentation of tertiary-educated migrants in the analytical sample is unlikely to significantly affect the results of our study.
- 4. This category refers to the descendants of the ethnic Finns (mainly Ingrians), who were forcefully moved to the USSR at the end of the Second World War. Since 1990 and the collapse of the USSR, their descendants have had a differentiated treatment facilitating their 'return' migration to Finland (Tinguy 2003).
- 5. Here, 'people with foreign background' refers to individuals who were born abroad and whose both parents or the only known parent have been born abroad. These data come from the Statistics Finland publicly available registers, which have been combined with the FinMonik-survey data.
- 6. The questionnaire explicitly prompted for the following forms of discrimination: offensive names, offensive signs/gestures, verbal or behavioural threats of violence, property vandalism, ignorance, acts of violence, acts/attempts of sexual violence, and any other forms of threat.
- 7. We also tested ordered logistic regression, but as the proportional odds assumption did not hold, we opted for multinomial regression.
- 8. BIC imposes a greater penalty for the number of parameters (Fabozzi et al. 2014). Therefore, it tends to support the simpler model. We considered all the fit indices together to get a better sense of the overall fit. To obtain the fit indices, unweighted data had to be used.

Supplementary data

Supplementary data are available at Migration Studies online.

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Conflict of interest statement. None declared.

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ORIGINAL RESEARCH



Young People's Well-Being and the Association with Social Capital, i.e. Social Networks, Trust and Reciprocity

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Abstract

The paper explores the association between social capital of young people at 12-13 years and their subjective well-being using Finland's sub-sample of the third wave of the International Survey of Children's Well-Being. Despite much previous research on this topic, relatively little knowledge is accumulated given that different studies define and measure social capital differently. In line with Robert Putnam, we understand social capital as a combination of social networks, trust, and norms of reciprocity. We measure well-being with two context-free scales: a one-dimensional overall life satisfaction scale and a fivedimensional Student's life satisfaction scale. The analysis is done with linear and unconditional quantile regression. The results indicate that all three dimensions of social capital are significantly associated with well-being. Of the three, trust is the strongest predictor explaining over 30% of the variance in both well-being scales. The study demonstrates the relevance of considering all dimensions of social capital together to avoid unobserved variable bias. Quantile regression reveals that while social capital is important for well-being across the quantiles, it is particularly important for the youth who fare poorly otherwise. Family-related variables showed the strongest association with well-being while relationships with friends, schoolmates, teachers, and other people mattered considerably less.

Keywords Well-being \cdot Social capital \cdot Social networks \cdot Reciprocity \cdot Trust \cdot Young people

1 Introduction

It is during our adolescent years that we consolidate our social selves (Coleman & Hendry, 1999). During this period, interest in other people increases, and friendship and peer relationships in general gain greater importance (Choudhury et al., 2006).

This paper explores how important not only social relationships but social capital, in general, is for the well-being of young people at 12–13 years of age. Social capital has

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stimulated much research and it has been associated with a range of positive outcomes, including better school performance (Lindfors et al., 2018), pro-social behaviour (Jenkins & Fredrick, 2017), and well-being (Addae, 2020; Bae, 2019; Geraee et al., 2019; Ko & Kuo, 2009; Lau & Li, 2011; Laurence, 2019; Morgan et al., 2012; Yoo, 2019), to name a few. Although most researchers have found a positive relationship between social capital and well-being, the evidence is fragmented as many studies have interpreted social capital narrowly, often equalling it to mere social relationships.

In this paper, we adopt Robert Putnam's three-dimensional definition according to which social capital consists of (1) social relations, (2) trust in other people, and (3) norms of reciprocity (Putnam, 2000). In this view, a person is well-off in terms of social capital if she/he sustains good relationships with family, friends, and acquaintances; considers other people generally trustworthy; and provides help to others and receives help from them with ease.

Our study is inspired by Tamar Dinisman and Asher Ben-Arieh's paper from 2016 (henceforth DBA), which explores the characteristics of well-being among young people across 14 countries. Using age, gender, country of living, and access to specific material goods as predictors, they explain up to 11–20% of the variance in well-being. We build on their results by adding social capital to the model. Alike DBA, we use the Children's Worlds -survey data but only the subset of Finland, which includes variables related to all three dimensions of social capital.

Finland in itself is an interesting case as both young and adult Finns have repeatedly reached some of the highest scores in global well-being/happiness assessments (e.g. Helli-well et al., 2020; Rees, 2017; Ottova-Jordan et al., 2016).¹ While the use of a one-country sample alone restricts our possibilities of drawing conclusions at a more global level, this is to our knowledge one of the few datasets, which allows measuring Putnam's three social capital dimensions together.

2 Social Capital Theories

Each of the three most prominent social capital theorists—Pierre Bourdieu, James Coleman, and Robert Putnam—formulated a distinct definition for it, which partly overlap, but also bear important differences. We go briefly through the three definitions in part to point out some often-repeated misunderstandings, in part to justify our choice adopted in the present paper.

2.1 Bourdieu's Perspective

Bourdieu was the first one of the three to write about social capital. Strongly influenced by Marxist theory, he defined social capital in somewhat utilitarian terms as being the sum of actual or potential resources that one can accrue through his/her friends and acquaint-ances (Bourdieu, 1986). Hence, the volume of one's social capital "depends on the size of the network of connections he can effectively mobilize and on the volume of capital

¹ Happiness and life satisfaction are often taken as synonyms to well-being and are being used interchangeably as outcome indicators in well-being-related research. (See e.g. Helliwell & Putnam, 2004; Campbell et al., 1976; Webster et al., 2021).

(economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected" (Bourdieu, 1986).

In Bourdieu's perspective, networks are established and maintained through chains of exchange of gifts, favours, material resources, etc.² Exchange is the essential element that ties people together. "Exchange transforms the things exchanged into signs of recognition, and through the mutual recognition and recognition of group membership which it implies, re-produces the group" (Bourdieu, 1986). To summarise, for Bourdieu, social capital is an individual resource that consists of two inseparable dimensions: social networks and exchange; the latter is what builds and sustains the former.

2.2 Coleman's Perspective

Shortly after Bourdieu, Coleman and Hoffer introduced another version of social capital while researching high school students' educational achievement and school dropout rate. They noticed that the dropout rate was significantly lower in Catholic schools in comparison to other schools and concluded that the closely bound religious community formed a protective resource, social capital (Coleman & Hoffer, 1987).

For Coleman and Hoffer, social capital is essentially about a network of relationships. The structure of the network is critical for the amount of social capital it can include. A "closure" is a structure where network members know and interact with each other, and a form of closure where older and younger generations share the same values, norms, and sanctions, is what Coleman and Hoffer consider a "functional community" (Coleman, 1988; Coleman & Hoffer, 1987).³

Coleman never specified a clear-cut definition of social capital. Instead, he identified several different expressions of it, including social norms and sanctions, obligations and expectations, trust, and information channels (Coleman, 1988; Coleman & Hoffer, 1987).

Social norms refer to shared regulations that can, for example, be endorsed by a group of parents and imposed on their offspring. Obligations and expectations are formed between individuals when one person does a favour of some kind to another person. This institutes an obligation, an outstanding "credit slip" that the person placing the initial favour can expect to collect at a given moment. The idea is similar to Bourdieu's chains of exchange. Coleman stresses that obligations and expectations entail trust between people without which there would hardly be any initial gesture of kindness. Trustworthiness means that obligations will be repaid. (Coleman, 1988).

Coleman distinguishes three different contexts where young people's social capital resides. Family-level social capital is revealed in the presence of parents at home and parental interest in their children's lives. School-level social capital arises through the relationships between the students, and between students and teachers. Community-level social capital depends on the structure or the degree of closure that the community members form. A true closure provides a protected setting for making favours that can be expected to be returned, and where joint rules and norms can easily be agreed upon. (Coleman, 1988; Coleman & Hoffer, 1987).

 $^{^2}$ In fact, this view is reminiscent of Marcel Mauss' earlier work in Polynesia where he noted that every gift or favour placed an expectation of some form of return (Mauss, 1990).

³ Coleman and Hoffer's interest in the structure of network relates back to Mark Granovetter's (1973) studies of the strength of ties in different network constellations.

In contrast to Bourdieu, Coleman understands social capital as an inherently collective resource that can only exist in relationships between people (Coleman, 1988). His ultimate interest was in educational achievement and he saw social capital as a functional resource of the family and community that could boost young people's school performance. Although appealing particularly for youth researchers, Coleman's version of social capital is challenging mainly for being so loosely formulated (e.g. Lin & Fu, 2003). Moreover, this version of social capital largely overlooks young people's own investment in building social capital. For Coleman, social capital is essentially an outcome of social structures, not so much of individual behaviour.

2.3 Putnam's Perspective

Putnam was the last one of the three scholars to launch his version of social capital. He is much indebted to Coleman for his work, and probably also to Bourdieu, although Putnam hardly ever refers to him. For Putnam "social capital refers to connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them" (Putnam, 2000). Many researchers associate overall social norms with Putnam's theory (e.g. Bjørnskov, 2006; Rodríguez-Pose & von Berlepsch, 2014), and it is true that in his earlier work (1993), Putnam was less clear about what types of norms he was talking about, but in his masterpiece (2000), Putnam explicitly limits the definition to norms *of reciprocity*. Conversely, *social* norms relate to Coleman's theory.

Putnam differentiates between formal, organized social networks and informal family and friendship networks. By the same token, Putnam differentiates bonding and bridging social capital. Bonding social capital consists of "inward-looking" relationships that bolster the group identity of homogenous groups and is typically a source of social and psychological support, mutual reciprocity, and solidarity. Bridging social capital, on the other hand, entails an "outward-looking" approach, and consists of relationships with people with more diverse backgrounds that is critical for the exchange of strategic information, for example about job markets. (Putnam, 2000).

Similar to Bourdieu's exchange and Coleman's obligations and expectations, in Putnam's framework, social networks almost inevitably entail reciprocity. Putnam distinguishes specific reciprocity from a more generalized one. Specific reciprocity is about two-way interaction, where a favour done to a friend evokes an expectation, and a moral obligation, to return the favour at some point. That is how reciprocity becomes a norm. Conversely, generalized reciprocity is about helping a person without expecting anything directly in return while trusting that there will always be people to help out when one needs it. (Putnam, 2000).

Trust, the last element of Putnam's three-dimensional social capital, can also be divided between a thicker type of trust that grows from strong and frequent social relations, and a thinner type of trust that relates to people in general.⁴ Thick trust is a necessary building block for bonding social capital, while thin trust contributes to overall law-abiding conduct, active citizenship, and participation in diverse forms of formal networks. (Putnam, 2000). Although institutional and political trust have received plenty of attention among social capital (e.g. Bjørnskov, 2006; Portela et al., 2013; Rodríguez-Pose & von Berlepsch,

⁴ With the distinction between thick vs. thin trust, Putnam pays explicitly tribute to Mark Granovetter (1973) whose theory about thick and thin ties has clearly marked Putnam's social capital framework.

2014; Rothstein & Stolle, 2002), Putnam actually identified only social trust, or trust in other people as part of social capital. "Our subject here is social trust, *not* trust in government or other social institutions. Trust in other people is logically quite different from trust in institutions and political authorities." (Putnam, 2000, emphasis in original text).

Putnam's conceptualization is often interpreted as an account of collective form of social capital (e.g. Portes, 1998; Siisiäinen, 2003). Indeed, in his earlier work on civic engagement in Italy, Putnam explicitly claimed: "One special feature of social capital [...] is that it is ordinarily a public good, unlike conventional capital, which is ordinarily a private good" (Putnam et al., 1993). Yet, in "Bowling Alone" Putnam revised this view: "Social capital has both an individual and a collective aspect [...] Social capital can thus be simultaneously a 'private good' and a 'public good' " (Putnam, 2000). This leaves no doubt that Putnam also recognises social capital as an individual resource.

Putnam focuses mainly on positive outcomes of social capital. In his perspective, social relationships with family, friends, partners, acquaintances, etc. can spawn direct benefits, such as a stronger feeling of self-worth and a greater sense of happiness (Putnam, 2000). Some authors have criticised Putnam for an overly positive approach to social capital and called attention to equally possible negative effects of it (Portes, 1998; Farrell, 2007). While this caution is good to keep in mind, we believe that the average effect of social capital is nevertheless more positive than negative. Just like wealth can become a burden in some circumstances, it is in general considered better to have more than less of it.

Alike Coleman, Putnam also recognises that young people flourish in an environment where people trust each other and frequently interact with each other. He also notes that while children-at-risk are likely to experience deficiencies in social capital, they are also likely to experience the greatest gains if their social capital can be increased. (Putnam, 2000).

In sum, we see many similarities between the three scholars. All of them, relate the idea of exchange/reciprocity tightly to social capital, and both Coleman and Putnam also associate trust to it. Portes considers Bourdieu's theory "arguably the most theoretically refined [one]" (Portes, 1998), but in our view, Putnam, while borrowing elements from both Bourdieu and Coleman, formulated the most comprehensive and yet most specific definition of social capital, thus far.

Some critiques blame Putnam for having put together a too broad concept that combines causes and consequences (Lin & Fu, 2003; Portes, 1998). For Portes, for example, the essence of social capital is "the ability to secure benefits through membership in networks", while trust and reciprocity are mere causes of it (Portes, 1998). Similarly, Lin understands social capital as "diverse resources embedded in social networks", but he sees social resources and trust as consequences, not causes, of it (Lin & Fu, 2003).

We agree that Putnam's definition is broad, but like him, we too find social networks, trust and reciprocity, intrinsically interrelated elements, hard to differentiate which comes first, and which follows (as evidenced by opposing views of Portes and Lin about causes and consequences). Social relationships entail some form of reciprocity, or exchange of favours, but that only lasts if one can trust that other persons are there for him/her when the need raises (Putnam, 2000).

In empirical research, Putnam's three dimensions are seldom measured together in one study. Considering, however, the interrelationship between the three, we believe that approaching social capital as a unidimensional resource induces a risk of omitted variable bias and generates potentially misleading results. To verify this assumption, we adopt here Putnam's definition of social capital and test how social networks, social trust and reciprocity, separately and jointly contribute to young people's subjective wellbeing.

3 Previous Research on Social Capital and Subjective Well-Being Among Young People

A myriad of earlier studies have recorded an association between young people's wellbeing and social networks, friendship relationships, family support, etc. (e.g. Haanpää et al., 2019; Parker & Asher, 1993; Webster et al., 2021; Leme et al., 2015). Although important, we focus here exclusively on studies, which explicitly look into the relationship between *social capital* and well-being.

In 2006, Kristin Ferguson conducted a systematic review of such studies focusing on family and community social capital, and hence binding her attention to the Colemanian theoretical framework. Ferguson observed that there were major differences in the way the studies operationalized the concept of social capital, but practically all of them found a positive relationship between social capital and well-being. (Ferguson, 2006).

Most studies in Ferguson's review relied on data collected from adult respondents; in them, social capital was seen as something that either the parents or surrounding adults had, or not, and that through them was reflected onto their children (Furstenberg & Hughes, 1995; Garbarino & Sherman, 1980; Maccoby et al., 1958; Runyan et al., 1998; Sampson et al., 1999; Stevenson, 1998). Well-being was understood broadly to refer to anything between successful physical and behavioural development to lower levels of violent acts in youth, higher levels of psychological adjustment, and better academic performance.

