

The (com)promise of sustainable urban transition for migrant descendants in Shenzhen, China

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Abstract

In 2017 Shenzhen scaled up its policy ambition to be a global sustainable city. However, the innovation-driven and talent-focused urban agenda is undermining the sustainable development of the migrant population. This research used the framework of urban sustainability and social quality theory to determine the characteristics of migrant descendants in urbanisation and their relation to sustainable development, and detect the policy gaps through semi-structured interviews, deductive thematic analysis and policy review. It was found that security of housing, income and education was the primary determinants to their individual social quality. The proximity to family and social networks were highly correlated with their preferences for future careers. The livability of the city was determined by developed transport, economic pressures, and the general living environment. These findings imply policy gaps in the city's sustainable development plan towards the integration of social quality and equity and deliverability of innovative and technocratic policy initiatives.

Keywords: Urban sustainability, social quality, rural-urban migration, megacities, thematic analysis, *hukou* policy

Word count: 10025

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Will there ever be enough gratitude that one can express so long as one lives and breathes? I doubt that.

For me, the pure existence of the self, myself, is composed of kindness and love from many humans and non-human beings. Your love towards the life of me enriches me as a human, also as a social being, who, if with lack of affection, would otherwise have perished at a young age. And I made it, thanks to you, and I shall continue to make it, because of you.

I long for connections and thrive on bringing the best out of others. Therefore, when it is myself that has been helped, I appreciate the beauty of humanity even more.

The unconditional love I receive has guided me home through fatigue and sorrow. The lovable friendship, and the supportive kinship and mentorship are the beams shining into the tunnel.

I swim across the lanes, to catch the sun on the pool floor. Waves are greeting me, friendly pats on my back, gentle talks into the good nights, hearty hugs in the sunshine, tears and giggles interact. Oh, I love my life, and all that engage with me, people, and nature. Thanks for making my life. Thank you. Thank you.

List of Figures

Figure 1. The trend of the population in Shenzhen municipality from 2012 to 2020.....4

Figure 2. Key targets of *Shenzhen Sustainable Development Plan 2017-2030*7

Figure 3. Major projects and actions of *Shenzhen Sustainable Development Plan 2017-2030*8

Figure 4. The dominance of codes in four conditional factors.....20

List of Tables

Table 1. Three dimensions of factors in social quality12

Table 2. The domain of conditional factors13

Table 3. The domains and subdomains of four conditional factors of social quality17

Table 4. The profiles of five migrant descendants19

Table 5. The number of codes and code examples of four conditional factors20

Table 6. The various definitions of sustainable development from interviewees25

Table of Contents

1 Introduction	1
1.1 Research aim	1
1.2 Thesis outline	2
2 Background	3
2.1 Migrants and urbanisation in Shenzhen	3
2.2 The <i>hukou</i> system.....	3
2.3 Justification of the significance of migrant descendants in discussing sustainable urban transition	5
2.4 Sustainable development in Shenzhen.....	6
2.4.1 <i>Shenzhen sustainable development plan 2017-2030</i>	6
3 Theoretical framework	10
3.1 Urban sustainability.....	10
3.2 Social quality theory	11
3.2.1 <i>Different factors in social quality</i>	12
4 Methodology.....	15
4.1 Semi-structured interviews.....	15
4.2 Thematic analysis	16
4.3 Policy review	17
4.4 Positionality and reflexivity	18
5 Results and analysis.....	19
5.1 Prevalent themes.....	19
5.1.1 <i>Social quality</i>	20

<i>Socio-economic security</i>	20
<i>Social cohesion</i>	22
<i>Social inclusion</i>	23
<i>Social empowerment</i>	24
5.2 Sustainability awareness	24
6 Discussion	26
6.1 Urban sustainability in a nutshell	26
<i>6.1.1 Social quality for sustainability</i>	26
<i>6.1.2 Technocratic solutions for sustainable cities</i>	27
<i>6.1.3 Understanding sustainable cities: from awareness to actions</i>	28
6.2 The implications for urban sustainability in policymaking	29
6.3 Limitations	29
7 Conclusion	31
8 References	33
9 Appendix	38
9.1. Interview questions	38
9.2 Shenzhen Sustainable Development Index	39
<i>9.2.1 Original index in Chinese</i>	39
<i>9.2.2 Translated version of index</i>	40
9.3 Codes derived from interview transcripts	42
<i>9.3.1 Original codes in Chinese</i>	42
<i>9.3.2 Translated version of codes</i>	49
9.4 Social quality indicators	57

1 Introduction

During the Reform and Opening Up era, the market-oriented economy was introduced in the Chinese coastal regions to attract foreign trade and the demand for the labour force was prominent (Li & Chen, 2022). Shenzhen, as one of the special economic zones set up in 1980, was granted some extent of autonomy for policy innovation. The flexibility around population control and the prosperous outlook of the urban economy has attracted millions of migrants from across the country to dwell in the city and eventually establish their families (Guo & Zhao, 2019; Li & Chen, 2022). Despite the Shenzhen's success story of rapidly transforming into a global urban centre, the current migrant descendants, some of whom are nowadays fresh university graduates, are finding themselves confronted with increasing pressures from competitive labour market, rocket-high housing prices and living costs in the city (Choy & Li, 2017; Lin et al., 2022).

The current sustainable urban agenda of the Shenzhen Municipality have set up an ambition to achieve sustainable development aligned with the international standard by 2030 (The Shenzhen Municipality Government, 2018). The plan is based on the principle of social equity and inclusiveness, aiming for an innovative, attractive, and vibrant metropolis. However, it is uncertain if these technocratic-centred policy guidelines will address the needs of its current and future residents with integrity, and the talent-focused programmes are subject to undermining the sustainability of migrant generations and marginalizing vulnerable population.

1.1 Research aim

The research aim is to determine the characteristics of migrant descendants, detect the policy gaps in the current urban agenda in addressing their needs for sustainable development, and propose possible reorientation of the policy design to improve the overall sustainability of the migrant residents.

The main research question is:

- How can the urban agenda be reoriented to increase migrant descendants' sustainability during urbanisation?

This question is further divided into three sub questions:

- What are the characteristics of migrant descendants manifested in their everyday life?
- How do these characteristics contribute to their sustainability during urbanisation?
- What factors in the new urban agenda affect the sustainability of migrant descendants?

I answer the first sub-question through interviews with migrant descendants, as primary data collection. I engage with interviewees in areas of personal upbringing, career prospects, and observations of sustainable urban development. For sub-question 2, I thematically analyse the characteristics of migrant descendants manifested using indicators of social quality and urban sustainability. In the end, I review policy documents that cover the city's sustainable development goals and criteria as references to reveal the gaps between policy design and social needs and discuss the possible orientation to enhance the sustainable development of migrant descendants.

The sustainability characteristics of migrant descendants in this research refer to a variety of traits that are commonly manifested among migrant descendants in experiencing and responding to changes during urbanisation. In the ecological concept such as the traits of an organism to its related ecosystems, traits describe the features of an organism's links to the functions of the system (Andersson et al., 2021). Derived from such conception, sustainability traits in this research are defined as demonstrable links of individual migrant descendants to the broader socio-economic and environmental systems they are tied in that ensure their social functioning and overall well-being.

1.2 Thesis outline

In the background sections, I introduce the general situation of domestic migration and urbanisation in Shenzhen, present the current urban agenda for sustainable development of the city and justify the target group of the research. The following section is composed of an analytical framework that covers essential concepts and theories with social quality theory and urban sustainability as the pillars. The methodology section is wrapped around thematic analysis and qualitative data collection and results are presented subsequently and analysed to determine the main findings of the research. In the discussion section, the analysis is expanded to correspond to the research aims and situate the findings in a holistic context. The rest of the section discusses the limitations of theoretical and methodological approaches. The conclusion highlights the thesis findings to respond to research questions and the potential direction of future studies.

2 Background

2.1 Migrants and urbanisation in Shenzhen

Originally a small fishing village neighbouring Hongkong in south-eastern China, Shenzhen was selected as the hub for capitalism experimentation and benefited from policy subsidies as the special economic zone during the Reform and Opening up era (Liu et al., 2018). Since then, the city has experienced rapid economic, social, and environmental transformation, now a global innovation metropolis. The rapid urban expansion as the pathway to respond the migrant influx and their needs for affordable housing and access to public services is undermining the urban system's performance. The benefits of accumulating young labour to boost the economy since the 1990s are now running short as the city is facing increasing challenges in addressing the maldistribution of socio-economic capitals and environmental problems (Huang & Tao, 2015). Inequalities and social stratification arising from urbanisation are also part of the major challenges, in which migrant generations are struggling with insecurities and institutionalized discrimination (Guo & Zhao, 2019; Kuang & Liu, 2012; Li & Chen, 2022; Liu et al., 2018).