Our interest resides in the social capital held by young people themselves and its relation with their subjective well-being. We understand subjective well-being as people's own evaluations and aspirations related to their lives (Campbell et al., 1976). As opposed to more objective measures, subjective well-being: (a) is grounded in a person's perceptions and evaluation of his or her experiences; (b) includes positive measures instead of only absence of negative ones; and (c) includes an overall evaluation of life, usually ''life satisfaction'' (Diener, 1984).

We have identified eight studies that share with us the same research interest. Many of them assess a more complex mechanism where social capital is only one of the potential predictors. For example, Addae (2020) explores the relationship between young people's socio-economic status, social capital, and well-being in Ghana, and Laurence (2019) studies the relationship between community disadvantage, young people's social capital, and well-being in England. Appendix 1 summarises key details of these studies.

All eight studies were conducted in the realm of health sciences, psychology, or in an interdisciplinary setting. Their foremost interest was in well-being, not in social capital, as such. This may explain why many of the studies define social capital only cursorily without relying on any dominant social capital theories. Three of the eight studies use some elements of Putnam's theoretical framework. Two of them deal with the dyad of bonding and bridging social capital (Ko & Kuo, 2009; Yoo, 2019), while one considers the quality of social networks as an indicator of social capital (Laurence, 2019).

Most of the eight studies operationalise social capital through such dimensions as family social capital (including family sense of belonging, family cohesion, family autonomy and support, family control), friends social capital, school social capital, and/or community social capital (Addae, 2020; Bae, 2019; Geraee et al., 2019; Lau & Li, 2011; Morgan et al., 2012). Typically, these studies use large batteries of variables to compose a latent factor or a composite index for social capital, but many do not specify the detailed variables used, only the Cronbach's alpha value to evidence the internal reliability of the used scale. Still, the provided information is sufficient to tell that the studies diverge considerably in the way they operationalise the concept of social capital (see also Appendix 1). This applies even to those relying on Putnam's theory (Ko & Kuo, 2009; Laurence, 2019; Yoo, 2019). Notably, none of them applied Putnam's three dimensions of networks, trust, and reciprocity.

There is less variation in the way the studies have operationalised the outcome variable, subjective well-being. The most common ones include some form of happiness/life satisfaction scales (Bae, 2019; Geraee et al., 2019; Ko & Kuo, 2009; Lau & Li, 2011; Laurence, 2019; Yoo, 2019) or Cantril's ladder (Addae, 2020; Morgan et al., 2012). Both context-free and domain-specific well-being measures have been used. We observe that models with domain-specific well-being measures run a risk of tautological results if the same model includes related items both as predictors and as part of the outcome variable (e.g. "I like school very much" as part of the satisfaction-scale and "I feel part of my school" or "I feel close to people at school" as predictors).

All eight studies find a significant positive relationship between adolescents' social capital and their subjective well-being (Addae, 2020; Bae, 2019; Geraee et al., 2019; Ko & Kuo, 2009; Lau & Li, 2011; Laurence, 2019; Morgan et al., 2012; Yoo, 2019). This is the case even of the three studies that assess the association between social capital and wellbeing in the context of social media (Bae, 2019; Geraee et al., 2019; Ko & Kuo, 2009).

Only Sung-Man Bae (2019) explores young people's social capital and well-being with a longitudinal research design. Bae focuses on Korean adolescents and finds that a more intense use of smartphones is related to greater social capital over time, and that in turn is related to greater subjective well-being over time. To our knowledge, this is the only study to provide empirical evidence of a causal relationship between young people's social capital and well-being.

4 Data and Method

4.1 Sample and Procedure

The present study is based on the third wave of the International Survey of Children's Well-Being (ISCWeB: www.isciweb.org), collected in 2018–2019. The survey targeted 8–9, 10–11, and 12–13-year-old primary school students in 35 countries and covered a wide range of themes from home environment and material assets to time use, family relationship, friendships, access to help and support, and subjective well-being. We had an opportunity to include a few additional questions in Finland's questionnaire for the age-group of 12–13 years, i.e. sixth graders to obtain information on the three dimensions of Putnamian social capital. The present study uses this Finnish dataset.

A stratified sampling was conducted based on four major regions (NUTS2) in mainland Finland, as illustrated in the Fig. 1. A random selection of municipalities was conducted according to the proportional number of students in each region making the sample nationally representative of sixth graders. Altogether 29 schools participated in the survey. The proportion of foreign-born students was 4.4% in the sample (4.0% in Helsinki-Uusimaa, 5.5% in Southern Finland, 4.3% in Western Finland, and 3.1% in Northern and Eastern Finland) against 5.5% in the country (Statistics Finland, Population 31.12. by Language, Origin, Year, Sex, Information and Age, referred 31.12.2017). Case weights are used in the analyses to account for the stratified sampling.

Data collection was administered online using the Webropol-survey tool. The ethical committee of the host institution of the authors approved the study protocol in 2018. After

REGIONAL REPRESENTATIVENESS OF SAMPLE STRATA

1:10 000 000

© EuroGeographics for the administrative boundaries Statistics Finland, Municipality-based statistical units, major regions 1:100 000, 2021



Fig. 1 Representativeness of the sample strata in each NUTS2-region in mainland Finland. Data on all sixth-grade students in 2017 obtained from the Municipality-based statistical units, Statistics Finland. The material was downloaded from Statistics Finland's interface service on 15 June 2021 with the licence <u>CC</u> <u>BY 4.0</u>

parental consent, the children themselves made the final decision on participation. They were also informed of the confidentiality and possibility of discontinuing the survey at any point. The response rate of the whole sample was 80% (N=1075 of 12–13-years old). Our analytical sample only includes cases with no missing values in the variables of interest, n=821.

The present article builds on a study of DBA that explored the effects of a few sociodemographic factors (age, gender, born in-country, three asset variables, and current country of living) on children's subjective well-being in 14 countries (N: 34,512). They carried out the study with linear regression using three different subjective well-being scales as comparative outcome variables, including one context-free item (Overall Life Satisfaction scale) and two domain-specific scales.

While DBA detected some differences in the magnitude of the estimates across the wellbeing scales, all their analyses indicated that the current country of living contributed the most, and demographic variables (age, gender, born in-country) the least to well-being. Overall, DBA were able to explain 11–20% of the variance in their outcome variables.

The present study continues from the DBA study and seeks to answer, (1) to what extent social capital, i.e. social networks, trust, and reciprocity, relates to young people's subjective well-being, and (2) whether the importance of these three dimensions vary at different points of the SWB distribution.

We have used the same modelling method and, to the extent possible, the same variables as DBA, only adding measures of social networks, reciprocity, and trust. However, there are some important differences to the original study. First, we used only two noncontextual well-being scales as our dependent variables. Furthermore, we focus on a single country (Finland) as opposed to a multi-country comparison, and thus dropped the variable of current country of living from the model. Lastly, we adopted both a parametric and a non-parametric analytical approach for the reasons explained below.

4.2 Instruments

4.2.1 Dependent Variable

Two different well-being scales were used. First, a context-free Overall Life Satisfaction scale (OLS-scale), based on a single question of "how satisfied are you with your life as a whole," with a response scale of 0-10 (0= "completely dissatisfied", 10= "completely satisfied"), which was transformed to 0-100 scale. Young people's understanding of the question and the response scale was thoroughly pre-tested before the application (Dinisman & Ben-Arieh, 2016).

Second, a reduced version of Huebner's Students' Life Satisfaction Scale (SLSS-scale), which is a composite indicator (Cronbach alpha 0.979) measuring cognitive subjective well-being with five statements: "My life is going well", "My life is just right", "I have a good life", "I have what I want in life" and "The things in my life are excellent" (Huebner, 1991; Diener et al., 1985). The sum of the original 11-point agreement scales (0="does not agree at all", 10="fully agree") was transformed to 0–100.

4.2.2 Social Capital

The original ISCWeB–survey included several variables related to the dimensions of social networks and reciprocity, but social trust was not covered. Thus, a battery of questions related to trust was added to the Finnish questionnaire.

We used in total twelve variables to measure social capital, covering both close and somewhat more distant relationships (family, friends, and other acquaintances). Instead of combining the variables into fewer factors or composite indicators as some researchers have done, we kept them separate to distinguish the effects of networks, trust, and reciprocity respectively, and to discern the relative importance of family, friends, and other people. Because of the unavailability of data, we limit our attention to social capital accrued from live relationships, disregarding the admittedly important element of online social capital.

To measure social networks, we used ISCWeB-survey questions related to time used with different categories of people: "How often do you spend time relaxing, talking, or having fun with your family?", "How often do you see your friends when not at school?", "How often do you usually spend time playing sports or doing exercise in group (as opposed to alone)?", and "How often do you usually participate in hobbies or spare-time activities in group?" In the questionnaire, the last two questions were modified to specify whether the referred activities were done alone or in a group. For the analysis, the activities done in group were combined into one composite variable measuring "frequency of participation in hobbies in group". All these questions used a response scale ranging from 0= "never" to 5= "every day." One more frequent question about confidential relationships (see e.g. Rönkä et al., 2013) was added to the survey for the analysis of networks: "Do you currently have any close person, with whom you can talk about almost any personal matter" (0="none", 3="several close persons").

In line with Putnam's theory, we understand reciprocity to refer to provision and reception of tangible and intangible forms of help, but the ISCWeB-survey only included questions related to reception of help. We used these as proxies for reciprocity: "If I have a problem, people in my family will help me", "If I have a problem, I have a friend who will support me", "If I have a problem at school, my teachers will help me", and "If I have a problem at school, other children will help me." The response scale of each ranged from 1 = "disagrees" to 5 = "fully agrees".

Social trust has been largely absent in the social capital research of youth, and it was neither included in the original ISCWeB-survey. Among adults, trust has often been measured with the question "would you say that most people can be trusted, or that you cannot be too careful in dealing with people" (e.g. Bjornskov 2006; Portela et al., 2013). We added the dimension of trust in the ISCWeB-questionnaire, by breaking the above question into several more concrete questions: "How strongly do you trust in (a) your family members, (b) friends, (c) neighbours, (d) schoolmates, (e) school personnel, (f) random passing-by foreigners. The response scale ranged from 0= "not at all" to 4= "very strongly". For the present analysis, four first ones were selected given their highest correlations with the well-being measures.

For comparability, all the social capital measures were standardized and used as continuous variables.

4.2.3 Control Variables

To the extent possible, the variables included in DBA's models were used here as control variables: age, gender, and whether the person was born in the country (yes–no). A material deprivation index was included in substitution for the three possession dummies used by DBA. The index was composed of eight dummies asking whether the respondent possesses given material items (e.g. good clothes, access to the Internet at home, a mobile phone), and the scale ranged from 0= not deprived to 8= heavily deprived.

4.3 Analysis

Considering that the social capital variables were measured on an ordinal scale (although treated as continuous ones in the analyses⁵), both Pearson's correlations and Kruskal–Wallis nonparametric test were assessed. Both indicated significant associations between wellbeing variables and the included social capital variables (both test results available upon request), which justified their inclusion in the model. Most social capital variables also correlated moderately with each other (correlation coefficient ranging mostly between r: 20-30), yet without causing too high multicollinearity in the models (VIF ≤ 2.02).

The analysis was carried out in three parts. First, the association between social capital and well-being (OLS-scale vs. SLSS-scale), was assessed with ordinary least squares linear regression. With both OLS-scale and SLSS-scale as dependent variables, five linear models were run; the first one only comprised the control variables (corresponding to the full model in DBA's analysis). Then, to assess the relative importance of each dimension of social capital, three models were run, each with the set of variables of one dimension of social capital added to the controls. The fifth model included all the variables at the same time. The magnitude of estimates and the coefficient of determination were compared between the models, as did DBA.

Second, a non-parametric approach was employed to check whether the predictors related differently to well-being at different points of the distribution of the outcome variable. This was done with a quantile regression analysis, but only using the SLSS-scale, which is a more truly continuous measure. To avoid conditioning the quantiles by the set of predictors, as does the more traditional conditional quantile regression, here unconditional quantile regression (UQR) was used, which divides the outcome variable into quantiles before the regression (Firpo et al., 2009; Killewald & Bearak, 2014; Rios-Avila, 2020). Thus, the name "unconditional".

To interpret UQR results at an individual level, the assumption of rank invariance or rank similarity must remain true (Dong & Shen, 2018; Gregg et al., 2019). The ISCWeB-data did not contain instrumental variables that would have allowed testing rank invariance/similarity. While we believe that social capital can move people from lower to higher ranks of wellbeing, we are rather confident that a one unit change in any one variable alone would not be sufficient to do so. Thus, we trust the assumption holds, and interpret the results at an individual level.

Third, the same analyses were carried out with a reversed and log-transformed SLSSscale for robustness check. As illustrated in Fig. 2, the original SLSS-scale was strongly

⁵ A test was conducted to compare models where social capital variables were treated as continues vs. ordinal ones. The one with continuous variables resulted in a better fit (BIC).



Fig. 2 Distribution of the original and the transformed SLSS-scales

left-skewed (skewness: -2.35; kurtosis: 10.06), and the Breusch-Pagan test after linear regression indicated severe heteroscedasticity (p < 0.000). Log-transformation of the reversed scale improved the issue but resulted nonetheless with a non-normal distribution (skew: -0.29; kurtosis: 1.88). As the transformed SLSS-scale is not directly comparable with the work of DBA, and its interpretation is less intuitive because of the reversed scale, we only use it for robustness check of the results.

For the analysis, Stata 16.0 software was used. All analyses were carried out using case weight to reflect the stratified sampling strategy and the distribution of the young people between the strata. The case weight has been calculated so that the size of the weighted sample remains the same as that of the unweighted sample. For UQR, the Stata command "rifhdreg" was used, which accepts the same case weight to obtain results comparable to those of the linear regression (Rios-Avila, 2020).

The cross-sectional data design impedes claims about causality or direction of the association between the dependent and independent variables. However, the dominant postulation is that social capital impacts well-being rather than the other way around (e.g. Bae, 2019; Helliwell & Putnam, 2004). Without being able to put this to test, we too have endorsed this assumption.

Table 1 presents descriptive statistics for the full sample and two extreme fractions of the SLSS distribution. The overall level of well-being in the sample is high with a mean score of 88 (median 90) on the OLS-scale and 86 (median 90) on the SLSS-scale. Approximately 46% of the sample scores full 100 on OLS-scale and 25% score 100 on SLSS-scale, with variance 0.00. A t-test comparing the mean values between the fractions revealed that there is significantly and systematically more social capital accumulated at the upper extreme of the well-being scale. It should be noted that these fractions are different from the quantiles in UQR analysis, which refer to specific points in the distribution instead of fractions.

5 Results

Tables 2 and 3 present the results of linear regression models. Similar to DBA, also here demographic and socioeconomic background variables alone have a limited share of the variance in well-being. Understandably, the present study shows even lower coefficients of determination for the baseline models than obtained by DBA (5–7% against 11–20%), given the different contexts.

Measures	Total sample mean (SE)	Lowest 25% of SLSS mean (SE)	Highest 25% on SLSS mean (SE)
Dependent variables			
OLS-scale	88.13 (0.69)	68.37 (1.80)	99.58 (0.14)
SLSS-scale	86.27 (0.66)	64.19 (1.51)	100.00 (0.00)
Independent variables networks			
Number of confidants	2.24 (0.04)	1.69 (0.07)	2.59 (0.06)
Freq. time spent with family	3.19 (0.05)	2.24 (0.10)	3.87 (0.08)
Freq. see friends	2.82 (0.05)	2.57 (0.10)	3.12 (0.09)
Freq. hobbies in group	2.02 (0.05)	1.65 (0.09)	2.30 (0.10)
Reciprocity			
Family helps with problems	3.48 (0.03)	2.89 (0.08)	3.80 (0.05)
Friends help with problems	3.26 (0.03)	2.88 (0.07)	3.62 (0.06)
Teachers help at school	2.98 (0.04)	2.47 (0.08)	3.38 (0.07)
Schoolmates help at school	2.74 (0.04)	2.26 (0.08)	3.14 (0.07)
Trust			
Trust in family	3.66 (0.02)	3.13 (0.07)	3.96 (0.01)
Trust in friends	3.33 (0.03)	2.99 (0.07)	3.64(0.04)
Trust in neighbours	1.93 (0.04)	1.33 (0.08)	2.49 (0.08)
Trust om schoolmates	2.45 (0.04)	1.84 (0.07)	3.03 (0.06)
Control variables			
Age	12.17 (0.02)	12.16 (0.03)	12.13 (0.03)
Deprivation index	0.2 (0.02)	0.43 (0.06)	0.06 (0.02)
Proportion (SE)			
Gender (girls)	56.31 (1.83)	59.32 (3.60)	48.25 (3.69)
Born in country	95.92 (0.71)	94.70 (1.59)	95.50 (1.50)
n	821	212	205

 Table 1
 Weighted descriptive statistics for full sample, and the youth with lowest vs. highest well-being level measured on SLSS-scale

The present study reveals that social capital adds considerably to the baseline model; it explains 38% of the variance in OLS-scale and 47% of the variance in SLSS-scale when adjusting for the control variables. Irrespective of the scale of the dependent variable, the dimension with the strongest association with well-being is trust, which alone explains 32–39% of the variance, followed by reciprocity (explaining 24–31%) and then social networks (explaining 19–25%). Most estimates of social capital variables decrease substantially when moving from unidimensional to multidimensional model (Models 2–4 vs. Model 5) due to correlation between social capital indicators. This finding underlines the importance of including the different dimensions of social capital in the same model to avoid overstated estimates caused by omitted variable bias.

Practically, all family-related variables are positive and strongly significant on both well-being scales and in every model. Moreover, the number of confidants is significant on both scales, and trust in schoolmates on SLSS-scale. The results show a largely similar pattern across the two well-being scales although the magnitude of the estimates varies to

Overall life satisfaction	Model 1	Model 2	Model 3	Model 4	Model 5
Age	0.775	1.770	0.749	1.580	1.660
Gender (ref. boys)	- 4.117**	- 4.618***	-5.171***	- 3.240**	- 3.954***
Born in country (ref. "no")	5.747	6.836	6.277	5.180	5.792
Deprivation index	- 7.551***	- 4.540**	- 4.563***	- 3.794**	- 2.679*
Networks					
Freq. time spent with family		4.988***			1.619*
Freq. see friends		0.620			0.868
Number of confidants		5.016***			2.409***
Freq. hobbies in group		0.009			- 0.489
Reciprocity					
Family helps with problems			6.951***		3.339***
Friend helps with problems			- 0.050		- 0.350
Schoolmates help			2.228**		0.860
Teachers help at school			2.326**		0.516
Trust					
Trust in family				9.467***	6.476***
Trust in friends				0.085	- 0.435
Trust in schoolmates				1.763	0.967
Trust in neighbours				1.704*	0.951
_cons	77.184***	63.490***	76.924***	66.037***	64.854***
Ν	821	821	821	821	821
$Adj.R^2$	0.073	0.261	0.311	0.392	0.451
$Adj.R^2$ change from Model 1		0.188	0.238	0.319	0.378

 Table 2
 Weighted linear regression on the association between social capital and overall life satisfaction (standardized coefficients)

p < 0.05, p < 0.01, p < 0.01

some extent. Overall, deemed by the adjusted R2-level, the SLSS-scale appears somewhat more sensitive to social capital.

UQR analysis (Table 4) revealed a slightly more complex picture. Because of zero-variance at the highest extreme of SLSS-scale (25% of the respondents scored 100), the analysis was done only until the 75th quintile.

Most social capital variables get somewhat higher estimates in lower quantiles in comparison to the higher ones. The pattern is particularly notable concerning trust in family, help received from family, and number of confidants, all of which are positive and statistically significant in q-10, but not in q-75.

Overall, at the lower end of the scale, all family-related variables and the number of confidants are significant and positive. Interestingly, the frequency of participating in group hobbies is also significant but negative in q-10, while non-significant in any other quantiles.

At the upper end of the scale, time spent with family, trust in schoolmates, and access to teachers' help are positive and significant; time spent with family received the highest estimate but only slightly higher than that of trust in schoolmates.

Notably, there are some variables of each dimension of social capital that are significantly related to well-being at both ends of the distribution. For a comparison, UQR was

Students' life satisfaction scale	Model 1	Model 2	Model 3	Model 4	Model 5
Age	0.937	1.909	0.943	1.829*	1.782*
Gender (ref. boys)	- 2.917*	- 3.442**	- 4.306***	- 2.062*	- 3.093**
Born in country (ref. "no")	7.425	8.845*	8.046*	6.593	7.597*
Deprivation index	- 6.060***	- 2.929*	- 2.943**	-2.050^{*}	- 1.079
Networks					
Freq. time spent with family		6.244***			2.706***
Freq. see friends		0.606			0.614
Number of confidants		4.667***			1.798***
Freq. hobbies in group		- 0.220			- 0.712
Reciprocity					
Family helps with problems			6.990***		3.428***
Friend helps with problems			0.518		0.175
Schoolmates help			2.285**		0.624
Teachers help at school			3.081***		1.115
Trust					
Trust in family				9.459***	6.073***
Trust in friends				0.594	0.064
Trust in schoolmates				2.403**	1.448*
Trust in neighbours				1.804**	0.968
_cons	70.738***	56.970***	70.102***	58.689***	58.847***
Ν	821	821	821	821	821
Adj. R ²	0.052	0.298	0.363	0.443	0.517
$Adj.R^2$ change from Model 1		0.246	0.311	0.391	0.465

 Table 3
 Weighted linear regression on the association between social capital and Student's life satisfaction scale (standardized coefficients)

p < 0.05, p < 0.01, p < 0.01

also run only with the control variables (not shown here) to calculate the difference in adjusted R2-values. According to these results, social capital variables weigh considerably more for well-being at the lower end of the scale.

In Fig. 3, UQR estimates are plotted separately for each social capital variable. For comparison, linear regression estimates are plotted in the same graphs with constant horizontal lines. The overlapping confidence intervals show that most of the results do not differ significantly between linear and quantile regression models, except for those of trusting in one's family. Its importance is significantly greater at the lower end of SLSS-distribution. Moreover, confidence intervals of receiving help from family, and the number of confidants are at the limit of statistical significance. Such differences go unnoticed in the linear models.

A robustness check of the linear regression results was run using reversed and log-transformed SLSS-scale as the dependent variable (results available upon request). Although the sign and the magnitude of the estimates obviously changed, the significance level matched largely with those obtained with the untransformed SLSS-scale. Only, the number of confidants did not turn significant on the transformed scale, whereas help received from teachers did. The most notable difference was found in the coefficient of determination; the

Table 4 Weighted unconditional quantile regression	on the association	l between social	capital and Studer	nt's life satisfactio	n scale (standardiz	ed coefficients)	
	q10	q20	q30	q40	q50	q60	Q75
Networks							
Freq. time w. family	3.357* (1.635)	3.831*** (1.007)	4.068*** (0.794)	2.963*** (0.618)	2.287*** (0.582)	2.390*** (0.531)	1.651*** (0.434)
Freq. see friends	2.357 (1.562)	0.232 (0.851)	-0.500 (0.718)	0.159 (0.547)	0.157 (0.528)	- 0.262 (0.506)	-0.003 (0.423)
Number of confidants	3.886* (1.632)	3.326*** (0.997)	2.030* (0.801)	0.976 (0.614)	0.758 (0.583)	0.075 (0.520)	- 0.043 (0.441)
Freq. hobbies in group	(1.435)	-0.707 (0.861)	-0.230 (0.740)	-0.290 (0.574)	0.237 (0.543)	0.393 (0.494)	0.059 (0.424)
Reciprocity							
Family helps with probl	9.947*** (2.283)	3.376** (1.184)	2.713** (0.938)	1.122 (0.697)	1.308* (0.657)	0.897 (0.553)	0.721 (0.447)
Friend helps with probl	- 0.783 (2.576)	0.657 (1.399)	1.144 (1.130)	1.361 (0.868)	0.834 (0.819)	0.684 (0.664)	1.052 (0.540)
Schoolmates help	2.529 (1.891)	0.736 (1.100)	- 0.119 (0.866)	0.060 (0.687)	0.670 (0.679)	0.749 (0.598)	0.449 (0.465)
Teachers help at school	0.839 (1.640)	0.441 (0.992)	1.579 (0.808)	1.217 (0.622)	1.053 (0.580)	1.116* (0.525)	0.953* (0.430)
Trust							
Trust in family	11.909 *** (2.545)	7.578*** (1.355)	4.053*** (1.025)	3.872*** (0.765)	2.997*** (0.702)	1.882^{***} (0.554)	0.677 (0.429)
Trust in friends	- 0.742 (2.332)	0.185 (1.335)	1.374 (1.051)	1.421 (0.805)	0.889 (0.748)	1.009 (0.680)	0.934 (0.574)
Trust in schoolmates	1.276 (1.900)	2.346* (1.194)	2.004* (0.976)	1.363 (0.762)	1.923^{**} (0.711)	2.140^{***} (0.638)	1.346^{**} (0.516)
Trust in neighbours	1.469 (1.640)	1.118 (0.950)	0.884 (0.777)	0.748 (0.642)	0.336 (0.589)	0.161 (0.556)	0.591 (0.472)
_cons	-1.334 (28.927)	29.459 (22.900)	68.116^{***} (18.444)	78.620*** (14.385)	77.727*** (13.750)	104.563*** (12.532)	111.001^{***} (10.329)
$Adj. R^2$	0.320	0.361	0.328	0.310	0.282	0.254	0.214

(continued)	
Table 4	

	q10	q20	q30	q40	q50	q60	Q75	
Adj R ² of models with controls only (not shown)	0.041	0.051	0.040	0.030	0.026	0.021	0.027	
Adj. R2 change from models with controls only	0.279	0.31	0.288	0.28	0.256	0.233	0.187	
Standard errors in parentheses. Models are controll *p < 0.05, **p < 0.01, ***p < 0.001	led for age, gende	er, whether the p	erson was born ii	the country and r	naterial deprivatio	m index		



Fig. 3 Results of ordinary linear regression (dark grey) and unconditional quantile regression (light grey) with 95% confidence intervals

full set of social capital indicators explained less of the variance in the transformed SLSS-scale than in the untransformed one (36% vs. 47%).

UQR results with the transformed SLSS-scale were equally similar to those obtained with the untransformed scale in terms of statistical significance. Among the main differences, frequency of participating in group hobbies turned non-significant for those with most frail well-being, and for those best-off, help received from friends turned significant instead of help received from teachers. Most importantly, the dominant pattern observed with the untransformed scale where those with the faintest well-being level obtained many of the highest estimates, was no longer observed when using the transformed scale. Yet, the adjusted R2-values indicated even more clearly that social capital matters more for the wellbeing of those who otherwise fare poorly.

6 Discussion

This paper explores the relationship between social capital and subjective well-being among young people using Finland's subsample of Children's Worlds survey. We relied on Putnam's theoretical framework and assessed the relative contribution of social networks, social trust, and reciprocity, separately and jointly, to subjective well-being of early adolescents. Our results indicate that all three dimensions of social capital are strongly related to well-being, jointly explaining 38–47% of the variance in adolescents' well-being. Of the three dimensions, social trust generates the strongest effect. These results were largely confirmed by robustness check with a reversed and log-transformed well-being scale, although

the importance of social capital for wellbeing appeared somewhat lower (36% vs. 47% of the variance in wellbeing). In comparison to sociodemographic variables (age, gender, born in country, deprivation index), social capital expands manifold our understanding of well-being.

Family-related variables showed the strongest association with well-being while relationships with friends, schoolmates, teachers, and other people mattered considerably less. Other researchers have noted that the importance of family tends to reduce gradually at the same pace as the importance of friends increases (Ahlborg et al., 2019). However, our cross-sectional dataset with only 12–13 years old adolescents did not allow us to verify changes over time.

Our findings converge largely with previous research, which also has found a significant positive effect of young people's social capital on their wellbeing. However, we have argued that previous research has possibly overstated the importance of social capital when it has focused on one dimension of social capital only. We approached social capital as a multidimensional resource consisting of networks, trust, and reciprocity. Alike Putnam (2000) and Lin and Fu (2003), we too observed a moderate correlation between the three dimensions. In multivariate analyses, the magnitude of regression estimates decreased when a unidimensional model was expanded to a multidimensional one. Our findings therefore underline the importance of including all social capital dimensions in the same model to avoid omitted variable bias.

We explored the association of social capital with well-being using two context-free well-being scales: a one-dimensional OLS-scale and a five-dimensional SLSS-scale. We considered it important to avoid domain-specific outcome variables, which might cause tautological results if very similar variables are included as explanatory and outcome variables. The two well-being scales produced similar results both in terms of statistical significance and magnitude of estimates. Small differences were noted, but only at p < 0.05 level; a more conservative interpretation with p < 0.001 resulted in very similar results across the two scales. Overall, the SLSS-scale appeared somewhat more sensitive to the effects of social capital, but the OLS-scale did not fall far behind. Moreover, given the greater time-effectiveness of gathering data for OLS-scale (one question vs. five questions), it can be considered as a satisfactory measure of well-being, especially if using a more stringent confidence level.

Much of previous well-being research has relied on parametric methods without verifying whether the methodological assumptions are met. Finland has repeatedly scored as one of the happiest countries in the world and is therefore one of the most extreme cases for happiness/well-being research. Due to heavily left-skewed well-being scales, we employed both a parametric and a non-parametric approach, using linear and unconditional quantile regression to discern potential differences in the way social capital relates to well-being at different points of the well-being scale. Our descriptive results showed that young people with low levels of well-being possess significantly less social capital than youth with higher levels of well-being. Quantile regression results largely coincided with those of linear regression indicating that all the three social capital dimensions were significant predictors of well-being across the quantiles, and that intra-family relationships were the strongest predictors of well-being at every quantile. Measuring with the original SLSS-scale, quantile regression suggested that the importance of family relationships was greatest for those whose well-being was low, but the robustness test with reversed and log-transformed wellbeing scale found that family ties matter equally across the quantiles. Yet, social capital as a whole weighs considerably more for those whose well-being level is low. These results support Putnam's proposition that at-risk-children who possess the least of social capital,

can gain most if their social capital is increased (Putnam, 2000). In the present study, this observation would have gone unnoticed if only analysed with ordinary linear regression. However, more studies are needed to confirm these results.