2.2 The *hukou* system

The Chinese *hukou* system is nevertheless one of the pressures on rural migrants who seek to dwell in the city. The *hukou* system is a household registration system that divides urban and rural populations with affiliation to their place of residency (Dong & Goodburn, 2020; B. Li & Chen, 2022). One's *hukou* is assigned and inherited according to the *hukou* status of their parents, which is common today that their *hukou* status is possible to convert from "rural to non-rural" (*nong zhuang fei*) based on the conditions they fulfil. An urban *hukou* holder (the following is referred as *hukou* holder) has access to free compulsory education in public school up to junior high school level, public healthcare schemes, and other social benefits provided by their urban residency while a rural *hukou* holder (the following is referred as non-*hukou* holder) has the right to agricultural and residential land use rights at their home village (Kuang & Liu, 2012). The latter is restricted from accessing social benefits in the urban areas. The *hukou* system considerably influences migrants' sense of identity, social integration, and socio-economic security (Guo & Zhao, 2019; Lin et al., 2022). Despite the recent efforts in reforming the system to include more rural *hukou* holders into the urban welfare system, the first-tier cities like Shenzhen are still restrictive in *hukou* transfer and currently operationalise a point system to control the population influx (The Shenzhen Municipality Government, 2016a). Up till the end of 2020, 70% of the population in Shenzhen were still non-*hukou* holders (Figure 1).

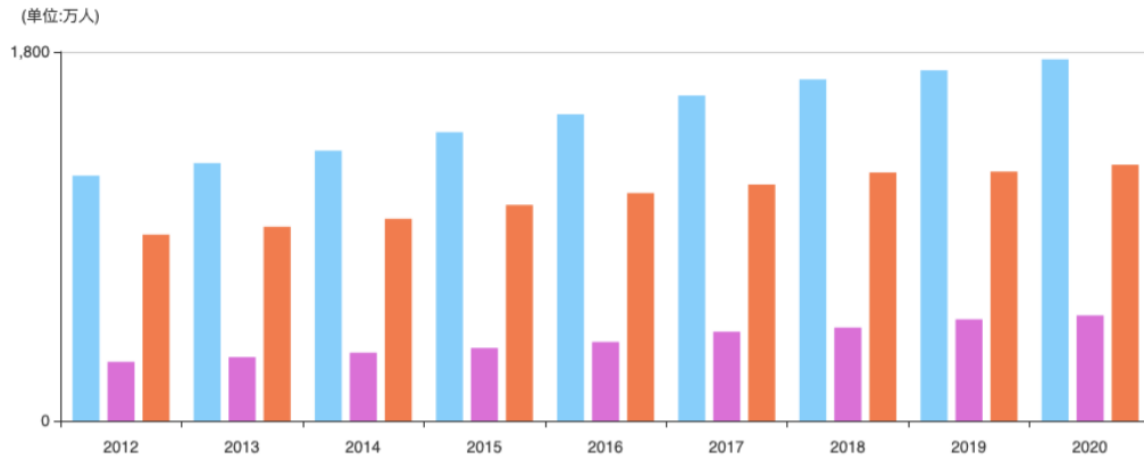


Figure 1. The trend of the population in Shenzhen municipality from 2012 to 2020. In 2020, the blue, purple, and orange columns respectively refer to the overall floating population (17.63 million), *hukou* population (5.14 million) and non-*hukou* population (12.49 million) Vertical Axis: 10,000 in population; Horizontal Axis: Year (The Shenzhen Bureau of Statistics, 2020).

The *hukou* status is divided into categories according to the policy document *Shenzhen 13th Five-Year Plan for Population and Social Development* and focuses on meeting the needs of city's economic and social development for various types of talents (The Shenzhen Municipality Government, 2016a). To introduce the *hukou* conversion from rural to non-rural and manage internal migration, China issues the point system and exercises decentralisation regarding *hukou* policy, which allows regional governments to regulate their *hukou* policies (Li & Chen, 2022). The *hukou* policies in Shenzhen have four programmes: talent introduction, tax migration, policy migration and residential social security migration. In the research, the categories for talent introduction and residential social security are the more relevant ones concerning migrant families according to the corresponding requirements for education and housing.

The general criteria emphasize on introducing high-level talents with official recognition, and favour those who have overseas education and relevant degrees at including and higher than bachelor's level with an age limit of below 45 years old, and specialist degree under 35 years old (The Shenzhen Municipality Government, 2016b). The criteria also apply to those who have technical vocational qualifications with an age limit and length of participation in social insurance, and talents who have won skills competitions. The residential social security migration refers to the *hukou* transfer for those with an age limit below 55 years old for males and 50 years old for females, who have both participated in the Shenzhen social pension insurance and owned property or rental housings for minimum ten years as the baseline requirements. The higher points are distributed towards those who fulfil the criteria over a longer period of time and the *hukou* is allocated once annually based on the available

yearly quotas (The Development and Reform Commission of Shenzhen Municipality Government, 2021).

Besides the *hukou* policy, the obligatory education for children enrolled at middle school is also reliant on their compliance with the *hukou* policy and housing conditions. For example, as one of the most populated districts in the city subordinate to the municipality government, Longhua District applies the principle of "category first, then points", in which students will be admitted in order of category 1 to 6, and students of the same category will be admitted according to the highest to lowest points until the school's admission plan is full (The Longhua District Bureau of Education, 2021). The point system is allocated based on the type of *hukou* (Longhua district *hukou*, Shenzhen *hukou*, non-*hukou*) and housing conditions encompassing permanent family housing ranging from commodity apartments, inherited family housing, and rental apartments within the district) and the priority is given to the category with permanent housing and urban *hukou* (The Longhua District Bureau of Education, 2021).

2.3 Justification of the significance of migrant descendants in discussing sustainable urban transition

In this research, migrant descendants are defined in the popular term as “深二代” (*shen er dai*) in Mandarin Chinese, which refers to the second generation of migrant workers that moved to Shenzhen during their teens or early adulthood who now consider themselves local residents in Shenzhen. These descendants are predominantly born and/or raised up in Shenzhen and have received mandatory education until their late teens. Their migrant parents originate from other cities or provinces across China, and many are of rural origins.

Many scholars have researched migrant workers in the contexts of social mobility and *hukou policy* regarding the housing policies, economic sustainability, education, psychology of migrant children and so on. (Guo & Zhao, 2019; Huang & Tao, 2015; Kuang & Liu, 2012; Li et al., 2012; Zhu, 2015). However, very few have targeted their research at adult migrant descendants, even less in the sustainability context. The rationale of targeting this research at migrant descendants is that upon the 40th anniversary of Reform and Opening Up, the second generations of the migrant workers are the new blood of the vibrant city and as the current urban agenda is emphasising talent introduction to achieve sustainable development, perspectives of migrant descendants are a good fit to examine the deliverability of relevant policy initiatives.

Although there is no existing statistical account of such a population as *shen er dai*, data on the proportion of the population with a university education can provide an overview. According to The

Shenzhen Bureau of Statistics, as per 100,000 people, compared to 2010, the number rose from 17,545 to 28,849, which are 13,382 and 13,150 more than the national and the provincial levels respectively (2021). Thanks to the city's talent introduction policy, the proportion of the talent population has continued to grow, which is said to have provided stronger impetus for the city's innovation-driven development (The Shenzhen Bureau of Statistics, 2021).

Scholars like Zhu (2015) have researched the migrant descendants' identities, which manifest decentralised and postmodernist characteristics. This means that their identities are multiple and sometimes even conflicting as they dominantly identify themselves as local residents in Shenzhen but also recognize their identities as being tied with the origins of their parents. The generation of migrant descendants also share other common characteristics, namely embracing an international perspective, innovative, open-minded, and inclusive. These characteristics are also aligned with the "Shenzhen Spirit" (*shen zhen jing shen*), in which being "open and inclusive" (*kai fang bao rong*) has been commended by the Shenzhen Municipality Government (The Shenzhen Special Zone Daily, 2020)

2.4 Sustainable development in Shenzhen

In 2015, following the United Nations Development Summit, China introduced political schemes to implement the 2030 Agenda for Sustainable Development and the specific requirements for the constructing innovation demonstration zones for the 2030 Agenda (The Ministry of Foreign Affairs of the People's Republic of China, 2016). In March 2018, Shenzhen was granted by the State Council the "National Innovation Demonstration Zone for Sustainable Development Agenda" (*guo jia ke chi xu fa zhan chuang xin shi fan qu*) and an innovative mega-city was themed for the city's sustainable development plan (The Shenzhen Municipality Government, 2018). The demonstration zone was designed to pilot sustainable urban development at the national level and provide transferrable experiences for other Chinese megacities.

Over the 40 years of the reform and opening up, Shenzhen has built up from a small village to a modern metropolis, marking the rapid historical changes as a result of industrialisation, urbanisation, and modernisation. However, it is also faced with challenges such as pressure on natural resources and environment, insufficient supplies of public services, and the need to further improve social governance (The Shenzhen Municipality Government, 2018).

2.4.1 Shenzhen sustainable development plan 2017-2030

The *Shenzhen Sustainable Development Plan 2017-2030* (the following is referred to as "the plan") was published in 2019 by the city government as the leading document for each subordinate district to

map out a political agenda for sustainable development. The document was set in the scene that followed the 19th National Congress of the Chinese Communist Party in 2017. The congress identified that the “main ongoing social conflicts lie between the growing need for a better life for all and the unbalanced and insufficient development” and advocated for sustainable development strategies for human and societal development (The Shenzhen Municipality Government, 2018). The plan was composed based on a series of policy documents, including several “13th Five-Year Plans” at the municipality level regarding population control, housing security, innovation, education and urban planning. These plans were derived from the national-level master plan *Outline of the 13th Five-Year Plan for National Economic and Social Development of the People's Republic of China*. The master plan seeks to address China’s unbalanced, uncoordinated, and unsustainable growth and “create a moderately prosperous society in all respects” (*quan mian jian cheng xiao kang she hui*), namely, to improve the quality of life of the citizens through enhancing social welfare and environmental protection (Xinhua Net, 2016).