Social capital is a multifaceted asset with inherently intertwined dimensions. Therefore, to analyse any presumed outcome of it, one should consider all its dimensions concurrently. We have taken one step in that direction. However, our social capital measurement had some important limitations. Reflecting on Lin's (2003) recommendation of contextualizing social capital variables, the ones available in ISCWeB may have been too generic for measuring social networks. Because of the unavailability of data, our dimension of reciprocity was only covered from the perspective of receiving help but lacked the other equally important dimension of the provision of help. Moreover, although the new trust-related questions were pre-tested in advance, these should be validated with different age groups. Further, limited by its cross-sectional design and focus on one country, our study cannot establish any claims about causality or inter-cultural validity of the results.

Longitudinal studies on young people's social capital are scarce but important. If we can prove the causal link between young people's social capital and well-being, the relevant next step will be to consider how to support social capital accumulation. No doubt, schools are best placed to bolster social network building, trust in other people, and reciprocity, even among those young people whose home environment does not provide strong social capital. Embracing, at all levels, the strengthening of social capital as a permanent part of the educational programme could be one of the best investments in the future well-being of young people.

Appendix 1

(See Table 5).
Article	Sample population	Theoretical frame- work	Method	Definition of social capital	Social capital measurements	Well-being measure- ments	Result
Addae, Evelyn Aboagye 2020. The mediating role of social capital in the rela- tionship between socioeconomic status and adoles- cent wellbeing: evidence from Ghana. BMC Public Health, 20(1): 1–11	13–18 years	Earlier research	Path analy- sis	A valuable social resource that can be accessed by adolescents at the individual and community level of their social contexts for promotions of health and wellbeing	4 composite variables: family sense of belong- ing, school sense of belong- ing, family autonomy & support, family control	2 vari- ables used separately: Cantril ladder, a happiness scale	Three measures of family social capital protected adolescents' life satisfaction and happi- ness against the effects of socioeconomic status. School sense of belonging augmented adolescents' wellbeing but played no mediating role in the relationship between socioeconomic status and well-being
Bae, Sung-Man 2019. The rela- tionship between smartphone use for communica- tion, social capi- tal, and subjective well-being in Korean adoles- cents: Verification using multiple latent growth modeling. Chil- dren and Youth Services Review, 96: 93–99	10,98 years (mean age)	Earlier research	Multi- variate latent model- ling	Resources and values that are available through offline and online social networks and includes social interactions, social ties, social support, and reciprocity	1 social capital factor com- posed of 3 sub-factors: family social capital, friend social capital, community social capital	One SWB- factor composed of 3 items: I am happy to live, I do not have many wor- ries, I think my life is happy	Smartphone use for communi- cation was related to greater social capital over time, and greater social capital was associated with greater sub- jective well-being over time

Article	Sample population	Theoretical frame- work	Method	Definition of social capital	Social capital measurements	Well-being measure- ments	Result
Geraee et al. 2019. The relation- ship between family social capital, social media use and life satisfaction in adolescents. Health Promo- tion Perspectives, 9(4):307–313	12–19 years	Earlier research	Struc- tural equa- tion ling	Family social capital: family characteristics, such as family environment, family functioning, family compo- sition, family cohesion, and family interactions	1 family social capital factor based on 4 sub-factors: family cohe- sion, family interactions, lack of fam- ily conflicts, and family control	One factor composed of 5 items e.g. In most ways, my life is close to my ideal	Family social capital and social media use explained 50% of the variance in life satisfac- tion. Family social capital was the strongest predictor of life satisfaction
Ko and Kuo 2009 Can blog- ging enhance subjective well- being through self-disclosure? CyberPsychology and Behavior, 12(1): 75–79	16–22 years	Putnam: bonding & bridging	Struc- tural equa- tion ling	Bonding and bridging social capital. Bonding capital exists in groups of individu- als who share tightly knit, intimate and reciprocal rela- tionships. Bridging social capital exists in people com- ing from different networks through which members can share diversified messages and acquire resources from the outside	1 latent factor on social bonding, 1 latent factor on social bridging, 1 latent factor on social integration	The evalua- tion made by a blogger on his or her social con- tact, human relation- ships, and self- satisfaction after blogging	Self-disclosure of bloggers sig- nificantly and directly affected their perception of social integration and bonding and bridging social capital, which in turn promoted bloggers' subjective well-being

Table 5 (continued)

		ocial capital and schoo apital explained 18.79 % respectively of the on in subjective well-
	Result	Family sc social c and 3.5; variatio being being
	Well-being measure- ments	One compos- ite indica- tor: self- reported happines, feel pres- sured by school- work, self- rated health status
	Social capital measurements	2 composite variables for family social capital (cog- nitive vs. structural), 4 composite variables for school social capital (cog- nitive, struc- tural peer relation- ship, bonds between parents and schools)
	Definition of social capital	Structural vs. cognitive social capital. Structural social capital is an objective construct, and refers to the social setting which facilitates or inhibits inter- personal interactions, and access to resources. Cogni- tive social capital is a sub- jective element and refers to shared norms, values, trust, attitudes, and beliefs
	Method	Linear regres- sion
	Theoretical frame- work	Earlier research
	Sample population	11–12 years
Table 5 (continued)	Article	Lau and Li 2011. The extent of family and school social capital promoting positive subjec- tive well-being among primary school children in Shenzhen, China. Children and Youth Services Review, 33(9): 1573–1582

Table 5 (continued)							
Article	Sample population	Theoretical frame- work	Method	Definition of social capital	Social capital measurements	Well-being measure- ments	Result
Laurence, James 2019. Community disadvantage, ine- qualities in ado- lescent subjective well-being, and local social rela- tions: The role of positive and negative social interactions. Social Science & Medicine, 237, artID: 112442	16–17-years	Putnam and earlier research	Random- inter- cept hierar- chical, mixed- effects linear regres- sion models	Positive and negative social relations	1 composite variable for posi- tive social interaction, 1 composite variable for nega- tive social interactions, 1 variable on trust on neighbour- hood	One factor composed of 3 items, incl. life satisfac- tion scale, happiness scale, things- you-do-in- life-are- worthwhile scale	Community disadvantage reduced positive social rela- tions and increased negative relations. Through these dual, independent social relations pathways community disad- vantage affected subjective well-being

Table 5 (continued)							
Article	Sample population	Theoretical frame- work	Method	Definition of social capital	Social capital measurements	Well-being measure- ments	Result
Morgan et al. 2012. Does social capital travel? Influences on the life satisfaction of young people living in England and Spain. BMC Public Health 12:138, 1–12	15 years	Earlier research	General linear model- ling and deci- sion tree analy- ses	Social relationships, levels of trust, group membership and civic engagement	6 composite indicators: Family social capital (family sense of belonging, autonomy and control), family social support, school social (school sense of belonging, autonomy and control), school social (school sense of belonging, pelonging, pelonging, support, neighbour- hood social (sense of belonging), pelonging), pelonging), friende)	Cantril lad- der	Family autonomy and control, family and school sense of belonging and social support at home and school were important factors for well- being, but they manifested themselves differently in each country

Table 5 (continued)							
Article	Sample population	Theoretical frame- work	Method	Definition of social capital	Social capital measurements	Well-being measure- ments	Result
Yoo, Changmin 2019. Stress coping and mental health among adoles- cents. Applying a multidimensional stress coping model. Children and Youth Ser- vices Review, 99: 43–53	15–18 years	Putnam and earlier research	Struc- tural equa- tion ling	Bonding social capital: being linked to inward- looking bonds, focusing on relationships and networks of trust and reciprocity that ties within groups, and is found between individuals in tightly-knit, emotionally close relationships from family and close friends	One factor for bonding- social- capital-with- peers, one factor for bonding- social- capital-with- parents	One factor composed of 5 items e.g. I think I'm healthy, I like school very much	Parent-bonding-social-capital and peer-bonding-social- capital directly and indirectly affected adolescents' subjec- tive well-being and suicide ideation

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Availability of Data and Material The data on the third wave of the International Survey of Children's Well-Being will become openly accessible in June 2021. The first two waves of the survey are freely accessible at www.isciweb.org

Code Availability Stata 16.0, SPSS 25.

Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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Hyvinvoinnin sosiaaliset juuret

Luokka-analyysi sosiaalisen pääoman ja hyvinvoinnin välisestä yhteydestä

Minna Tuominen & Elina Kilpi-Jakonen



Abstrakti

Tämä tutkimus yhdistää Robert Putnamin ja Pierre Bourdieun teoriat tarkastellakseen sosiaalisen pääoman, subjektiivisen hyvinvoinnin ja yhteiskuntaluokan välisiä yhteyksiä. Tutkimuksessa huomioidaan samanaikaisesti sosiaalisen pääoman kolme ulottuvuutta – sosiaaliset verkostot, luottamus ja vastavuoroisuuden velvoite – ja etsitään vastauksia kahteen kysymykseen: missä määrin sosiaalisen pääoman määrä vaihtelee yhteiskuntaluokkien välillä ja miten sosiaalisen pääoman yhteys hyvinvointiin vaihtelee eri yhteiskuntaluokkien välillä? Aineistona käytetään European Social Surveyn kuudennen aallon (2012) Suomen otosta. Tulokset ovat sekä Bourdieun että Putnamin näkemysten mukaiset. Ne paljastavat systemaattisia eroja sosiaalisen pääoman määrässä yhteiskuntaluokkien välillä. Professioluokalla on muita enemmän ja työväenluokalla puolestaan muita vähemmän sosiaalista pääomaa lähes kaikilla mittareilla mitattuna. Tulokset osoittavat myös, että Putnamilaisen sosiaalisen pääoman käsitteen jokaisella ulottuvuudella on yhteys hyvinvointiin yhteiskuntaluokasta riippumatta. Tutkimustulokset antavat syyn uskoa, että vahvistamalla ihmisten välisiä sosiaalisia yhteyksiä voidaan lisätä onnellisuuden ja hyvinvoinnin määräsä kaikissa yhteiskuntaluokissa.

AVAINSANAT: hyvinvointi, onnellisuus, sosiaalinen pääoma, yhteiskuntaluokka

Johdanto

Tämä artikkeli tarkastelee hyvinvoinnin ja sosiaalisten suhteiden välistä yhteyttä Suomessa. On ehkä perusteltua kysyä, miksi keskittyä Suomeen, jonka YK on toistuvasti listannut maailman onnellisimmaksi maaksi (Helliwell ym. 2018, 21–22; Helliwell, Huang & Wang 2019, 24–25;) ja jossa tyytyväisyys elämään on monen aikaisemmankin tutkimuksen mukaan huipputasoa (esim. Fleche, Smith & Sorsa 2011, 12). Tietyillä väestöryhmillä heikon elämänlaadun riski on kuitenkin muita merkittävästi korkeampi. Näihin lukeutuvat muun muassa pitkäaikaistyöttömät, toimeentulotukea saavat ja matalasti koulutetut työikäiset henkilöt. Keskeisiä elämänlaatua madaltavia tekijöitä ovat muun muassa heikko terveydentila, alhainen toimeentulon taso ja yksinäisyys (Vaarama, Mukkila & Hannikainen-Ingman 2014, 20-36).

Käsillä oleva tutkimus liittyy kiinteästi sosiaalisen pääoman tutkimusperinteeseen ja ammentaa sekä Robert Putnamin että Pierre Bourdieun teorioista. Me ymmärrämme sosiaalisen pääoman putnamilaisittain ilmiöksi, joka kattaa sosiaaliset suhdeverkostot (sekä organisoidut järjestöverkostot että luonnollisesti muodostuvat informaalit verkostot), luottamuksen (toisiin ihmisiin ja instituutioihin) ja sitoutumisen vastavuoroisuuden velvoitteeseen (Putnam 2000, 19). Kaikilla näillä ulottuvuuksilla on todettu olevan yhteys hyvinvointiin, mutta aiemmat tutkimukset eivät ole tarkastelleet kaikkia ulottuvuuksia samanaikaisesti yhtä kattavasti (mm. Bjørnskov 2006; Kroll 2011; Rodríguez-Pose & Berlepsch 2014). Vaikka yhteyksien kausaalisuutta ja suuntaa on vaikea empiirisesti todentaa, nykyään on laajalti hyväksytty tulkinta, jonka mukaan nimenomaan sosiaalinen pääoma vaikuttaa ensisijaisesti hyvinvointiin (Helliwell & Putnam 2004, 1444; OECD 2013, 149).

Kaksi näkökulmaa sosiaaliseen pääomaan

Putnam ja hänen koulukuntansa näkevät sosiaalisen pääoman sekä kollektiivisena että yksilöllisenä resurssina. Kollektiivisessa muodossaan se voi synnyttää muun muassa yhteenkuuluvuutta, turvallisuutta ja solidaarisuutta yhteisön sisällä (Putnam 2000, 307-318). Yksilötasolla sillä on vahva yhteys muun muassa koettuun hyvinvointiin (Putnam 2000, 326-335). Putnam sanookin sosiaalisten suhteiden laajuuden ja syvyyden ennustavan parhaiten yksilön onnellisuuden tasoa (Putnam 2000, 332). Kaikista ihmissuhteista Putnam pitää parisuhdetta hyvinvoinnin kannalta tärkeimpänä. Sen merkitys onnellisuudelle ja hyvinvoinnille on suurempi kuin esimerkiksi tulojen (Putnam 2000, 333). Mutta muutkin ihmissuhteet ovat merkityksellisiä. Hyvät välit ystäviin, naapureihin ja työtovereihin madaltavat yksinäisyyden, huonon itsetunnon ja masentuneisuuden todennäköisyyttä. Samoin esimerkiksi järjestötoiminnalla, vapaaehtoistyöllä ja kutsujen järjestämisellä on Putnamin mukaan positiivinen vaikutus hyvinvointiin (Putnam 2000, 327–335). Käänteisesti taas sosiaalinen eristäytyneisyys madaltaa ihmisten vastustuskykyä ja altistaa heidät useille sairauksille (Putnam 2000, 326–335). Käsillä olevan tutkimuksen kannalta Putnamin teorian keskeinen anti liittyy nimenomaan hänen korostamaansa yhteyteen sosiaalisen pääoman ja onnellisuuden/hyvinvoinnin välillä. Tutkimus testaa tämän yhteyden vahvuutta suomalaisessa yhteiskunnassa.

Pierre Bourdieu näkee sosiaalisen pääoman yksinomaan yksilöllisenä resurssina, jota muodostuu sosiaalisissa yhteyksissä ja verkostoissa ryhmään kuulumisen myötä (Bourdieu 1986, 248-252). Jokainen ryhmän jäsen hyötyy näistä verkostoista niiden aineellisten ja aineettomien resurssien myötä, joita muut saman verkoston jäsenet omaavat ja joita jokainen verkoston jäsen kykenee hyödyntämään ryhmän sisäisen solidaarisuuden ansiosta (Bourdieu 1986, 248-249). Bourdieun mukaan sosiaalisen pääoman kartuttaminen edellyttää sosiaalisten suhdeverkostojen luomista, mikä puolestaan vaatii sosiaalisuutta (sociability). Pitkään jatkuneen vuorovaikutuksen myötä jotkut satunnaisista tuttavuussuhteista muuttuvat vahvemmiksi siteiksi, joita ylläpidetään palveluksin (exchange) ja erilaisin avunannon elein (Bourdieu 1986, 249-250).