The government recognizes the need of solving the urban challenges through accelerating the innovation and integrating science and technology into social development (The Shenzhen Municipality Government, 2018). It focuses on implementing the concepts of innovation, coordination, greenery, openness and sharing (Figure 2). The core of the plan is to enhance the quality and efficiency of development, and better promote all-round human development and social progress.



Figure 2. Key targets of Shenzhen Sustainable Development Plan 2017-2030 (The Science, Technology, and Innovation Commission of Shenzhen Municipality, n.d.)

The plan also identifies the “urban diseases” commonly experienced by megacities as - rapid population expansion, the unbalanced structure of the *hukou* and non-*hukou* population, relatively insufficient supply of public services such as education and healthcare, unbalanced and uncoordinated regional development, increasing pressure on urban security and social governance (The Shenzhen Municipality Government, 2018).

It recognizes the major "two deficiencies" during the city’s urban development, namely the relative inadequacy of resources and environmental carrying capacity, and that of support for social governance (Figure 3). Particularly, the insufficient supplies of quality public services such as restrictive education and medical services, and risk and problems in social governance are attributed to the high density of resident population along with the increasing ownership of private vehicles, and social conflicts arising from diversifying social groups and ideologies (The Shenzhen Municipality Government, 2018).



Figure 3. Major projects and actions of *Shenzhen Sustainable Development Plan 2017-2030* (The Science, Technology, and Innovation Commission of Shenzhen Municipality, n.d.)

To address these challenges, the plan focuses on the advancement of science and technology, the overseas talent introduction program, and the systemic improvement of supporting innovation industries and talent services (The Shenzhen Municipality Government, 2018). In particular, the social governance modernization project highlights the structural plan of integrating technology to improve social governance and operationalizes innovation projects to achieve modernisation (Figure 3). The aims of this project are also explicit in its innovation- and technology-driven principles to create a more

liveable community environment and a more human-centred urban environment, and continuously enhance the identity of the citizens and the sense of belonging and happiness of the general public (The Shenzhen Municipality Government, 2018).

3 Theoretical framework

This section includes the theoretical framework and concepts that are essential for understanding the context of migrant descendants and their sustainability in urbanisation. The overarching conceptual framework is urban sustainability, in which social sustainability is tied with social quality theory and manifested to answer sub-question 1 on the characteristics of migrant descendants. To further on answer the sub-question 2 on the determinants of the sustainable development of migrant descendants, the specific domains of the social quality theory are discussed to situate their characteristics in the policy contexts based on the city's sustainable development plan. The understanding and theoretical application elaborate on sub-question 3 in terms of policy gaps and potential policy reorientation to enhance the sustainable development of migrant descendants.

3.1 Urban sustainability

The Brundtland Commission defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (The World Commission on Environment and Development, p.45). In the framing of sustainability, the dominant development paradigm is that “economic growth must be continuous for the improvement of human well-being” (Romero-Lankao et al., 2016, p.25). This growth will compensate for any part of the overexploited or deteriorated environment.

Urban sustainability is a concept developed from urban ecology (Childers et al., 2014). The latter focuses on the approaches of ecological processes and functioning in the urban settings. Due to its interdisciplinary nature, and its intrinsic integration between human and biophysical systems in the urban systems, urban sustainability offer opportunities for sustainability conceptual approaches that do not differentiate ecological and human-driven structures (Childers et al., 2014).

Evolved from the earlier focus on environment and natural resources limits, urban sustainability refers to a series of normative qualities that contribute to a mutually healthy socio-environmental relationship (Elmqvist et al., 2019; Leach et al., 2018; Pan & Du, 2021; Zeng et al., 2022). Elmqvist and colleagues also provides a nuanced view of urban sustainability based on reviewing policy documents and research that have proved the dilemmas in explicitly defining the concept (2019). Their proposed definition of urban sustainability is that “manage all resources the urban region is dependent on and enhance the integration of all sub-systems in an urban region in ways that guarantee the wellbeing of current and future generations, ensuring distributional equity” (Elmqvist et al., 2019, p.269).

Urban sustainability is composed of three pillars - social sustainability, environmental sustainability, and economic sustainability (Zeng et al., 2022). Social sustainability requires internal and external integrity for future generations to create and maintain sustainable communities. Environmental sustainability means fulfilling the needs of economic and social development should not come at the expense of the environmental development and ecosystem functioning. Economic sustainability refers to a set of criteria that allows the optimal use of resources in urban management to create long-term sustainable values.

3.2 Social quality theory

The social quality theory originated from the theoretical application in the European Commission to measure the quality of social life centring around people (Han, 2020). It has since been applied in Asian countries as well and in the Chinese context (Che et al., 2022; Cui et al., 2021; Lin & Herrmann, 2015; Wei & Yan, 2018). The theory serves as a comprehensive theoretical foundation to understand citizen's welfare and socio-economic capacity. As the sustainable urban agenda is set to address the citizens' need for a better life for all, the theory can offer to ameliorate the understanding of sustainability through measuring the life of people and the integration of its multiple dimensions in urban sustainability (Van Der Maesen & Walker, 2014). The understanding of societal trends, the outcomes of the policies in response to these trends, and the interconnectedness of these outcomes will be crucial to understanding the commonalities and social needs of migrant descendants.

The founding scholar of social quality theory, Wolfgang Beck, defines social quality as the extent of human participation in the social and economic life and development of their communities for enhancing their well-being and potential (Beck, Van der Maesen & Walker, 1997). Such concepts changed the social model of the European Commission and shaped the present social welfare system. The question is - What kind of socio-economic security will provide the social protection for people to secure the social quality? Considering social and environmental factors, social quality is reflected by the degree and level of socio-economic security that society provides for people to live (Han, 2020). At the individual level, it is manifested through their opportunities, provided by society and the openness of the society itself, to enter the social system and the possibility to be integrated into the mainstream society (Han, 2020).

Social quality in essence is shaped by three types of factors, constitutional factors, normative factors, and conditional factors (Han, 2020). Social systems functions as people act, which leads to their social quality. As social norms conduct their constitutional activities at the individual level, one's activities are aligned with their recognition of one's collective identity. These eventually form the normative

factors, with strong ideological significance. Therefore, social quality should be examined at the individual and social levels so the influence of these factors is not overlooked (Han, 2020).

3.2.1 Different factors in social quality

Table 1. Three dimensions of factors in social quality

Constitutional factors	Conditional factors	Normative factors
Personal (human) security	Socio-economic security	Social justice (equity)
Social recognition	Social Cohesion	Solidarity
Social responsiveness	Social Inclusion	Equal value
Personal (human) capacity	Social Empowerment	Human dignity

There are three dimensions of factors in social quality theory – constitutional, conditional, and normative (Table 1). Constitutional factors concern the development of the capacities of individuals as social beings and their role to engage in social affairs. Constitutional factors are the starting point for the processes that lead to social quality – the essential foundations of social life that determine their capacity that subject to conditional factors. Conditional factors concern the opportunities and/or resources which determine the extent of social quality achieved by individuals, groups, communities, or societies. Normative factors play the central role in judging the outcomes of the linked processes concerning the constitutional and the conditional factors (Van Der Maesen & Walker, 2014).

Conditional factors are the core factors of social quality, including socio-economic security, social cohesion, social inclusion, and social empowerment (Van Der Maesen & Walker, 2014). There are respective domains and subdomains of the conditional factors determined by the social quality indicators as the methodological approach (Table 3; Appendix 9.4). The following concepts are explained based on the work of Han (2020).

Table 2. The domain of conditional factors (Van Der Maesen & Walker, 2014)

<p>Socio-economic security</p> <p>Financial resources Housing Environment Health and care Work Education</p>	<p>Social cohesion</p> <p>Trust Other integrative norms and values Social networks Identity</p>
<p>Social inclusion</p> <p>Citizenship rights Labour market Services (public and private) Social networks</p>	<p>Social empowerment</p> <p>Knowledge base Labour market Supportiveness of institutions Public space Personal relations</p>

Socio-economic security is conceptualised to include all welfare provisions which guarantee the primary security of daily life and enhance life chances. It indicates the basic survival safely, everyday safety, and welfare supply of the citizens to deal with social crises and the relevant opportunities to expand on these domains. It both ameliorates risk and enhances life chances by protecting people from poverty and social and material deprivation. It serves as the prerequisite for inclusion and citizenship and is a much broader concept than social security.

Social cohesion refers to the local autonomy at the micro level in social relationships with family, friends and communities, and the social trust at the interpersonal and institutional level relatively. It maximises solidarity and shared identity. It is manifested as depending upon the strength of social relations and is a function of the integration between integrative norms and values in society.

Social inclusion indicates the idea of citizenship in its possibility of participating and defending identified material interests, assurance of guaranteeing public autonomy and citizen’s private autonomy. Improving social inclusion can reinforce the existing social structure, accelerate the individual socialisation process, and promote social empowerment. It integrates people into the social system and enables them to be involved in various social relationships.

Social empowerment is to realise human competencies or capabilities primarily concerning on a micro level, enabling people to develop their full potential. It refers to developing the competence of citizens to participate in processes determining daily life. The thematic event of empowerment is defined as broadening the range of choice for people and upgrading their basic needs at an early stage through a top-down approach. The focus on people’s ability and social relationships makes improving

empowerment, in essence, enhancing social ability in social relationships and their ability to participate in social affairs.

4 Methodology

The section demonstrates the methodological components including qualitative data collection through semi-structured interviews, and the deductive thematic analysis and policy review.

4.1 Semi-structured interviews

The interviews were conducted with five migrant descendants aged between 23 and 25 years old, with a general profile of job-seeking students, whose parents or immediate families moved to Shenzhen in the 1990s and who spent the majority of their childhood and teenagerhood there. The criteria of interviewees were that they should identify themselves as a migrant descendant in Shenzhen, have acquired degrees at bachelor's level and/or above, and have a basic understanding of sustainable urban development.

Interviewees were asked to provide ethnographic history regarding their upbringing in Shenzhen, their career choices in association with the city, and their overall attitudes towards the sustainable development of the city. The interviews followed a set of questions with flexibility around questions that guided interviewees throughout the process, in which interviewees generally expressed their opinions without interruptions. The quotes of the interviews were translated into English by the author.

The rationale behind this target group is that the city government has designated a comprehensive political agenda aimed at attracting high-level talents, including graduates from higher educational institutions. Considering that migrant descendants with higher educational backgrounds are to benefit from more policy subsidies and that due to the COVID pandemic, it was relatively more accessible and plausible to conduct online interviews with young migrant descendants who are generally willing to contribute to academic research and familiar with the technology.

Two informal interviews were preliminarily conducted to detect the main areas of interest for refining drafted interview questions, which were not included as the research results. Subsequently, each of the five formal interviews were conducted in March and April 2022 through video or voice calls and was around one hour long. Upon the consent of interviewees, interviews were tape-recorded and later transcribed by Microsoft Word, and the transcripts were finally proofread by the author. Despite being a small sample, the qualitative data collected from the interviews reached the expected saturation of arguments based on the theoretical interest and were considered substantial for a comprehensive analysis (Appendix 9.3). The interview questions are attached in the appendix with English translation

(Appendix 9.1). Overall, the interviews were conducted in a semi-structured format in Mandarin. Consents were granted beforehand for handling the data with anonymity.

4.2 Thematic analysis

For data analysis, thematic analysis was applied in this research as deductive method to capture the repeated themes from the textual transcripts of the interviews. The purpose of thematic analysis is to identify the topics, patterns and ideas that come up recurrently in the text format and as the data is closely examined, researchers actively discover and report to their readers what are of interest (Braun & Clarke, 2006).

Adapted from the approach of Braun & Clark (2006), the process includes getting familiarised with data sets to grasp the general content and identify possible patterns, closely examining interview transcripts, marking relevant statements as a stand-alone baseline code, renaming codes to clarify the content, sorting the codes under themes, and reviewing the themes. The themes in this research are based on the qualitative understanding of indicators subordinate to the four conditional factors in social quality theory – socio-economic security, social cohesion, social inclusion, and social empowerment. Most of the social quality indicators are based on the quantitative criteria and as the data from this research are qualitative based, the analysis is conducted through an integrated understanding of the 19 domains, subdomains, indicators for coding the data (Table 3; Appendix 9.4). The data analysis was operated using NVivo Pro qualitative data analytical software.

Table 3. The domains and subdomains of four conditional factors of social quality (Van Der Maesen & Walker, 2014)

Social quality conditions	Domains	Subdomains (sub-subdomains)
Socio-economic security	Financial resources; Housing and environment; Health and care; work; education	Income sufficiency ; income security Housing security; housing conditions Environmental conditions (social and natural) Security of health provisions; health services; care services Employment security; working conditions Security of education; quality of education
Social cohesion	Trust; other integrative norms; social networks; identity	Generalised trust; specific trust (institutional; personal) Altruism; justice (formal/institutional legal framework; Practice); Commonality and reciprocity; horizontal networks; vertical networks; Cross-cutting ties; national / European; regional / community / local; interpersonal
Social inclusion	Citizenship rights; Labour market; Services – public; Service – private; Social networks	Constitutional / political rights; social rights; civil rights Access to paid employment; quality of employment Health services; housing; education; social care Financial services; transport; commercial facilities; leisure services Friendships; neighbourhood participation; family life
Social empowerment	Knowledge base; Labour market; Openness and supportiveness of institutions; Public space; Personal relationships	Application of knowledge; availability of information; User friendliness of information Control over employment contract; prospects of job mobility; reconciliation of work and family life (work/life balance) Openness and supportiveness of political system; openness of economic systems; openness of organisations Support for collective action; cultural enrichment Provision of services supporting physical and social independence; personal support services; support for social interactions

The deductive approach of thematically analysing data is deliberately designed to categorize statements from interview transcripts that represent normative and ideological factors, which in essence are the expressions of social quality in the everyday life of migrant descendants. This approach was selected due to the theoretical soundness of social quality indicators, which explicitly showcases how each indicator is measured both quantitatively and qualitatively (Appendix 9.4).

4.3 Policy review

The choice of the policy document *Shenzhen Sustainable Development Plan 2017-2030* was composed and published by the government of Shenzhen considering the nation-level governmental document China's implementation of the 2030 United Nations Sustainable Agenda (The Shenzhen Municipality Government, 2018). It is based on multiple other flagship documents that direct the China's sustainable development plan at the domestic and international levels. The plan provides guidance to

the policy conduct of each district subordinate to the Shenzhen Municipality Government. This document serves as the secondary data collection to detect the policy gaps that can potentially contribute to the increased sustainability of these individuals and consequently to the general sustainability of the city. The plan is the latest updated version regarding the city's sustainable development.

The *hukou* policy was also chosen in this research based on the documents the *Shenzhen 13th Five-Year Plan for Population and Social Development* (2016a) and the *Certain Regulations on Household Registration Conversion in Shenzhen* by the Shenzhen Municipality Government (2016b). The policy is the fundamental guideline for *hukou* conversion from rural to urban and the main reference in various stages of policy implementation regarding primary and secondary education concerning *hukou* status (Dong & Goodburn, 2020). The conditions described in the document showcase the application of the point system, which has been critiqued by scholars like Li & Chen (2022) to impair social equity despite improvements from policy reformation.

4.4 Positionality and reflexivity

This research is targeted at studying migrant descendants in Shenzhen and I, as the author of the research, share commonalities with research subjects as an enrolled master student at a Nordic university with family originating from a Chinese province other than Guangdong. I grew up in Shenzhen and received education there until high school. These commonalities as a migrant descendant myself allow me to be well tuned in with my research subjects during interviews, policy, and literature review in the Chinese context. Though my personal experience might subject me to bias and assumptions that could undermine the accuracy of my interpretation toward data analysis, I argue that the familiarity with the topic also enables me to come close to the concerns of migrant descendants of my age and have a better understanding of their situatedness.

5 Results and analysis

5.1 Prevalent themes

During the five interviews, each of them lasted approximately one hour and common topics were brought up such as income, education, housing, and social governance. On a specific note, the COVID pandemic has exerted some extent of impact on the interviewees’ choices in terms of higher education at the master’s level. Five interviewees were students that had obtained or were in the process of seeking their master’s degree (Table 4). Three of them had received or were receiving education from some Hong Kong universities, one from a top university in the Guangdong province, and one a Nordic university at the time of the interview.

Table 4. The profiles of five migrant descendants

Interview	Shenzhen hukou	Permanent family housing	Education at master’s level	Employment status	Guangdong origin (up to grandparents)	Number of siblings
1	Yes	Yes	Currently enrolled	Intern at private sector	Yes	2
2	Yes	Yes	Graduate	Public sector	Yes	1
3	Yes	Yes	Currently enrolled	Not yet	Yes, grandparents were migrants from other provinces	0
4	No	Yes	Currently enrolled	Not yet	Yes	1
5	Yes	Yes	Graduate	Public sector	Yes	1

The dominance of four conditional factors emerged during the interviews are illustrated as below (Figure 4). Code frequency and code examples are demonstrated as below (Table 5).

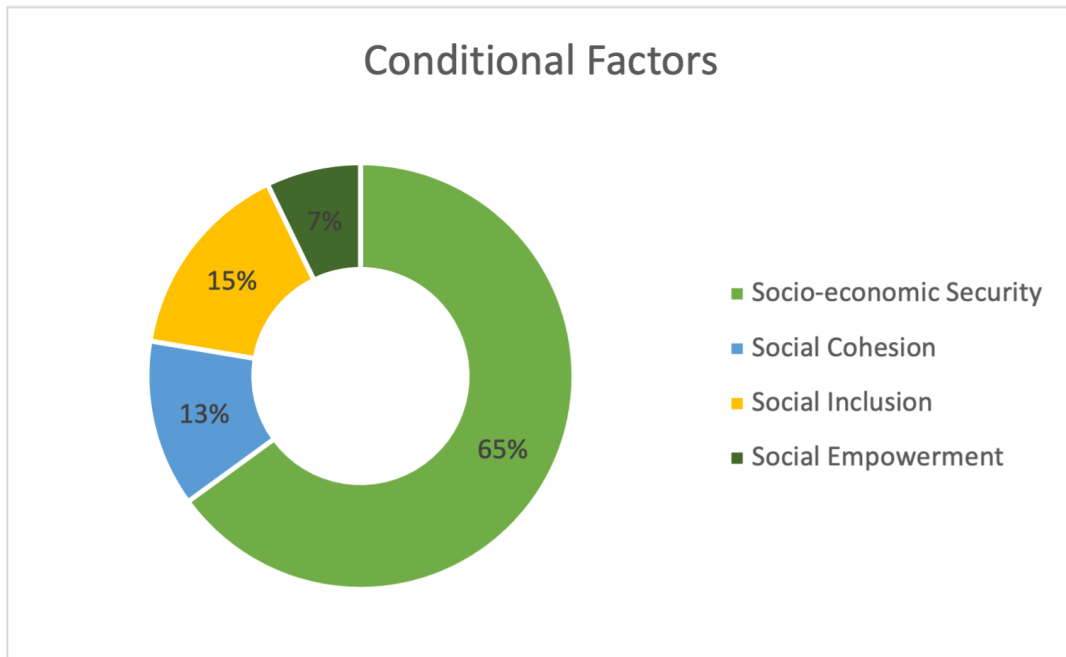


Figure 4. The dominance of codes in four conditional factors. 65%, 13%, 15%, and 7% of the codes are correspondent to the respective themes in social-economic security, social cohesion, social inclusion, and social empowerment