Bourdieun mukaan sosiaalisen kanssakäymisen tapoihin ja edelleen sosiaalisen pääoman määrään vaikuttaa habitus, joka on yhteiskuntaluokka-aseman myötä ruumiillistunut olemisen tapa (Bourdieu 1986, 248–252; Bourdieu 1990, 52–65; Bourdieu 2005, 43–45). Vaikka yksilö onkin vapaa toimija, hänen luokka-asemansa rajoittaa niitä käyttäytymisen muotoja, jotka hän kokee itselleen mahdollisiksi (Bourdieu 1990, 55–56). Luokka-aseman ja habituksen pohjalta rakentuu "käytännöllinen järki", joka ohjaa yksilön toimintaa kussakin sosiaalisessa tilanteessa (Bourdieu ym. 1995, 40–41). Tämä selittää, miksi saman yhteiskuntaluokan jäsenet jakavat jossain määrin samankaltaisen habituksen ja miksi toisaalta sosiaalisen kanssakäymisen muodot vaihtelevat yhteiskuntaluokkien välillä (Bourdieu 1984, 172–173; Bourdieu 1986, 257; Bourdieu ym. 1995, 170–172). Bourdieun ja hänen seuraajiensa mukaan sosiaalista pääomaa keskittyy yleensä eniten ylempiin yhteiskuntaluokkiin. Tämä johtuu siitä, että eri resursseilla on taipumusta kasautua yhteen; henkilölle, jolla on runsaasti yhtä pääoman lajia, kertyy paljon myös muita resursseja (Bourdieu 1984; Lin 2001, 55–60).¹

Sosiaalisen pääoman yhteismitattomat mittarit

Vaikka sosiaalista pääomaa onkin tutkittu paljon, tutkimuksia vaivaa eräänlainen yhteismitattomuus. Useat tutkimukset jakavat sosiaalisen pääoman käsitteen kolmeen osaan: verkostoihin, luottamukseen ja normeihin² (esim. Portela, Neira, & Salinas-Jiménez 2013, 493–511; Sarracino & Mikucka 2017, 407–432; Neira ym. 2018, 1067– 1090; Hommerich & Tiefenbach 2018, 1091–1114;

1 Jo ennen Bourdieuta muun muassa Robert Merton kirjoitti resurssien epätasaisesta kasautumisesta Matteus-efektinä (Merton 1968, 56–63).

2 Tällainen tulkinta sosiaalisesta pääomasta sekoittaa Putnamin ja James S. Colemanin sosiaalisen pääoman teoriat. Putnam rajasi sosiaalisen pääoman eksplisiittisesti kattaman sosiaaliset verkostot, luottamuksen ja vastavuoroisuuden velvoitteen (norms of reciprocity) (Putnam 2000, 19). Coleman sen sijaan määritti sosiaalisen pääoman moniselitteisemmin viitaten sellaisiin sosiaalisen kanssakäymisen muotoihin, jotka 1) synnyttävät velvoitteita, odotuksia ja luottamusta, 2) edesauttavat informaation kulkua ja 3) nojaavat sellaiseen yhteiseen normistoon, joka tukee yhteisön etua (Coleman 1988, 95-120, 101-105). Monet tutkimukset viittaavat Putnamiin, mutta korvaavat hänen määritelmäänsä liittyvän vastavuoroisuuden velvoitteen Colemanin teoriaan liittyvällä normien käsitteellä.

Ferragina 2017, 55-90; Bjørnskov 2006, 22-40). Usein verkostot jaetaan edelleen kahteen kategoriaan: muodollisesti organisoituihin ja toisaalta luonnollisesti muodostuviin informaaleihin verkostoihin (esim. Neira ym. 2018, 1067-1090; Engbers, Thompson, & Slaper 2017, 537-558). Samoin luottamuksen käsitteestä on tapana erotella luottamus toisiin ihmisiin ja toisaalta luottamus instituutioihin (esim. Rodríguez-Pose & von Berlepsch 2014, 357-386; Portela, Neira, & Salinas-Jiménez 2013, 493-511). Käytännössä kuitenkin osa empiirisistä tutkimuksista mittaa vain yhtä tai muutamaa näistä ulottuvuuksista – tavallisimmin luottamusta toisiin ihmisiin ja/tai osallistumista organisoituihin verkostoihin - mutta raportoi silti tuloksensa sosiaalisen pääoman kattotermin alla (esim. Addis & Joxhe 2017, 146-171; Behtoui 2016, 711-724; Kouvo 2010, 166-181).

Vaikka Bourdieu ja Putnam ovat tarjonneet omat ohjeensa sosiaalisen pääoman operationalisointiin, harva tutkimus on toteutettu niitä noudattaen. Bourdieun mukaan sosiaalisen pääoman määrä riippuu a) sen suhdeverkoston koosta, josta yksilö pystyy ammentamaan resursseja, sekä b) suhdeverkoston jäsenten omistamien pääomien määrästä (Bourdieu 1986, 249). Tällä tavoin määriteltynä sosiaalisen pääoman mittaaminen olisi kuitenkin sangen haasteellista. Bourdieu antaakin ymmärtää, että sosiaalista pääomaa voidaan arvioida yksinkertaisesti mittaamalla, kuinka paljon aikaa ihmiset käyttävät sen kartuttamiseen (Bourdieu 1986, 253). Tämä ei kuitenkaan riitä, jos käytetään sosiaalisen pääoman putnamilaista määritelmää.

Putnam on kehittänyt sosiaalisen pääoman indeksin, joka muodostuu 14 muuttujasta, jotka mittaavat osallistumista poliittiseen ja järjestötoimintaan, yhteisössä tapahtuvaa vapaaehtoistoimintaa, informaalia sosiaalisuutta ja luottamusta toisiin ihmisiin (Putnam 2000, 290–291). Empiirisissä tutkimuksissa Putnamin indeksi ei ole kuitenkaan vakiinnuttanut paikkaansa. Yksi indeksin heikkous on se, että se yhdistelee yksilötason ja yhteisötason muuttujia samaan indeksiin. Indeksi ei myöskään sisällä lainkaan vastavuoroisuuteen sitoutumista, vaikka se on kiinteä osa Putnamin sosiaalisen pääoman määritelmää.

Vakiintuneen mittarin puuttuessa sosiaalisen pääoman indikaattorit vaihtelevat tutkimuksesta toiseen. Trent Engbers ja kollegat ovat käyneet läpi Yhdysvalloissa valtakunnallisissa survey-tutkimuksissa eniten käytettyjä sosiaalisen pääoman mittareita ja listanneet yhteensä 24 erilaista informaalien verkostojen (*informal interaction*) mittaria, 9 organisoituihin verkostoihin osallistumisen mittaria, 13 luottamuksen mittaria ja 9 normeihin sitoutumisen mittaria (Engbers, Thompson & Slaper 2017, 537–558). Toisinaan jopa yhtä ja samaa muuttujaa on käytetty ilmentämään sosiaalisen pääoman eri ulottuvuuksia.³

Sosiaalinen pääoma eriarvoisessa maailmassa

Aikaisempien tutkimusten mukaan sosiaalinen pääoma jakautuu epätasaisesti yhteiskuntaluokittain. Vertailu 27 Euroopan maan kesken on osoittanut, että ylemmillä yhteiskuntaluokilla on taipumus luoda keskimäärin laajemmat ja monimuotoisemmat sosiaaliset verkostot kuin muilla luokilla (Pichler & Wallace 2009, 319–332). Ylemmillä luokilla on tyypillisesti enemmän järjestöpohjaista verkostoitumista (*formal networks*), mutta vahvat läheissuhteet jakautuvat tasaisemmin eri yhteiskuntaluokissa. Pichlerin ja Wallacen (2009) tutkimuksen mukaan Pohjoismaissa sosiaalisen pääoman yhteiskuntaluokkakohtaiset erot ovat yleensä pienemmät kuin muualla.

Suomessa sosiaalista pääomaa on tutkittu etupäässä luottamuksen ja organisoitujen verkostojen muodossa. Luottamus muihin ihmisiin on Suomessa kansainvälisesti verrattuna sangen vahvaa. Vuonna 2002 jopa 77 prosenttia suomalaisista sanoi luottavansa yleensä ihmisiin (Iisakka 2006, 26–32). Luottamuksen on todettu olevan vahvimmillaan naisten, ylempien toimihenkilöiden, nuorten aikuisten ja korkeasti koulutettujen henkilöiden parissa (Hanifi 2012; Iisakka 2006, 26–32). Toisaalta taas luottamus on heikoimmillaan 55–64 vuotiaiden sekä vain peruskoulun suorittaneiden henkilöiden keskuudessa (Iisakka 2006, 26–32).

Noin puolet Suomessa asuvista henkilöistä osallistuu jonkinlaiseen järjestötoimintaan (Hanifi 2006, 35-37), mutta järjestöaktiivisuus vaihtelee yhteiskuntaluokittain (Kouvo 2010, 176-178; Sanaksenaho 2006, 59-61). Maanviljelijät ja maataloustyöntekijät sekä professioammateissa toimivat suomalaiset ovat osoittautuneet kaikkien aktiivisimmiksi järjestöihmisiksi. Työnväenluokka puolestaan osallistuu verrattain harvoin järjestöjen toimintaan. (Kouvo 2010, 175-179.)

Tässä artikkelissa haluamme syventää keskustelua sosiaalisen pääoman ja yhteiskuntaluokan välisestä yhteydestä huomioimalla yhtäaikaisesti kaikki putnamilaisen sosiaalisen pääoman keskeiset ulottuvuudet: sosiaaliset verkostot (organisoidut ja informaalit), luottamuksen (ihmisiin ja instituutioihin) ja vastavuoroisuuden velvoitteen. Tältä pohjalta me etsimme vastausta kysymykseen: missä määrin sosiaalisen pääoman määrä vaihtelee yhteiskuntaluokkien välillä?

Vaikka sosiaalisen pääoman ja hyvinvoinnin välillä on todettu olevan yhteys, aikaisempien

³ Esim. kysymystä siitä, yrittävätkö muut ihmiset tilaisuuden tullen käyttää henkilöä hyväkseen vai yrittävätkö he olla reiluja, on joissain tutkimuksissa käytetty sosiaalisen luottamuksen mittarina ja toisissa taas normeihin liittyvänä muuttujana (ks. esim. Portela, Neira & Salinas-Jiménez 2013, 493–511; Rodríguez-Pose & Berlepsch 2014, 357–386).

tutkimusten tulokset eivät kuitenkaan ole yhdenmukaiset sen suhteen, mikä sosiaalisen pääoman ulottuvuuksista varsinaisesti aktivoi tuon yhteyden. Esimerkiksi Christian Bjørnskovin (2006) tutkimuksen mukaan yhteys perustuu yksinomaan luottamukseen toisia kohtaan. Andrés Rorígues-Pose ja Viola Berlepsch (2014) ovat puolestaan osoittaneet, että yhteyteen vaikuttavat ennen kaikkea läheissuhteet mutta myös luottamus toisiin ihmisiin sekä yhteiskunnan instituutioihin. Tosin he osoittavat myös, että sosiaalisen pääoman eri ulottuvuuksien yhteys hyvinvointiin vaihtelee yhteiskunnasta toiseen: Pohjoismaissa yhteyteen vaikuttaa vain luottamus ihmisiin ja instituutioihin, kun taas muualla Euroopassa muillakin ulottuvuuksilla on merkitsevä yhteys (Rodríguez-Pose & Berlepsch 2014, 357-386).

Sosiaalisen pääoman vaikutusta hyvinvointiin on useimmiten tutkittu maatasolla tekemättä eroa eri väestöryhmien välillä. Kuitenkin sosiaalisen pääoman ulottuvuudet saattavat vaikuttaa eri tavoin eri ryhmiin. Omassa tutkimuksessaan Christian Kroll (2011) havaitsi muun muassa, että osallistuminen organisoituihin vapaaehtoisverkostoihin vaikutti positiivisesti lapsettomien naisten hyvinvointiin, kun taas samalla muuttujalla oli yksinomaan negatiivinen vaikutus pienten lasten äiteihin, joiden ajankäyttöä kuormittivat useat muutkin velvoitteet. Krollin tutkimus osoittaa, että muut resurssit, kuten käytettävissä oleva aika, saattavat vaikuttaa siihen, tuottaako sosiaalinen pääomaa hyvinvointia vai ei.

Toinen tutkimuskysymyksemme soveltaa sekä Bourdieun että Putnamin teoriaa ja perustuu oletukseen, että sosiaalisen pääoman ja hyvinvoinnin välinen yhteys vaihtelee sen mukaan, kuinka paljon henkilöllä on muita resursseja käytettävissään, kuten Kroll (2011) on todennut. Siksi kysymme, miten sosiaalisen pääoman yhteys hyvinvointiin vaihtelee eri yhteiskuntaluokkien välillä? Yhteiskuntaluokkien vaikutusta sosiaalisen pääoman ja hyvinvoinnin väliseen yhteyteen ei ole tiettävästi aikaisemmin tutkittu Suomessa. Tällä työllä me haluamme paikata tuon puutteen.

Aineisto ja menetelmä

Tutkimuksemme perustuu European Social Surveyn (ESS) kuudennen aallon (2012) Suomen aineistoon. Vaikka ESS on tuottanut uudempiakin aineistoja, yksikään niistä ei sisällä yhtä kattavasti sosiaaliseen pääomaan liittyviä muuttujia. ESS-6:n Suomen aineisto koostuu 2 197 havaintoyksiköstä, joista analyyseissamme on mukana 1 935. Koko aineisto perustuu satunnaisotantaan, joka edustaa yli 15-vuotiaita Suomessa asuvia henkilöitä kansalaisuuteen tai äidinkieleen katsomatta. Jätämme kuitenkin analyysimme ulkopuolelle alle 18-vuotiaat henkilöt, koska heidän yhteiskuntaluokkaasemansa on usein vielä vakiintumaton.