Table 5. The number of codes and code example of four conditional factors (Appendix 9.3)

Themes	Socio-economic Security	Social Cohesion	Social Inclusion	Social Empowerment	Total
Number of Codes	154	30	36	17	237
Code Examples	housing conditions in relation to economic concerns and family choice; hukou benefits associated with employment	identity associated with hukou; recognition of Shenzhen as home; family and cultural values	the role of transport in bonding with social networks; intra- and intergeneration support	flexibility of working hours; cultural activities and public space; individual autonomy over decision-making	/

5.1.1 Social quality

Socio-economic security

When the interviewees were asked about the potential obstacles for them to residing long-term in the city, economic security and financial independence were the primary concerns that were iteratively brought up. Upon their plan for future urban life in the next five to ten years, it appeared that their choices of residency often involved considerations towards the level of income from future employment, living costs, and housing prices in the region of their choices. For some, preferences were

given to areas in Shenzhen where the overall living expenses were lower, such as in Longhua District in the relatively suburban part of Shenzhen, where many migrant workers reside (Interview 1). For others, they considered investing in housings that were in the more affluent districts where young families reside and with available quality education (Interview 3). The security of permanent housing was prioritized by some for a more stable life (Interview 1) while was less so by others for its unaffordability and their reluctance to be “mortgage slave” (*fangnu*), namely being chained to their housing loans, at a young age (Interview 5). Some also expressed concerns involving addressing the inequalities in resource distribution regarding housing to ensure a higher minimum living standard (Interview 4).

The positions in the public sectors were preferred due to the stability of income. As one of the interviewees mentioned, *“the advantage of working at the public institutions is that such entrenchment [as that in private enterprises] won’t happen. Despite that it is tiring, at least I have a job, won’t be laid off, and my income is stable”* (Interview 5). Urban *hukou* was considered an advantage in the job market as the implicit preferences during recruitment as one that has been employed at a state-owned primary school has expressed *“even though it is not required a lot of job applicants will indicate on the resumé their urban hukou status, for they consider it as an advantage (...) and the recruiters would think if you grow up here and have the hukou, you are more familiar with the educational system, and are likely to reside here long-term”* (Interview 2).

Apart from considerations towards income, the security of work was one of the influential factors that determined their overall career outlook. The pressures coming from financial burdens and higher living costs as well as rapid urban development was said to compromise the quality of life compared to the city’s neighbour Guangzhou, which was a more conventional city with long history. As it was expressed, *“at the employment market, I feel this strong sense of “involution”, which is that my peers are all under high pressure. We are all excellent people but if you don’t stand out more, you will be opted out. I feel this very strongly in Shenzhen. It might be that there are quite many competitors.”* (Interview 2).

The priorities to housing were given towards areas where the education of the future generations would be beneficial. The purchase of apartments in the future was concerning for some due to its affiliation with *hukou* status as the prerequisite for their future children to access public school. The choices of housing location were prioritised in the area where there would be allocated seats for public schools. Conditions of environments were given towards green areas or green spaces with high vegetation cover, with an agreeable climatic environment, and good air quality. The city’s investment in health services was recognized but criticised for being inadequate and underdeveloped compared with other first-tier cities such as Guangzhou, Shanghai and Beijing. However, due to its proximity to

Guangzhou where more adequate healthcare services were provided, it was not considered affecting decision-making regarding city of future residency and the increasing investments in the healthcare resources from the government were commended.

There was clear stratification on accessibility towards educational resources and quality of education depending on one's *hukou* status. During the entrance exam to high school, pupils with relatively low grades were placed at a great disadvantage if without *hukou*, as the requirements for admission were to the preferences of *hukou* holders. As one interviewee stated, *"among students with relatively lower grades it was a great advantage [for hukou holders as they require fewer points to be admitted to the same high school compared to the non-hukou holders]"* (Interview 1). Some expressed their sense of insecurity coming from the lack of education and financial resources provided by their parents compared to the *hukou*-holder. As the non-*hukou* holder, they prioritized high autonomy and self-sufficiency gained from socio-economic security in their future planning. The quality of family values and upbringing determined the prospect of the education towards their children. Education in the city was recognized and the quality of education was commended, especially during the recent years when investments in recruiting high-level talents and teachers were visible and promising.

Social cohesion

Volunteering for public services was one of the factors that enhanced social cohesion among migrant descendants. For example, despite that during the COVID pandemic, some that worked in the public sectors had to work night shifts due to the restaffing for volunteering work for disease prevention, it was expressed with a strong sense of duties at the personal level as it was stated *"there was no other choice, but it was for serving the people (...) you know, there are always people who make sacrifice for the common good"* (Interview 5).

Social networks supported the parental generations of migrant descendants being integrated into the community during the time of arrival in the city. The division was made between the single-child family and the multi-children family, particularly in the sense of family cohesion and interdependence, where the interviewees from a multi-children family with Guangdong origin demonstrated a strong sense of belonging and recognition toward the regional cultural and family values. Social cohesion was highly correlated with cultural origins and family networks, as well as the ties to the city, as it was stated when interviewees were questioned regarding their decision to pursue higher education within the province, *"because people from Guangdong usually prefer to stay where they are, it is more of a general recognition towards the regions and culture [from my end]"* (Interview 1).

When being asked on the intergenerational differences between migrant descendants and their parents, many recognized themselves as the “*shen er dai*”, the common identity that has been defined in the section 2.3, and the *hukou* status did not discourage their identity that was bound with the city. Many called it home as it was the only place while in comparison their parental generations had another alternative home which referred to their origins. The parental generations of some demonstrated a lower degree of identity attached to the city for reasons such as “*on the emotional level, they [my parents] don’t feel as strongly as we do, as they don’t have many reminiscences related to childhood here, their memory was all about hard work*”.

Further on, the vibes of the city characterized by youthful and dynamic and the high “quality” (*suzhi*) of the population, namely the education and social manners during one’s upbringing, were correlated with their recognition of the city as the place of residence.

Social inclusion

The city was praised for its inclusiveness, for which newcomers were able to establish based on their capabilities. Its attraction was correlated with its vibrant vibe characterised by a large number of young migrants, administrative efficiency, prominent innovation and high-tech industries, and an overall higher level of moral integrity and good manners among the residential population.

Well-developed transport network was a major contribution to strengthening social networks and facilities and infrastructure were better developed in Shenzhen than in most of the other regions in China. As some stated that “*having a well-facilitated transport network is a necessity for me. For example, if I find a job which is not right next to home, I will rely on reliable and convenient, either public transport or private means. As a human being, it is impossible to not travel, whether it is for work or everyday interactions [with other people]*” (Interview 1). Though they have expressed their concerns over the high population density, traffic congestion and noises from constructions which hinder the city’s attractiveness, the strong sense of identity as a local and the future resident of the city was expressed to outweigh the temporary inconveniences or issues as a result of urban development.

Family and the wider social network were highlighted to be the essential factors that supported one’s overall sense of social integration, and the generous attitudes from family members towards personal choices allow flexibility and self-autonomy. However, it was brought up that the migrant children, including their cousins, had to return to rural areas to study after their failures to enter middle or high schools in the city due to reasons such as insufficient grades and non-*hukou* status. They were provided with inadequate support as a result of being separated from their parents. It was generally expressed that migrant descendants overall were inclined to live close to their parents, relatives, and friends,

regarding the choices of their previous education, the future place of residence, and long-term planning. Besides that, with the two interviewees that studied at Hong Kong universities and one at a Guangdong university, such considerations as cultural similarity, economic prominence, and regional proximity between Hong Kong and Guangdong, and within the Guangdong cities were part of their decisions to stay around in the region.

Social empowerment

Empowerment during the labour market was manifested through the working conditions, on which working in the public sectors faces more restrictive terms in terms of travelling outside business trips, and some were exposed to a large amount of bureaucratic work that went beyond their essential duties and became time-consuming and energy-draining. Creativity and diversity of work were considered as part of their career outlook. In the public sectors, working hours were fixed but flexibility around travel as well as opportunities for promotion was restricted. Administrative procedures beyond normal working duties were laden in the sectors like educational institutions and pressures were commonly prevalent regardless of industry. In everyday life, administrating streamlines in recent years were commended for the advancements in digitised procedures and reduced paperwork.

Policy implementation was criticised for its general orientation towards quantifying administrative performance and formalism. Student work experiences beyond general education were considered a source of personal empowerment to enhance employability and admission to higher educational institutions. The cultural activities and elderly care facilities, the city's spiritual life was inadequate and general sustainability awareness of lifestyle had room for improvement through awareness-raising activities. It was stated during the interview that *"compared to Beijing and Hong Kong, its cultural vibes and artistic sensations are lacking. (...) As if people living here are only concerned about earning money, not spiritual development"* (Interview 3).

5.2 Sustainability awareness

In terms of awareness, the definitions of sustainable development provided by the interviewees varied, but commonly demonstrated their basic understanding regarding governance, public education and awareness raising campaigns, and utilisation of renewable resources at the individual and systemic level (Table 6). It was recognized that sustainability was significant for the city's development and more emphasis was drawn on social and economic sustainability than environmental sustainability. Regarding specific action-oriented strategies at different levels to contribute to the sustainable development of the city, it has been stated that *"I think the primary action could be to travel with public transport, drive less, which will reduce a generous amount of unnecessary waste of energy. Then,*

it would be to promote reusing and recycling, and reducing the waste from the sources, minimising waste of resources, and cultivating a green lifestyle. At the enterprise level, it could be done to regulate the use of raw materials and water, which have a much bigger impact than individual efforts” (Interview 1). Concerns were raised in the conduct of the sustainability index as the sustainable urban agenda is exposed to risks such as mentioned *“actually in China, these ideas, when turning into reality, most are transformed into part of quantitative criteria to measure political performance, and therefore become formalistic”* (Interview 2). The overall understanding of sustainable cities was coupled with liveability of the cities in the areas that have been covered in the 5.1.1 social quality section.

Table 6. The various definitions of sustainable development from interviewees (Interview 1, 2, 3, 4, & 5)

Interview	Definition of sustainable development
1	<i>“Multilevel efforts from i.e.: government, enterprises, society, and individuals, on renewable and green energy and resources and its application under guidance of standardized index system”</i>
2	<i>“Defined based on the education received from school, in the areas of recycling and decarbonization/energy saving integrated into everyday lifestyles”</i>
3	<i>“Manifested in terms of sufficient resources of quality education, advanced level of healthcare services, and high livability of (living and/or ecological and/or climatic) environment”</i>
4	<i>“To sustain the needs of current generation without compromising the needs of future generations, to correct the traditional way of development models [first pollute, then restore], and to localize sustainable solution in the contexts at national and city levels”</i>
5	<i>“Based on literal understanding, sustainable renewable resources with healthy and reasonable structure of population age, mainly centering around humans, but with liveable environments”</i>

6 Discussion

This section discusses the implications of the results and contextualize the findings based on the theoretical and analytical framework and sheds light on the possible reorientation of sustainable urban agenda towards enhancing sustainable development among migrant descendants.

6.1 Urban sustainability in a nutshell

6.1.1 Social quality for sustainability

As the more prominent theme among the interviewees' responses, sustainability in the social aspects concerning housing, income, education, and employment commonly reflected in their struggles and wish to secure socio-economic capacities in the long run. The lack of support and the orientation of innovation and talent introduction to some extent would benefit groups of people as such with higher education (Choy & Li, 2017; Cui et al., 2021). However, these struggles are a cumulative phenomenon of sustainable promise falling into the hands of market-oriented approaches and the reliance on such benefits is temporary. The current urban agenda focuses on the general increase of welfare and income per se, but the policies in place are insufficient to fundamentally revert the social stratification. The hierarchical structure of the *hukou* system and the lack of social equity integrated into the *hukou* policy reproduce disadvantaged generations and prioritize the population who already are elites and whose future descendants will naturally inherit privileged socio-economic capitals (Tiwari & Fu, 2017). The quality of urban life of the migrant descendants, heavily relying on socio-economic security, lack of which is also constraining their outlook of city life.

The *hukou* constraints were particularly vivid concerning migrant descendants without viable socio-economic support, and the coupling of housing and urban *hukou* for the sake of providing quality educational opportunities for the next generation is problematic (Xiao et al., 2016). The reluctance of migrant descendants and their inability to secure housing prior to their career demonstrate the mismatch of policy considerations towards young people and their family planning with the housing. As homeownership is projected to activate their sense of belonging and the incentives to create social capital, their struggles to afford the housing is likely to hinder their overall social sustainability (Xiao et al., 2016). It is also hard to avoid social stratification due to the *hukou* policy that is primarily designed for population control over justice and fairness, despite such claims in the policy (Dong & Goodburn, 2020).

The strong preferences to stay physically close to their family members as well as broader social networks and the high recognition of their bond and values tied to their network also showcase the

significance of communities in supporting migrant descendants to settle in the city. Their emphasis on public transport indicates the need of active social connections, which is recognized in the current urban agenda to develop the public transport system. Despite the reliable investments in essential facilities as such, the critique of the underdevelopment in cultivating cultural and spiritual dimensions of activities implies that the quantitative achievements in the index do not lead to overall enhancement of cultural enrichment and social empowerment. Regarding health and elderly care, the city has demonstrated policy interventions that are designed to take care of the elderly and improve the social services for enhancing elderly life, but many are available only for registered *hukou* population. The generational gaps between the migrant descendants with *hukou* and their parents without *hukou* reinforce the institutional discrimination and the restrictions towards their parental generations based on the *hukou* quotas system hinders the social cohesion and distribute the socioeconomic burden on migrant descendants.

The determining factors over the successful urban life of migrant descendants were particularly accentuated in the area of parental affluence, though the discrimination among migrant descendants based *hukou* status is much less common. However, the segregation and imbalance between different districts of Shenzhen, between the ones where more affluent communities and family reside and the others where migrant population live in urban villages, is threatening the promise of social cohesion and social inclusion (Liu et al., 2018). The discrimination against non-*hukou* migrant descendants in urban villages coming from *hukou* holders from the parental generations that were local to the region rather than migrants from other provinces were concerning. The discriminatory experience had a long-lasting negative effects on migrant children's identity at their young age and the impact still continues today during their adulthood (Guo & Zhao, 2019; Tiwari & Fu, 2017). It creates the social dilemma of one's urban identity being socially discredited for their parents' rural origins while they commonly recognize themselves with both urban and rural origins.

6.1.2 Technocratic solutions for sustainable cities

Throughout the plan, engineering projects and quantitative measures towards policy goals are marked with figures and percentages. It is promising to see that in a wide range of criteria these goals can be measurable regarding the number of talent population, living expectancy of residents and so on (Appendix 9.2). And through digitalising tools for social governance and healthcare system it seems to improve the functioning of the urban system, enhancing the high-tech industries as well as social services. However, it has the tendency to overemphasize technocratic planning and overlook the deliverability of the policy initiatives and the problematization of its discriminatory policy structure (de

Jong et al., 2016; Liu et al., 2018). As talent introduction is the core of the plan, it is hard to tell how the future of “invisible” floating population - the unregistered and unqualified rural migrants – will unfold while they are reduced to a statistical figure in the index.

The concept of applying smart technologies to sustainable urban planning and focusing on maximising energy efficiency has been also critiqued by scholars to overlook the redundancy of resilience in urban sustainability (Liu et al., 2018), as many of the issues that arise from urbanisation are fundamentally injustice and inequalities in the top-down policy design (Chen & Hoy, 2011). The case with Shenzhen is particularly relevant when it comes to relieving pressures from a high density of population. The *hukou* policy discriminates against migrant generations despite efforts of policy reformation to improve fairness (Dong & Goodburn, 2020). The strategical focus on talent introduction to stimulate the high-tech innovation industries widens the welfare gaps, in which the quotas system restricts migrants that are less qualified according to the criteria of *hukou* conversion. Their socio-economic struggles reflect on their living conditions and the congestion of urban villages with cheap housing was one of the few affordable alternatives for them (Pan & Du, 2021). The plan determines urban villages’ congestion as developmental issues to root out. However, it overlooks that such issues arise from other interlinked injustice that is well integrated into the system (Kaika, 2017).

6.1.3 Understanding sustainable cities: from awareness to actions

Sustainability awareness is the core of citizen participation in constructing and contribute to sustainable urban transition at the individual level (Guo et al., 2018; Isenhour et al., 2015; Qiao et al., 2019). As one of the four major areas considered in the sustainability index (Appendix 2), environmental sustainability is part of the urban agenda for investments and the betterment of the ecological environment will increase the attractiveness and competitiveness to its residents regardless of their place of residency or origins (Lin et al., 2022). The plan exerts considerations from restoration of essential ecosystem services, increasing efficient resources of resources utilisation to importing smart green technology for industries. The overall awareness of the migrant descendants on sustainable development regarding environmental sustainability in the areas of resource utilisation, energy efficiency, top-down compliance with social governance on the macro level, and green lifestyles on the micro level will positively impact the deliverability of the plan’s initiatives (Guo et al., 2018; Shao, 2019; Waqas et al., 2018). The awareness promotion in their everyday life plays an essential role in conducting their understanding and the perception of environmental sustainability as awareness differs from their parents due to intergenerational knowledge gap as a result of education (Wang et al., 2021). The collaborative efforts in sustainability education from academic and societal sectors

would be necessary to better convey the sustainability concepts and actions (Ding et al., 2019; Yan et al., 2021). It is also essential to increase the citizens' participation in building sustainable communities and supporting policy implementation (Alejandro-Cruz et al., 2019; Li et al., 2016)

6.2 The implications for urban sustainability in policymaking

The policy support to Shenzhen as the Demonstration Zone for 2030 Agenda would allow more opportunities beyond political constraints to run the plan of the city development with a more sustainable outlook (The State Council, 2016). The relaxation of *hukou* policy will be one of the determining factors that influence the overall welfare of migrant descendants and their parental generations. To make this city more attractive and sustainable not only to high-level talents but to the residents that are already living there, it is of critical importance to recognize their residency through policy reformation. The gained social recognition will lead to an overall enhanced sense of identity among migrant generations (Xiao et al., 2016).