Selitettävä muuttujamme on subjektiivinen hyvinvointi. Useiden aikaisempien tutkimusten tavoin käytämme sen mittaamiseen vastaajien omaa arviota heidän onnellisuutensa asteesta.⁴ ESS:ssä tätä on mitattu kysymyksellä "Kuinka onnellinen yleisesti ottaen olette". Vastaus annetaan asteikolla

⁴ Onnellisuuden vaihtoehtona on useissa hyvinvointitutkimuksissa käytetty tyytyväisyyttä elämään. Monet tutkijat ymmärtävät tyytyväisyyden viittaavan kattavammin koko elämänkaareen, kun taas onnellisuus tulkitaan koskevan lyhempää ajanjaksoa (Diener, Inglehart, & Tay 2013, 497-527; Helliwell & Putnam 2004, 1438; OECD 2013, 265). Olemme kuitenkin valinneet onnellisuuden selitettäväksi muuttujaksemme, sillä vaikka yksilön sosiaalinen pääoma ei yleensä merkittävästi vaihtele lyhyellä aikavälillä, siinä koettujen muutosten (esim. elämänkumppanin menetys) voidaan ajatella heijastuvan herkemmin onnellisuusmittarille kuin tyytyväisyysmittarille. Tarkistuksen vuoksi olemme tehneet kaikki artikkelin analyysit sekä onnellisuus- että elämään tyytyväisyys -muuttujalla. Tulokset ovat hyvin samankaltaiset. Selitysaste on vain hieman korkeampi onnellisuusmuuttujalla kuin elämään tyytyväisyys -muuttujalla.

nollasta kymmeneen, jossa nolla tarkoittaa "erittäin onneton" ja kymmenen "erittäin onnellinen". Käytämme muuttujaa sen alkuperäisessä muodossa, joskin olemme muuttaneet "ei osaa sanoa" vastaukset (n=4) puuttuviksi tiedoiksi. Onnellisuuden keskiarvo koko aineistossamme on 8,09.

Selittävät muuttujat

Käytämme kaikkiaan yhdeksää eri muuttujaa mittaamaan sosiaalista pääomaa. Viisi niistä liittyy sosiaalisiin verkostoihin (kolme informaaleihin ja kaksi organisoituihin verkostoihin), kaksi luottamukseen ja kaksi vastavuoroisuuteen.

Ensimmäinen informaaleja verkostoja mittaava muuttuja muodostuu dikotomisesta kysymyksestä, elääkö henkilö parisuhteessa. Monissa aikaisemmissa tutkimuksissa parisuhdemuuttujaa on käytetty kontrollimuuttujana, mutta mielestämme on perusteltua sisällyttää se osaksi informaalien verkostojen mittausta, sillä onhan suhde elinkumppaniin yksi tärkeimmistä ihmissuhteista, kuten muun muassa Helliwell ja Putnam (2004) ovat todenneet.

Toinen muuttuja arvioi, kuinka monen henkilön kanssa vastaaja voi keskustella kaikkein henkilökohtaisimmistakin asioista. Vastausvaihtoehdot ovat ei yhdenkään, yhden, kahden, kolmen, 4–6, 7–9 ja 10 tai useamman. Kolmas käyttämämme muuttuja kysyy, kuinka usein henkilö tapaa ystäviä, sukulaisia tai työtovereita muutenkin kuin työasioissa. Vastaus valitaan seitsenportaiselta asteikolta, jonka ääripäinä ovat "ei koskaan" ja "päivittäin".

Organisoituja verkostoja mittaamaan käytämme dikotomista kysymystä, onko henkilö osallistunut järjestö- tai yhdistystoimintaan viimeisten 12 kuukauden aikana, sekä kysymystä siitä, kuinka usein henkilö on viimeisten 12 kuukauden aikana osallistunut vapaaehtois- tai hyväntekeväisyysjärjestön toimintaan. Jälkimmäisessä tapauksessa vastausvaihtoehdot annetaan kuusiportaisesti väliltä "vähintään kerran viikossa" ja "ei lainkaan". Vaihtoehtojen suunnan olemme kääntäneet siten, että suuremmat arvot viittaavat tiheämmin toistuvaan osallistumiseen.

Mitataksemme luottamusta muihin ihmisiin hyödynnämme paljon käytettyä kolmen kysymyksen patteria: (i) voiko mielestänne ihmisiin luottaa, vai onko niin, ettei ihmisten suhteen voi olla liian varovainen; (ii) oletteko sitä mieltä, että useimmat ihmiset tilaisuuden tullen yrittäisivät käyttää teitä hyväkseen vai luuletteko, että ihmiset yrittäisivät olla reiluja; ja (iii) katsotteko, että useimmiten ihmiset pyrkivät olemaan auttavaisia toisia kohtaan vai että enimmäkseen he ajattelevat vain omaa etuaan? Jokaiseen kysymykseen vastataan asteikolla o-10. Olemme muokanneet vastausten keskiarvoista summamuuttujan (Cronbachin alpha 0,73), jonka asteikko säilyy samana (0-10) ja jossa korkeat arvot tarkoittavat vahvaa ja matalat arvot heikkoa luottamusta muihin ihmisiin.

Ihmisten luottamusta yhteiskunnallisiin instituutioihin mitataan Ess:ssä seitsemällä kysymyksellä, joiden kohteena ovat eduskunta, oikeusjärjestelmä, poliisi, poliitikot, poliittiset puolueet, Euroopan parlamentti ja vĸ. Näistä me huomioimme vain oikeusjärjestelmän ja poliisin. Tähän on kaksi syytä. Ensinnäkin on osoitettu, että ihmisten luottamus puoluepoliittisiin tai edustuksellisiin instituutioihin riippuu keskeisesti heidän omasta poliittisesta kannastaan (Rothstein & Stolle 2002, 11–12). Siksi jätämme eduskunnan, poliitikot ja poliittiset puolueet tarkastelumme ulkopuolelle.⁵ Toiseksi, koska Euroopan parlamenttiin ja vĸ:hon liittyvää luottamusta kysyttäessä "ei osaa sanoa" -vastausten määrä on huomattavan suuri

⁵ Tarkistuksen vuoksi olemme ajaneet samat analyysit myös muuttujalla, johon sisällytimme eduskunnan, puolueet ja poliitikot. Tulokset ovat samankaltaiset kuin käyttämällämme muuttujalla, mutta yhteys hyvinvointiin jää heikommaksi.

(71 edelliseen ja 53 jälkimmäiseen), olemme jättäneet ne kokonaan summamuuttujan ulkopuolelle. Tätä päätöstä puoltaa myös oletus siitä, että vain harvalla vastaajalla on henkilökohtaista kokemusta näistä instituutioista. Olemme muokanneet kahdesta jäljelle jäävästä kysymyksestä summamuuttujan (Spearmanin korrelaatiokerroin 0,60), jonka asteikko perustuu muuttujien väliseen keskiarvoon (0-10). Asteikon korkeimmat arvot viittaavat vahvaan institutionaaliseen luottamukseen.

Kuten jo edellä on esitetty, sosiaalisen pääoman kolmas ulottuvuus on useissa aiemmissa tutkimuksissa ymmärretty yhteiskunnan säännöiksi (*norms*), ja niitä on mitattu lainkuuliaisuuteen liittyvillä kysymyksillä. Lakeja kuitenkin säädetään eri yhteiskunnissa palvelemaan eri tarkoituksia, eikä lainkuuliaisuus sinänsä kerro mitään ihmisten suhtautumisesta toisiinsa.

Sekä Putnam että Bourdieu puhuvat vastavuoroisuuden velvoitteesta, joka sitoo ihmisiä yhteen (Bourdieu 1986, 248–250; Bourdieu 1990, 112–115; Putnam 2000, 134–147). Tarkkaan ottaen Bourdieu käyttää useammin termiä "vaihto" (*exchange*) kuin "vastavuoroisuus" (*reciprocity*), joka puolestaan on Putnamin toistuvasti käyttämä käsite. Molemmat kuitenkin viittaavat kanssakäymisen muotoon, jossa yksi osapuoli auttaa tai tukee toista osapuolta. Apu kattaa erilaiset aineelliset, ei-aineelliset, symboliset ynnä muut muodot.

Bourdieun mukaan avun saanti synnyttää kiitollisuutta, arvostusta ja ystävyyttä. Se lujittaa sidettä avun antajan ja vastaanottajan välillä sekä oikeuttaa avun antajan lunastamaan ennemmin tai myöhemmin näin syntyneen "velan" (Bourdieu 1986, 248–250). Putnamkin ymmärtää avun antamisesta koituvan hyötyä sekä avun saajalle että antajalle, mutta vaikka hän käyttääkin vastavuoroisuuden termiä (*reciprocity*), hän ymmärtää siitä koituvan hyödyn väljemmin: "Minä autan sinua tässä ja nyt, ehkä edes sinua tuntematta ja odottamatta mitään välittömästi vastineeksi, luottaen siihen, että jossain vaiheessa sinä tai joku muu auttaa minua" (Putnam 2000, 134).⁶ Näin sekä Putnam että Bourdieu ymmärtävät avunannon vahvistavan ihmisten välisiä suhteita ja synnyttävän heissä vastavuoroisen auttamisen velvoitteen. Vaikka he käyttävät termejä vaihto tai vastavuoroisuus, molemmat huomioivat, että annettu apu saatetaan "maksaa takaisin" ajallisesti huomattavasti myöhemmin, toisinaan jopa kohdentamalla apu toiseen henkilöön kuin alkuperäiseen avun antajaan (Bourdieu 1986, 248–250; Bourdieu 1990, 112; Putnam 2000, 134–135).

Tässä artikkelissa ymmärrämme vastavuoroisuuden käsitteen juuri edellä esitetyllä tavalla. Mekään emme oleta, että avun antaminen ja vastaanottaminen olisivat välittömässä yhteydessä toisiinsa, mutta toisistaan irrallisina toimintoinakin ne kertovat henkilön osallistumisesta vastavuoroisuuden normatiiviseen jatkumoon. Vaikka onkin mahdollista, että avun antaminen tai saaminen tapahtuu yksipuolisesti, oletamme tällöinkin osallisuuden kyseiseen tapahtumaan synnyttävän ainakin tietoisuuden vastavuoroisuuden velvoitteesta.

Vastavuoroisuutta mittaamaan käytämme kahta ESS:n kysymystä. Ensimmäinen kysyy, missä määrin vastaajat saavat apua ja tukea läheisiltään tarvittaessa, ja toisessa tiedustellaan, missä määrin vastaajat itse tarjoavat apua ja tukea läheisilleen silloin, kun he sitä tarvitsevat. Vastaukset molempiin kysymyksiin annetaan asteikolla o–6, jossa o tarkoittaa, ettei henkilö saa/anna lainkaan apua ja 6 taas viittaa äärimmäisen runsaaseen apuun. Koska oletamme, että avun saaminen ja avun antaminen saattavat vaikuttaa eri tavoin se-

^{6 &}quot;I'll do this for you now, without expecting anything immediately in return and perhaps without even knowing you, confident that down the road you or someone else will return the favour". Tekstissä kirjoittajien oma käännös.

litettävään muuttujaamme, koettuun hyvinvointiin, käsittelemme niitä erillisinä muuttujina.⁷

Dikotomisia muuttujia lukuun ottamatta käsittelemme kaikkia sosiaalisen pääoman muuttujia jatkuvina. Olemme testanneet myös kategorisia versioita ja tulokset pysyvät samankaltaisina. Indikaattorit mallien selitysvoimasta myös suosivat jatkuvia versioita. Analyyseja varten olemme standardisoineet kaikki jatkuvat muuttujat (keskiarvo o, keskihajonta 1).

Yhteiskuntaluokka on kolmas keskeinen tekijä tutkimuksessamme. Stratifikaatiotutkimuksille tyypilliseen tapaan muodostamme yhteiskuntaluokan ammattinimikkeiden pohjalta. Tällainen luokitus perustuu näkemykseen, jonka mukaan markkinataloudessa nimenomaan työmarkkina-asema ja ammatillisesta työnjaosta johtuva asema ovat sosiaalisen eriarvoisuuden taustalla (Rose & Harrison 2007, 460; Erola 2010a, 23). Tämä näkyy muun muassa eri ammattien välillä olevissa tuloeroissa ja vallankäytön mahdollisuuksissa (Erola 2010a, 22–24).

Käytämme tässä tutkimuksessa eurooppalaista sosioekonomista luokitusta, EseC:iä (*European Socio-economic Classification*). Kyseessä on Euroopan tilastokeskuksen (Eurostat) aloitteesta kehitetty luokitus, joka pyrkii tarjoamaan yhtenäisen, ajanmukaisen ja nimenomaan eurooppalaiseen kontekstiin soveltuvan luokituksen (Rose & Harrison 2007, 459–460). EseC on rakennettu Erikson–Goldthorpe–Portocarero-luokituksen (EGP) pohjalta, ja samoin kuin EGP se huomioi ammattinimikkeen lisäksi myös työmarkkina-aseman, mahdollisen esimiesaseman sekä alaisten määrän (Goldthrope 2000, 206–229; Rose & Harrison 2007, 461–463). Näiden lisäksi EseC:issä on pyritty huomioimaan aiempaa paremmin myös työn vaativuuden taso sekä asiantuntijuuden että työn tulosten kannalta. Näin ollen EseC sijoittaa muun muassa sellaiset ammatit kuin opettajat ja sairaanhoitajat lähelle luokkarakenteen huippua, koska niissä henkilökohtainen vastuu työn tuloksesta on verrattain suuri. EseC kuvastaakin EGPluokitusta paremmin modernin työn maailmaa, jossa luovan ongelmanratkaisukyvyn, päätöksenteon ja vastuunkannon merkitys korostuu.

Olemme yksinkertaistaneet alkuperäisen kymmenluokkaisen EseC-muuttujan kolmiluokkaiseksi. Kutsumme näitä professioluokaksi8 (suuret työnantajat, asiantuntijat, toimittajat, opettajat, jne.), keskiluokaksi (valkokaulustyöntekijät ja ylemmän tason sinikaulustyöntekijät, mukaan lukien työn ohjaajat, asiakaspalvelu- ja toimistotyöntekijät sekä pienyrittäjät) ja työväenluokaksi (ammattitaitoinen ja ei-ammattitaitoinen työväestö). Vaikka EseC-ohjeistus kehottaa yhdistämään alemman tason valkokaulustyöntekijät ja myyntityöntekijät työväenluokkaan, me olemme yhdistäneet ne keskiluokkaan, sillä meidän kiinnostuksemme kohdistuu nimenomaan modernin yhteiskuntarakenteen ääripäihin. Tässä järjestelmässä professioluokalle on ominaista asiantuntijuus ja itsenäinen vastuu työstä, joka ei ole samalla tavoin valvottavissa kuin manuaalinen työ, joka puolestaan antaa leimansa työväenluokalle. Keskiluokka on järjestelmässämme kaikkein suurin ja heterogeenisin. Se kattaa niin pienyrittäjät, asiakaspalvelutyöntekijät kuin toimistotyöntekijät. Ryhmän sisäinen epäyhtenäisyys ei kuitenkaan vaikuta oleellisesti analyysiimme, koska keskiluokka ei ole tutkimuksemme pääkohde. Taulukko 1 esittää sekä alkuperäisen

⁷ Tarkistuksen vuoksi olemme ajaneet analyyttiset mallit myös avun saamisen ja antamisen pohjalta rakennetulla summamuuttujalla. Tulokset säilyvät lähes samankaltaisina, mutta summamuuttuja ei luonnollisestikaan kykene näyttämään avun antamisen ja saamisen välistä eroa suhteessa hyvinvointiin.

⁸ Muun muassa Erola (2010b) on käyttänyt termejä "ylemmät ja alemmat professioammatit" viitatessaan vastaaviin ammattiryhmiin. Sovellamme samaa terminologiaa tässä työssä.