The social quality of migrant descendants indicates the long-term sustainability of migrant descendants who plan to reside in the city in the long run. To construct and transition towards a more sustainable and inclusive city, it is essential that the current policy agenda consider their concerns as they are the most important stakeholders of the city. The plan needs to reconsider the purpose of sustainable cities – beyond fulfilling the national goal as the demonstration zone – what and how should the policy around sustainable urban transition be centred around from the beginning? It is inevitable that the demands for population of residence to be oriented towards high-level talents if the goals are to develop high-tech industries and advance science and technology. But the shift of the population structure will not consequentially lead to better sense of inclusiveness and liveability while the findings have showcased the strong correlation between their social cohesion and family networks, and socio-economic security. Therefore, the plan needs to update its policy initiatives to integrate social quality in the overall concerns to retain its competitiveness and attractiveness while ensuring social equity consistently throughout the policy structure and implementation. It is also crucial to expand the current criteria beyond quantitative measurements to examine sustainable development, as the integrity and interconnection between the multiple dimensions of urban sustainability require social actors in place and social inclusion to effectively deliver policy initiatives.

6.3 Limitations

This research is facing some limitations in research scope and approach, theoretical and methodological application. Regarding the research target group, the focus on migrant descendants

might be subject to a lack of overall representation as a result of the interviewer's homogenous characteristics regarding family origins and educational level. Due to the constraints on the author's mobility in the midst of a pandemic, on-site observations were not plausible, which could potentially refrain the accuracy in contextualizing findings in a broader social environment. The reliance on textual analysis might also bring up personal bias derived from contextual indifference and insensitivity towards certain societal and cultural phenomena as the author is accustomed to the social norms as a local migrant descendent. The objectivity of the research might benefit differently from a distant perspective.

The methodological applicability was constrained by the choice of theory. The theoretical and methodological application of social quality has been developed and tested in the European contexts, which are highly developed welfare states and emphasise individual dignity in social participation. However, the ideology behind such a framework fundamentally determines the normative factors and that of the Chinese context might in essence differ in many nuanced understandings of social norms (Wong, 2009). Many of the modern Chinese social characteristics are products of Confucian thoughts, emphasising social harmony and stability, including the policy focus of constructing "a moderately prospective society" (*xiaokang*) society as previously mentioned. In this case, the political ideal of "a better life for all" in the Chinese context could be understood as satisfying basic needs and minimum social standard (Wong, 2009). The developmental gap compared to the European standard, the lack of consideration towards cultural connotations from the social quality indicators, and towards contextual factors in the theoretical application in this research limited the flexibility and transferability of using the indicators to study the implications of social and political conduct in a non-Eurocentric context.

The adaptation from assessing social quality based on statistical data could also inadequately reflect on the normative features of the qualitative data and the mismatch between qualitative and quantitative data might result in inconsistencies, which are difficult to detect without running research parallel in both formats.

7 Conclusion

The research was set to explore the possible policy reorientation of the current sustainable urban agenda towards enhancing the sustainable development of migrant descendants in Shenzhen. Through the theoretical framework based on social quality theory and urban sustainability, it thematically analysed the social quality of migrant descendent through semi-structured interviews to understand the characteristics of migrant descendants in the broader context of socio-environmental changes during urbanisation. By reviewing relevant policy documents on the city's sustainable development and the *hukou* system and migration population control, the research revealed the policy gaps in the current sustainable urban agenda in addressing their needs for sustainable development.

It is discovered that migrant descendants manifested a high level of concerns towards socio-economic security that are coupled with income and housing security, their sense of identity as urban citizens associated with the city and integration with social networks, the reliance on transport for better social connections, their preferences of autonomy over decision making, and their sustainability awareness coupled with liveability of the city and social governance. These characteristics indicate their overall social functions and well-being are reasonably correlated with social quality. Together with policy reviews, it also reveals that the current policy gaps exist in the overall policy design and deliverability. In particular, the lack of consideration and integration of social equity in the population control system and overemphasis of technocratic solutions in the sustainability policy schemes is problematic. The discriminatory policy structure and the social stratification may further undermine the promise of sustainable development. The policy reorientation could be to integrate considerations of social quality into the current sustainable development agenda and empower migrant descendants in participating in social governance.

The contribution of this research is that the qualitative analysis conducted with social quality theory to examine sustainability policies and the input of migrant descendants at the individual level provides insights into understanding the social quality theory applied and tested in the sustainability context. The findings of the research indicate the criticality of aligning policy design with social equity and social quality theory is proved to be useful in arguing for the promise of sustainable urban transition. The research also contributes to the emerging field of urban sustainability science, offering a new angle of looking into the needs for the integration of the three dimensions of urban sustainability (Frantzeskaki, 2021). It enhances the understanding of the significance of system thinking in social-ecological-technological innovations as the integrative solution towards urban sustainability. The research emphasizes the necessity of social equity in the transdisciplinary field to construct more collaborative

urban expertise with and for the socially excluded and vulnerable population, and that of grounding policy initiatives in lived reality.

Future studies could be to research the policy gaps identified in this research and in particular, the subjective experience of migrant descendants in participating in the planned social governance projects as indicated in the sustainable urban agenda. It will be crucial to understand how the enhancement of their social quality can contribute to the overall sustainability at individual and systematic levels. It is also worth examining the potential strategies of mainstreaming *hukou* policy and the city's sustainable development with considerations for social equity based on the social quality indicators.

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9 Appendix

9.1. Interview questions

Family Background

1. What is your Hukou (equivalent to citizenship registration that determines access to public welfare) status? Shenzhen *hukou* or xx (your Birthplace) *hukou* 你老家是哪儿的？是不是深户？你父母是从哪里来的？
2. Which province and city are you and your family originally from?
3. When and at what age did you move to Shenzhen? 你什么时候、几岁的时候搬到深圳的？
4. What are your definitions of *shen er dai*? 你对深二代的定义是什么？
5. How long have you been living in Shenzhen? (Include the years you study/work elsewhere, as long as your family are living in Shenzhen) 你在深圳住了多久？有哪些年份是在外地求学或上班的？
6. What are the motives for you and/or your family to move to Shenzhen in the first place? Work opportunities, education for children, rural poverty, policy subsidies, personal development? 你认为你们家最开始搬到深圳的动机是什么？是因为工作、子女教育、逃离乡村贫困、政策支持、个人发展吗？

Individual Development

1. To what extent is your willingness to live in Shenzhen for the next ten years? 你接下来十年有留在深圳的打算吗？
2. What are your goals in establishing a life here? 你留深的目标是什么？
3. What do you consider as the thresholds and driving force to do so? 你觉得你将会受到的动力和阻力有哪些？
4. Have you experienced any sort of inequalities/discrimination due to your non-*hukou* status in terms of education, work, social interactions and so on? 目前为止在教育、工作和社会交往等方面，你有没有受到过因为户口等原因的歧视或者不公平对待？
5. How do you see the current social stratification between different income and *hukou* groups? 你如何看待对于目前由于收入和户口类型而带来的社会分层？
6. How concerned are you about your future in case of reduced policy subsidies for young professionals? 你担心未来人才引进政策优惠缩小的情况吗？
7. How do you understand the generational struggles as a non-Hukou holder or with a family from other regions? 你如何理解作为非深户的不同代际之间的困难？
8. How do you intend to support your migrant family during the process of establishing yourself in the cities? 如果在深圳定居的话，你打算如何支持你的父母？
9. What are your primary concerns about doing so? 你的主要顾虑都有哪些？

Sustainability Policy

1. What do you think of applying such an index to measure the city's sustainable development? 你对于用这样的指标去衡量城市的可持续发展有什么看法吗？
2. What do you think of Shenzhen's 2030 goal of becoming an international sustainable city? 你对于深圳 2030 年以前建设成一个国际可持续城市有什么看法吗？
3. Which areas do you think you can contribute to the sustainable development of the city as a migrant descendant? 你觉得作为深二代，你可以对于深圳建成可持续城市作出什么贡献？