таицикко 1: ESeC-luokat

(luokkien nimet käännetty englannista suomeen artikkelin kirjoittajien toimesta)

ALKUPERÄISET ESEC-LUOKAT	ESIMERKKIAMMATTEJA	TÄSSÄ TYÖSSÄ SOVELLETTU ESEC-LUOKITUS			
Suuret työnantajat (+10 työntekijää), ylimmissä asiantuntija, hallinto- ja johtotehtävissä toimivat henkilöt: "korkeasti palkatut"	Asianajajat, tieteentekijät, korkeakouluopettajat, toimitusjohtajat, korkeimman tason virkamiehet				
Alemman tason asiantuntija-, hallinto- ja johtotehtävissä toimivat henkilöt: "alemmin palkatut"	opettajat, sosiaalityöntekijät, sairaanhoitajat, lentokapteenit, journalistit, tuotantopäälliköt, pienikokoisten organisaatioiden (<10 työntekijää) päälliköt, 1T-teknikot	PROFESSIOLUOKKA			
Keskiluokkaiset ammattinimikkeet: "ylemmän tason valkokaulustyöntekijät"	Useimmat toimistotyöntekijät, hallinnolliset apulaiset, johdon apulaiset				
Itsenäiset ammatinharjoittajat ilman koulutusta					
Pienikokoisten organisaatioiden työnantajat (< 10 työntekijää) ja itsenäiset ammatinharjoittajat maa-, metsä, ja kalastustaloudessa		KESKILUOKKA			
Alemman tason työnjohtajat ja teknikot: "ylemmän tason sinikaulustyöntekijät"	lemman tason työnjohtajat teknikot: "ylemmän tason nikaulustyöntekijät" lemman tason palvelu-, myynti- toimistotyöntekijät: "alemman				
Alemman tason palvelu-, myynti- ja toimistotyöntekijät: "alemman tason valkokaulustyöntekijät (ei- manuaalisen työn tekijät)"	kaupan työntekijät, alemmat hoitotyöntekijät				
Alemman tason tekniset työntekijät: "ammattitaitoiset työntekijät"	Asentajat, putkimiehet ja ajajat, veturinkuljettajat				
Rutiinityöntekijät: osittain ammattitaitoiset ja ammattitaidottomat työntekijät	Siivoojat, moottoriajoneuvon kuljettajat, kokoojat, koneenkäyttäjät, kantajat, lähetit	TYÖVÄENLUOKKA			
Pitkäaikaistyöttömät ja henkilöt, jotka eivät ole koskaan olleet mukana työelämässä					

ESEC -luokituksen että tässä työssä käyttämämme kolmiluokkaisen version siitä.

Muut resurssit, kuten koulutus ja tulot, jakautuvat odotetulla tavalla muodostamamme yhteiskuntaluokkamuuttujan eri kategorioissa. keskimääräiset nettotulot ovat suurimmillaan professioluokassa ja pienimmillään työväenluokassa. Professioluokan enemmistö on suorittanut korkeakoulututkinnon (50%) tai toisen asteen tutkinnon (43%), kun taas työväenluokassa enemmistöllä on joko toisen asteen tutkinto (60%) tai vain peruskoulun päättötodistus (38%). Myös tutkimuksemme selitettävä muuttuja, onnellisuus, vaihtelee luokittain, kuten taulukosta 2 käy ilmi. Työväenluokka jää selvästi muista luokista jälkeen; ero on tilastollisesti merkitsevä.

Kontrollimuuttujat

Otamme analyysiimme mukaan laajan joukon sosioekonomisia muuttujia, joilla on aikaisem-

pien tutkimusten mukaan yhteys koettuun hyvinvointiin. Näitä ovat sukupuoli, ikä (ja iän neliö), asuinpaikan kaupunkimaisuus, koulutustaso, työttömyys, koettu terveydentila ja lasten asuminen kotona. Koska myös kotikielellä (mm. Nyqvist ym. 2008; Perttilä 2011; Saarela & Finnäs 2005) ja uskonnollisuudella (Putnam 2000, 326-335) on osoitettu olevan yhteys hyvinvoinnin kokemiselle, otamme mukaan kotikielimuuttujan sekä muuttujan, jossa vastaajat arvioivat omaa uskonnollisuuttaan. Lisäksi huomioimme vastaajien tulotason. Alkuperäinen tulomuuttuja mittaa kotitalouden bruttotuloja kymmenportaisesti jokaisen portaan kattaessa vaihteluvälin minimi- ja maksimitulojen välillä (esim. 1 010-1 292 euroa). Saadaksemme tarkasteluun kotitalouden kulutusyksikkökohtaiset tulot olemme ottaneet jokaisen tuloluokan keskiluvun ja jakaneet sen kotitalouden jäsenten määrän neliöjuurella.9 Vain alimman (alle 1 010 euroa) ja ylimmän (vähintään 5 361 euroa) portaan kohdalla olemme käyttäneet suurinta ja pienintä raja-arvoa (1 009 ja 5 361 euroa vastaavasti) ja jakaneet sen kotitalouden jäsenmäärän neliöjuurella.

Yksittäisiä puuttuvia vastauksia on aineistossamme 114 vastaajalla. Jotta voisimme tehdä kaikki analyysit johdonmukaisesti samalla aineistolla, olemme jättäneet nämä havaintoyksiköt tarkastelumme ulkopuolelle. Jätettyämme ulkopuolelle myös ne tapaukset, joille ei ollut mahdollista määritellä yhteiskuntaluokkaa, analysoitavan aineistomme kooksi jää 1 935 havaintoyksikköä. Keskimääräinen onnellisuus ei eroa aineistosta

9 Muun muassa OECD ja Cross-national Data Center in Luxembourg (LIS) ovat käyttäneet kulutusyksikkökohtaisia eli ekvivalisoituja tuloja, jotka saadaan jakamalla kotitalouden bruttotulot sen jäsenten neliöjuurella. Tällöin jokaiselle kotitalouden jäsenelle, ikään tai sukupuoleen katsomatta, määritellään yhtä suuri tulomäärä. Ks. esim. http://www.oecd.org/els/ soc/OECD-Note-EquivalenceScales.pdf ja https://www. lisdatacenter.org/data-access/key-figures/methods/_ poistettujen ja siihen jääneiden välillä merkittävästi.

Analyysimenetelmä

Vastaamme ensimmäiseen tutkimuskysymykseemme vertailemalla jokaisen käytössämme olevan sosiaalisen pääoman muuttujan keskiarvoja ja luottamusvälejä yhteiskuntaluokittain. Vastataksemme toiseen tutkimuskysymykseen teemme joukon regressioanalyyseja. Tarkasti ottaen selitettävä muuttujamme, onnellisuus, on järjestysasteikollinen, ja sen jakauma on vasemmalle vino: suurin osa vastauksista sijoittuu arvoille 8-9 (67,46 %). Monien muiden tutkijoiden tavoin kuitenkin käsittelemme onnellisuutta jatkuvana muuttujana ja mallinnamme aineiston lineaarisella regressioanalyysilla. Olemme vertailun vuoksi tehneet samat mallinnukset myös ordinaalisella logistisella regressiolla (ordered logistic regression). Tulokset ovat hyvin samankaltaiset kuin lineaarisella regressiolla. Siksi raportoimme nämä tulokset vain silloin, kun ne poikkeavat lineaarisesta mallinnuksesta.

Etsiäksemme vastausta toiseen tutkimuskysymykseen lähdemme liikkeelle tarkastelemalla erikseen jokaisen sosiaalisen pääoman muuttujan yhteyttä onnellisuuteen regressioanalyysilla. Sen jälkeen tutkimme sosiaalisen pääoman ja onnellisuuden välistä yhteyttä luokittain ajamalla erikseen jokaiselle yhteiskuntaluokalle kaksiportaisen regressiomallinnuksen: ensimmäisessä mallissa huomioimme ainoastaan kontrollimuuttujat, toiseen malliin otamme mukaan myös sosiaalisen pääoman muuttujat. Vertailemme sitten molempien mallien selitysasteita keskenään arvioidaksemme, kuinka suuren osan onnellisuudesta sosiaalisen pääoman muuttujat yhdessä kykenevät selittämään. Pyrimme identifioimaan mahdolliset luokkien väliset erot ajamalla mallit erikseen jokaiselle yhteiskuntaluokalle. Olemme myös testanneet malleja interaktioiden kanssa ja raportoimme tästä tekstissä.

TAULUKKO 2: Onnellisuuden ja sosiaalisen pääoman muuttujien keskiarvot luottamusväleineen koko aineistossa ja yhteiskuntaluokittain

	Muuttujat	Koko aineisto (n=1935)	Luott.väli (95%)	Prof. luokka (N=693)	Luott.väli (95%)	Keski- luokka (n=758)	
	Onnellisuus	8,09	8,02-8,15	8,22	8,13-8,32	8,16	
T	Asuu parisuhteessa (%)	63,75	61,53-65,92	73,31	69,95-76,67	62,59	
RMAAL KOSTO	Luottamuksellisten ihmissuhteiden määrä	2,89	2,84-2,95	3,02	2,92-3,12	2,88	
INFO VER	Sosiaalisten tapaamisten tiheys	4,95	4,89-5,02	4,92	4,82-5,02	5,01	
OIDUT STOT	Osallistunut järjestötoimintaan (%)	36,82	34,68-39,01	52,00	48,23-55,77	33,75	
ORGANIS	Vapaaehtois-/ hyväntekeväisyys- järjestön toiminnan tiheys	2,03	1,97-2,10	2,35	2,23-2,48	2,00	
TAMUS	Luottamus toisiin ihmisiin	6,41	6,34-6,48	6,56	6,46-6,66	6,38	
LUOT	Luottamus instituutioihin	7,56	7,48-7,64	7,88	7,78-7,99	7,50	
EN	Avun tarjoamisen intensiteetti	5,01	4,96-5,05	5,00	4,93-5,06	5,09	
VASTA- VUOROISUUD VELVOITE	Avun saamisen intensiteetti	5,07	5,03-5,12	5,03	4,96-5,11	5,20	

Pienentääksemme otosvirhettä ja puuttuvien vastausten mahdollisesti aiheuttamia vääristyksiä käytämme analyyseissa jälkistratifikaatiopainotettua aineistoa (*post-stratification weight*) (European Social Survey 2014, 1-3).

Tulokset

Sosiaalisen pääoman jakautuminen yhteiskuntaluokittain

Sosiaalisen pääoman muuttujien keskiarvotarkastelu osoittaa, että yhteiskuntaluokkien väliset erot ovat monilta osin melko pienet, kuten taulukosta 2 käy ilmi. Merkittävää on kuitenkin se, että luokkaerot ovat systemaattisia ja niitä löytyy kaikilta sosiaalisen pääoman ulottuvuuksilta. Mittarista riippumatta työväenluokalla on vähiten sosiaalista pääomaa. Luottamusvälit paljastavat, että erot ovat tilastollisesti merkitseviä ennen muuta ylimmän ja alimman luokan välillä.

Luokkien välinen ero näkyy jo informaalien verkostojen kokoonpanossa. Parisuhteessa asuminen on noin 20 prosenttiyksikköä yleisempää

	Työv.	
Luott.väli	luokka	Luott.väli
(95%)	(n=484)	(95%)
7,67-7,95	7,81	8,06-8,25
49,04-58,11	53,57	59,08-66,10
2,64-2,88	2,76	2,79-2,97
4,78-5,04	4,91	4,91-5,11
18,76-26,24	22,50	30,35-37,15
1,58-1,80	1,69	1,90-2,10
6,13-6,42	6,27	6,27-6,48
7,08-7,43	7,25	7,38-7,61
4,80-5,01	4,90	5,02-5,15
4,83-5,05	4,94	5,13-5,26

professioluokassa kuin työväenluokassa. Professioluokassa luottamuksellisten ihmissuhteiden määrä on myös hieman korkeampi kuin työväenluokassa. Vaikka ero ei ole järin suuri (3,02 vs. 2,76), se on tilastollisesti merkitsevä. Sen sijaan luokkien välillä ei ole merkitseviä eroja sosiaalisten tapaamisten tiheydessä.

Organisoitujen sosiaalisten verkostojen kohdalla luokkaerot tulevat räikeästi esiin. Professioluokka toimii erilaisissa järjestöissä ja yhdistyksissä 2,3 kertaa useammin kuin työväenluokka ja 1,5 kertaa useammin kuin keskiluokka. Professioluokka osallistuu myös selvästi muita useammin vapaaehtoisja hyväntekeväisyystoimintaan. Nämä tulokset ovat yhteneväiset aikaisempien Suomessa tehtyjen tutkimusten kanssa (vrt. esim. Kouvo 2010, 175–179).

Luottamus muihin ihmisiin vaihtelee vain vähän luokkien välillä. Professioluokan keskiarvo on kuitenkin työväenluokkaa korkeampi, ja ero on tilastollisesti merkitsevä. Yhteiskunnan instituutioihin kohdistuneen luottamuksen osalta professioluokan luottamus on selvästi muita vahvempi.

Vastavuoroisuuden velvoitteeseen sitoutumista mitattaessa on mielenkiintoista huomioida, että jokainen luokka kokee saavansa hieman enemmän apua kuin antavansa sitä itse. Vastavuoroisuuden normien kohdalla luokkaerot eivät ole suuret, eikä merkittävin ero kulje ääripäiden vaan keskiluokan ja muiden luokkien välillä. Keskiluokka on muita edellä sekä avun antamisessa että saamisessa. Luokkien väliset erot avun tarjoamisessa ovat tosin hyvin pienet.¹⁰ Avun saamisessa keskiluokka erottuu selvemmin muista luokista. Työväenluokka on kummallakin mittarilla arvioituna kaikista heikoimmassa asemassa.

Saadut tulokset osoittavat, että professioluokalla on selvästi laajimmat informaalit ja organisoidut verkostot ja muita enemmän luottamusta sekä toisiin ihmisiin että instituutioihin. Vain professioluokan sitoutuminen vastavuoroisuuden normeihin edustaa koko aineiston keskitasoa. Työväenluokassa sen sijaan vain sosiaalisten tapaamisten tiheys yltää koko aineiston keskitasolle. Muuten työväenluokalla on muita suppeammat sosiaaliset verkostot ja heikoin luottamus sekä ihmisiin että instituutioihin. Lisäksi heidän

¹⁰ Keskiluokan ja professioluokan luottamusvälit menevät päällekkäin, ja t-testi osoittaa, että luokkien välinen ero on aivan tilastollisen merkitsevyyden rajalla (p = 0.053).

		Malli 1	Malli 2	Malli 3	Malli 4	Malli 5	Malli 6	Malli 7	Malli 8	Malli 9	Malli 10
	A		0.498***								
LIT DT	Asuu parisunteessa		(0.069)	-		-	-	-		-	
IAA] STC	Luottamuksellisten			0.228***							
O R N I R K C	ihmisten määrä		-	(0.033)			-				
INF VE	Sosiaalisten				0.131***						
	tapaamisten tiheys			-	(0.034)	-		-		-	
T	Osallistunut					0.112					
TOT	järjestötoimintaan		-	-		(0.059)	-	-		-	
NISC	Vapaaehtois-/						0.028				
RGA) VER	hyväntekeväisyys- järjestön toiminnan		-				(0.030)	-			
10	tiheys										
OTTAMUS	Luottamus toisiin			-		-	-	0.329***		-	
	ihmisiin							(0.035)			
	Luottamus								0.260***		
ГC	instituutioihin								(0.039)		
EN	Avun tarjoamisen	_	_				_			0.321***	
ra- uur oite	intensiteetti									(0.042)	
VAS' ROIS ELV	Avun saamisen										0.461***
	intensiteetti										(0.040)
		5.787***	5.811***	5.770***	5.737***	5.784***	5.805***	6.066***	6.038***	6.120***	6.166***
	Vakiotermi	(0.347)	(0.340)	(0.336)	(0.345)	(0.347)	(0.348)	(0.303)	(0.307)	(0.298)	(0.282)
	Ν	1935	1935	1935	1935	1935	1935	1935	1935	1935	1935
	R2	0.147	0.172	0.174	0.156	0.149	0.148	0.204	0.183	0.200	0.263

TAULUKKO 3: Lineaarinen regressioanalyysi sosiaalisen pääoman muuttujien yhteydestä onnellisuuteen yksitellen estimoituina. (Mallissa 1 mukana pelkät kontrollimuuttujat. Malleissa 2-10 mukana kontrollimuuttujat + yksi sosiaalisen pääoman muuttujista.)

(Kontrollimuuttujina käytetty: ikä, sukupuoli, asuinalue, koettu terveydentila, asuuko lapsi(a) kotona, kotikieli, uskonnollisuuden aste, koulutustaso, henkilökohtainen tulotaso ja työttömyys)

Suluissa keskivirheet.

* p < 0.05, ** p < 0.01, *** p < 0.001

sitoutumisensa vastavuoroiseen avunantoon on kaikkein löyhimmällä tasolla.

Sosiaalisen pääoman yhteys onnellisuuteen Seuraavaksi tarkastelemme lineaarisella regressioanalyysilla, kuinka sosiaalinen pääoma vaikuttaa onnellisuuteen. Mallinnamme ensiksi yksitellen sosiaalisen pääoman jokaisen mittarin yhteyden onnellisuuteen koko aineistossa silloin, kun vain taustamuuttujat on kontrolloitu (Taulukko 3). Analyysi osoittaa, että organisoituja sosiaalisia verkostoja lukuun ottamatta jokaisella sosiaalisen pääoman

		То	otal	Professi	oluokka	Keski	luokka	Työväei	nluokka
		Malli 1:	Malli 2:	Malli 3:	Malli 4:	Malli 5:	Malli 6:	Malli 7:	Malli 8:
		Kontrollit	Kontrollit + sos.p.						
	Agun poricultagos		0.430***		0.275*		0.485***		0.488***
£ _			(0.063)		(0.109)		(0.100)		(0.119)
[AAL] STO7	Luottamuksellisten		0.117***	-	0.209***	-	0.066		0.058
FORM BRKO	ihmisten määrä		(0.029)		(0.043)		(0.047)		(0.060)
INI VI	Sosiaalisten		0.027	-	0.046		0.021		0.017
	tapaamisten tiheys		(0.030)		(0.050)		(0.051)		(0.060)
	Osallistunut		0.046		-0.050		0.084		0.170
01D1 ST07	järjestötoimintaan		(0.057)		(0.084)		(0.092)		(0.140)
ANIS RKO (Vapaaehtois-/ hyväntekeväisyys-		0.020	-	0.019		-0.001		0.036
ORG VE	järjestön toiminnan tiheys		(0.027)		(0.038)		(0.042)		(0.069)
us	Luottamus toisiin		0.174***		0.142*		0.178***		0.158**
TA M	ihmisiin		(0.033)		(0.056)		(0.051)		(0.060)
L IN CLAWUS II	Luottamus		0.130***		0.161**		0.093		0.148*
гл	instituutioihin		(0.034)		(0.057)		(0.051)		(0.062)
DEN E	Avun tarjoamisen		0.091*		0.029		0.155*		0.062
STA- SUUS	intensiteetti		(0.040)		(0.064)		(0.060)		(0.076)
VAS OROI VELV	Avun saamisen		0.321***	-	0.374***		0.236***		0.356***
	intensiteetti		(0.040)		(0.065)		(0.057)		(0.077)
	Vakiotermi	5.787***	6.433***	6.811***	6.943***	6.456***	6.717***	4.526***	5.982***
	VukiOteriiii	(0.347)	(0.243)	(0.663)	(0.476)	(0.345)	(0.300)	(0.699)	(0.497)
	N	1935	1935	693	693	758	758	484	484
	R2	0.147	0.328	0.112	0.320	0.135	0.286	0.226	0.398

TAULUKKO 4: Lineaarinen regressioanalyysi kontrollimuuttujien ja sosiaalisen pääoman yhteydestä onnellisuuteen yhteiskuntaluokan mukaan

(Kontrollimuuttujina käytetty: ikä, sukupuoli, asuinalue, koettu terveydentila, asuuko lapsi(a) kotona, kotikieli, uskonnollisuuden aste, koulutustaso, henkilökohtainen tulotaso ja työttömyys)

Suluissa keskivirheet.

* p < 0.05, ** p < 0.01, *** p < 0.001

mittarilla näyttäisi olevan yhteys onnellisuuteen. Vertailu taulukon 3 eri mallien selitysasteiden (R2) välillä osoittaa, että kun taustamuuttujat on kontrolloitu, avun saaminen, luottamus toisiin ihmisiin ja avun tarjoaminen (tässä järjestyksessä) selittävät parhaiten onnellisuuden vaihtelua suomalaisessa aikuisväestössä. Tarkastelemme seuraavaksi, miten yhteiskuntaluokka vaikuttaa sosiaalisen pääoman ja onnellisuuden väliseen yhteyteen. Taulukon 4 ensimmäinen malli sisältää vain taustamuuttujat koko aineistolle. Sen jälkeen olemme lisänneet malliin kaikki sosiaalisen pääoman muuttujat samalla KUVIO 1: Sosiaalisen pääoman muuttujien ja onnellisuuden välinen yhteys koko aineistossa ja yhteiskuntaluokittain (perustuu taulukon 4 malleihin. Mukana vain ne sosiaalisen pääoman muuttujat, jotka muodostavat tilastollisesti merkitsevän yhteyden onnellisuuteen vähintään yhdessä luokassa)



kertaa. Olemme toistaneet saman kaksiportaisen mallinnuksen jokaiselle yhteiskuntaluokalle erikseen tarkastellaksemme, miten yhteys onnellisuuteen muuttuu. Vertailu taulukkoon 3 osoittaa, että mallissa, jossa on samanaikaisesti kaikki sosiaalisen pääoman muuttujat ja kontrollimuuttujat (taulukon 4 toinen malli), organisoidut verkostot ja sosiaalisten tapaamisten tiheys menettävät tilastollisen merkitsevyytensä.

Vertailemalla vain taustamuuttujat sisältävien mallien ja sosiaalisen pääoman muuttujien sisältävien mallien selitysasteita toisiinsa voidaan todeta, että sosiaalisen pääoman lisääminen keskimäärin kaksinkertaistaa mallien selitysasteen. Mallien välinen ero on suurin professioluokan kohdalla ja pienin keskiluokassa. Huomion arvoista on tosin se, että työväenluokassa kontrollimuuttujien merkitys on huomattavasti suurempi kuin muissa luokissa. Siitä huolimatta työväenluokassakin sosiaalisen pääoman huomioiminen nostaa mallin selitysastetta 1,8-kertaisesti. Kuvio 1 helpottaa luokkakohtaisten vertailujen tekemistä kokoamalla yhteen ne sosiaalisen pääoman mittarit, jotka ovat tilastollisesti merkitsevästi yhteydessä onnellisuuteen. Kuvio osoittaa, että professio- ja työväenluokan välillä ei ole suuria eroja. Molemmissa ryhmissä parisuhteella, luottamuksella muihin ihmisiin ja instituutioihin sekä avun saannilla on tilastollisesti merkitsevä positiivinen yhteys onnellisuuteen.¹¹ Efektikoot osoittavat kuitenkin, että työväenluokassa vahvin yhteys onnellisuuteen muodostuu parisuhteen kautta, kun taas professioluokassa avun saamisen myötä.

Professioluokassa yhteys onnellisuuteen aktivoituu myös luottamuksellisten ihmissuhteiden

¹¹ Ordinaalisessa logistisessa regressioanalyysissa luottamus muihin ihmisiin ei ole tilastollisesti merkitsevästi yhteydessä professioluokan onnellisuuteen, eikä toisaalta luottamus instituutioihin ole yhteydessä työväenluokan onnellisuuteen.

määrällä, mutta työväenluokassa ei. Tämä näennäisesti yllättävä tulos selittyy avunannon ja avun saamisen kautta. Jos jätämme nämä kaksi vastavuoroisuuden muuttujaa pois mallista, luottamuksellisten suhteiden yhteys hyvinvointiin on työväenluokassakin merkitsevä. Tämä tulos näyttäisi osoittavan, että luottamuksellisilla ihmisillä on jokseenkin välineellinen merkitys työväenluokan hyvinvointiin.

Keskiluokassa sosiaalisen pääoman yhteys onnellisuuteen on samankaltainen kuin työväenluokassa, joskin keskiluokassa myös avun tarjoaminen on yhteydessä onnellisuuteen, ja toisaalta keskiluokassa luottamus instituutioihin ei ole tilastollisesti merkitsevä selittävä muuttuja. Jos keskiluokan ja työväenluokan yhdistää ja vertaa niitä yhdessä professioluokkaan, tilastollisten interaktioiden tarkastelu osoittaa, että luokkien välinen ero luottamuksellisten ihmissuhteiden määrän vaikutuksessa on tilastollisesti merkitsevä ja ero parisuhteen vaikutuksessa lähes tilastollisesti merkitsevä (p = 0,06). Parisuhde siis näyttäisi vaikuttavan hieman vahvemmin keski- ja työväenluokan onnellisuuteen kuin professioluokan onnellisuuteen. Muut erot eivät ole tilastollisesti merkitseviä.

Yhteenveto ja pohdinta

Tässä artikkelissa olemme tarkastelleet sosiaalisen pääoman eri ulottuvuuksien yhteyttä hyvinvointiin eri yhteiskuntaluokissa. Kansainvälisissä vertailuissa Suomea pidetään yleisesti maana, jossa sosiaalinen tasa-arvo on pitkälti toteutunut. Tuloksemme osoittavat kuitenkin, että sosiaalisen pääoman jakaumassa on täälläkin selkeitä eroja. Professioluokalla on selvästi työväenluokkaa enemmän sosiaalista (kuten myös taloudellista ja koulutuksellista) pääomaa, kuten Bourdieu ja hänen koulukuntansa ovat esittäneet. Professioluokalla on laajimmat informaalit ja organisoidut verkostot ja muita enemmän luottamusta sekä ihmisiin että instituutioihin. Työväenluokka näyttäytyy professioluokan vastakohtana: sillä on suppeimmat verkostot ja heikoin luottamus. Keskiluokka, joka analyysissa muodosti suurimman ja sisäisesti epäyhtenäisimmän ryhmän, sijoittuu koko aineistossa lähelle sosiaalisen pääoman keskitasoa, vaikkakin keskiluokan sitoutuminen vastavuoroisuuden velvoitteeseen osoittautui muita vahvemmaksi.

Samoin kuin useat aikaisemmat tutkimukset myös tämän tutkimuksen tulokset osoittavat, että sosiaalisella pääomalla on selvä yhteys hyvinvointiin. Toisin kuitenkin kuin monessa aikaisemmassa tutkimuksessa, tässä työssä on huomioitu kaikki kolme Putnamin sosiaalisen pääoman ulottuvuutta ja niiden mittaamisessa on käytetty yhdeksää eri muuttujaa. Näin laaja-alaista sosiaalisen pääoman tarkastelua ei ole tiettävästi aikaisemmin tehty Suomessa, eikä se ole yleistä muuallakaan maailmassa.

Erikseen tarkasteltuna kaikki sosiaalisen pääoman muuttujat, lukuun ottamatta organisoitujen sosiaalisten verkostojen muuttujia, muodostavat tilastollisesti merkitsevän yhteyden onnellisuuteen. Sen sijaan tarkasteltaessa samanaikaisesti kaikkia yhdeksää sosiaalisen pääoman muuttujaa voidaan todeta, että vhtevden hyvinvointiin aktivoivat informaalit sosiaaliset verkostot (lukuun ottamatta sosiaalisten tapaamisten tiheyttä), luottamus (sekä toisiin ihmisiin että instituutioihin) ja sitoutuminen vastavuoroisuuden velvoitteeseen. Tuloksemme osoittavat siis. että kaikilla Putnamin erottamilla sosiaalisen pääoman ulottuvuuksilla on yhteys hyvinvointiin. Yhteiskuntaluokkien välillä ei ole erotettavissa merkittäviä eroja. Kaikissa luokissa parisuhteessa eläminen, luottamus kanssaihmisiin ja avun saanti lisäävät onnellisuuden määrää. Selkein ero luokkien välillä muodostui luottamuksellisten suhteiden määrän vaikutuksesta: vain professioluokassa tämä on yhteydessä onnellisuuteen. Työväenluokassa ja keskiluokassa vastavuoroisuuden merkitys korostuu ja peittää alleen uskottujen ihmisten vaikutuksen.

Tulostemme perusteella sosiaalinen pääoma ei pysty paikkaamaan alhaisemman yhteiskuntaluokka-aseman aikaansaamaa hyvinvointivajetta. Toisaalta onnellisuuserot yhteiskuntaluokkien välillä eivät ole enää havaittavissa, kun vakioimme sosiaalisen pääoman määrän. Näin ollen voimme pyrkiä vähentämään yhteiskunnallista eriarvoisuutta hyvinvoinnissa vahvistamalla sosiaalista pääomaa erityisesti alemmissa yhteiskuntaluokissa.

Sosiaalisen pääoman kvantitatiivinen tutkimus on haasteellista käsitteen moniulotteisuuden ja vakiintumattomien mittarien vuoksi. Harvat tutkimustulokset ovat keskenään verrannollisia. Tässä artikkelissa sosiaalista pääomaa on pyritty tarkastelemaan mahdollisimman kattavasti. Vaikka hintana on tällöin useiden muuttujien samanaikaisesta käytöstä johtuva raskaus, se on ainoa tapa huomioida sosiaalisen pääoman eri ulottuvuuksien samanaikaiset vaikutukset. Kuten olemme artikkelissamme osoittaneet, tulokset saattavat vääristää sosiaalisen pääoman vaikutusta hyvinvointiin silloin, kun yhteyttä tarkastellaan vain yksittäisten muuttujien avulla. Siksi on tärkeää, että vastaavanlaisissa analyyseissa sosiaalisen pääoman eri ulottuvuudet huomioidaan mahdollisimman kattavasti. Mikäli käytettävissä oleva aineisto ei tällaista kattavuutta salli, olisi tieteellisen täsmällisyyden nimissä tärkeää, että tarkastelun kohteena olevista ulottuvuuksista puhuttaisiin niiden omilla nimillä - informaalit verkostot, luottamus kanssaihmisiin, avunanto ja niin edelleen. Yksittäisten ulottuvuuksien käsitteleminen sosiaalisen pääoman kattotermin alla hämärtää ymmärtämystämme kyseisestä ilmiöstä ja hidastaa tiedon kumuloitumista.

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