9.2 Shenzhen Sustainable Development Index

9.2.1 Original index in Chinese

深圳可持续发展规划主要指标体系

类别	序号	指标名称	2016 年	2020 年	2025 年	2030 年	指标属性
创新驱动	1	全社会研发支出占 GDP 比重 (%)	4.10	4.25	4.50	4.80	预期性
	2	每万人发明专利拥有量 (件)	80.1	84.0	85.0	92.0	预期性
	3	PCT 专利申请量 (万件)	1.96	2.30	2.50	3.00	预期性
	4	每万名就业人数中研发人员数量 (人年)	185	190	200	210	预期性
	5	科技进步贡献率 (%)	60.7	62.0	63.0	64.0	预期性
经济发展	6	人均地区生产总值 (万元)	16.86	17.60	18.50	20.00	预期性
	7	新兴产业增加值占 GDP 比重 (%)	40.3	42.0	42.5	43.0	预期性
	8	第三产业增加值占 GDP 比重 (%)	60.5	60.0	61.0	62.0	预期性
	9	先进制造业增加值占规模以上工业增加值比重 (%)	69	72	76	80	预期性
	10	居民人均可支配收入 (万元)	4.87	6.00	8.00	10.00	预期性
社会发展	11	新增劳动力平均受教育年限 (年)	14.0	≥14.5	≥14.7	≥15.0	预期性
	12	继续教育年参与率 (%)	70	≥80	≥85	≥90	预期性
	13	居民人均预期寿命 (岁)	80.88	≥81.70	≥82.71	≥83.73	预期性
	14	重大慢性病过早死亡率 (%)	5.30	4.77	4.50	4.24	预期性
	15	重点癌症早诊率 (%)	35	55	60	65	预期性
	16	每万人全科医生 (人)	2.03	3.20	3.50	4.00	预期性
	17	公共文化设施总面积 (万平方米)	264	300	330	360	预期性
	18	注册志愿者总人数 (万人)	130	180	200	230	预期性
	19	高峰期间公共交通占机动化出行分担率 (%)	56.5	65.0	70.0	75.0	预期性
	20	光纤入户率 (%)	80	90	97	99	预期性
	21	亿元 GDP 生产安全事故死亡率累计下降 (%)	20.78	40.00	65.00	75.00	约束性
	22	重点品种食品监测合格率 (%)	94	96	97	98	约束性

环境提升	23	万人八类刑事案件立案数（宗）	3.6	≤3.5	≤3.3	≤3.2	预期性
	24	万元 GDP 水耗（立方米）	10.22	10.00	7.18	5.56	约束性
	25	细颗粒物（PM _{2.5} ）年均浓度（微克/立方米）	27	25	20	15	预期性
	26	臭氧（O ₃ ）日最大 8 小时平均浓度限值（微克/立方米）	135	135	130	120	预期性
	27	城市污水集中处理率（%）	91.5	95.5	97.0	98.0	预期性
	28	再生水利用率（%）	75	90	90	90	预期性
	29	生活垃圾资源化利用率（%）	55	80	85	90	预期性
	30	建成区绿化覆盖率（%）	45.1	45.1	45.3	45.5	预期性

9.2.2 Translated version of index

Main Indicator System of Shenzhen Sustainable Development Planning

category	serial number	Indicator name	2016	2020	2025	2030	Indicator properties
Innovation drive	1	R&D expenditure in the whole society as a percentage of GDP (%)	4.10	4.25	4.50	4.80	anticipatory
	2	Invention patent ownership per 10,000 people (pieces)	80.1	84.0	85.0	92.0	anticipatory
	3	PCT patent applications (10,000 pieces)	1.96	2.30	2.50	3.00	anticipatory
	4	Number of R&D personnel per 10,000 employed persons (person-year)	185	190	200	210	anticipatory
	5	Contribution rate of scientific and technological progress (%)	60.7	62.0	63.0	64.0	anticipatory
Economic development	6	GDP per capita (ten thousand yuan)	16.86	17.60	18.50	20.00	anticipatory
	7	The added value of emerging industries as a percentage of GDP (%)	40.3	42.0	42.5	43.0	anticipatory
	8	The added value of the tertiary industry as a percentage of GDP (%)	60.5	60.0	61.0	62.0	anticipatory
	9	The added value of advanced manufacturing industry accounts for the proportion of industrial	69	72	76	80	anticipatory

		added value above designated size (%)					
	10	Residents' per capita disposable income (ten thousand yuan)	4.87	6.00	8.00	10.00	anticipatory
Social Development	11	Average years of education of new labor force (years)	14.0	≥14.5	≥14.7	≥15.0	anticipatory
	12	Continuing Education Annual Participation Rate (%)	70	≥80	≥85	≥90	anticipatory
	13	Average life expectancy of residents (years)	80.88	≥81.70	≥82.71	≥83.73	anticipatory
	14	Premature mortality from major chronic diseases (%)	5.30	4.77	4.50	4.24	anticipatory
	15	Early diagnosis rate of key cancers (%)	35	55	60	65	anticipatory
	16	General practitioners per 10,000 people (person)	2.03	3.20	3.50	4.00	anticipatory
	17	Total area of public cultural facilities (10,000 square meters)	264	300	330	360	anticipatory
	18	Total number of registered volunteers (10,000 people)	130	180	200	230	anticipatory
	19	Share of public transport in motorized travel during peak hours (%)	56.5	65.0	70.0	75.0	anticipatory
	20	Fiber to the home rate (%)	80	90	97	99	anticipatory
	twenty one	100 million yuan GDP production safety accident fatality cumulative decline (%)	20.78	40.00	65.00	75.00	binding
	twenty two	Qualification rate of key varieties of food monitoring (%)	94	96	97	98	binding
	twenty three	Number of criminal cases filed in eight categories per 10,000 people (cases)	3.6	≤3.5	≤3.3	≤3.2	anticipatory
	Environmental Improvement	twenty four	Water consumption per 10,000 yuan of GDP (cubic meters)	10.22	10.00	7.18	5.56
25		of fine particulate matter (PM _{2.5}) (micrograms/m ³)	27	25	20	15	anticipatory
26		Ozone (O ₃) daily maximum 8-hour average	135	135	130	120	anticipatory

		concentration limit ($\mu\text{g}/\text{m}^3$)					
	27	Urban sewage centralized treatment rate (%)	91.5	95.5	97.0	98.0	anticipatory
	28	Reclaimed water utilization rate (%)	75	90	90	90	anticipatory
	29	The utilization rate of domestic waste recycling (%)	55	80	85	90	anticipatory
	30	Green coverage rate of built-up area (%)	45.1	45.1	45.3	45.5	anticipatory

9.3 Codes derived from interview transcripts

9.3.1 Original codes in Chinese

Socio-economic security

Socio-economic security\Financial Resources

Socio-economic security\个人发展与教育及本地人资本收入对比

Socio-economic security\个人经济独立，个人对家庭资本的依赖

Socio-economic security\代际发展目的性差异

Socio-economic security\住房与未来工作地点、生活成本（物价）相关

Socio-economic security\住房与经济考虑必须性与家庭选择相关

Socio-economic security\住房收入与父母资本缺乏作为个人受教育动力

Socio-economic security\住房条件经济压力父母退休心理后盾支撑

Socio-economic security\地区生意观念重，政策便利优惠

Socio-economic security\城市与劳工尊重与人权相关

Socio-economic security\城市人才吸引放缓与城市区位与经济就业优势相关

Socio-economic security\城市依靠唯一性与职业收入，家庭及成长经历

Socio-economic security\城市公平性与个人能力相关

Socio-economic security\城市创新发展水平吸引力

Socio-economic security\城市压力与发展速度快相关

Socio-economic security\城市发展水平与个人资本

Socio-economic security\城市发展水平与户口考虑无关

Socio-economic security\城市发展水平高，不限于消费和商业，也有文化活动

Socio-economic security\城市发展水平高于老家

Socio-economic security\城市发展远见不足与经济指标优先考虑相关

Socio-economic security\城市吸引力在于薪水高

Socio-economic security\城市对于人口压力限制比较

Socio-economic security\城市幸福感与经济工作压力环境相关，富裕程度高

Socio-economic security\城市总体政策与公平性优先考虑相关

Socio-economic security\城市改善考虑问题优先级

Socio-economic security\城市政治体系经济金融地位优势企业合作法律适用

Socio-economic security\城市更新改造态度与城市历史文化积淀相关

Socio-economic security\城市氛围

Socio-economic security\城市生活节奏与工作压力及经济压力相关联

Socio-economic security\城市经济压力前景薪酬与成长空间

Socio-economic security\城市规划指标与政绩要求相关

Socio-economic security\家庭经济情况乐观 深圳薪资待遇好

Socio-economic security\工作与城市选择优先挂钩

Socio-economic security\工作待遇与工作地点选择相关联

Socio-economic security\工作稳定性，工作待遇好，岗位明确，工作内容不枯燥

Socio-economic security\工作稳定收入稳定不裁员

Socio-economic security\工资水平对比北京深圳

Socio-economic security\工资水平高

Socio-economic security\帮家里赚钱

Socio-economic security\成人享受户口福利

Socio-economic security\户口划分区别不严格

Socio-economic security\户口办事方便

Socio-economic security\户口政策本科或者技术落户简单

Socio-economic security\房价高

Socio-economic security\政府投资于城市建设关联及体会

Socio-economic security\教师师资条件高工资水平高

Socio-economic security\教育香港奖学金高

Socio-economic security\未来伴侣考虑与自身情况匹配

Socio-economic security\未来伴侣选择与个人前途发展及条件相关

Socio-economic security\本地人特性

Socio-economic security\求职者简历户口暗示

Socio-economic security\深圳户口不用考虑未来在深是否发展打算

Socio-economic security\深圳户口与限制其实无关

Socio-economic security\深圳政策独立性相对有优势，比较其他城市

Socio-economic security\深户对与未来决定提供独立性

Socio-economic security\父母居住地与经济条件的关联性

Socio-economic security\父母年代经济追求

Socio-economic security\生活压力水平比较

Socio-economic security\省内地理位置近，机遇

Socio-economic security\经济负担休学赚钱支撑

Socio-economic security\老人由于政策大环境压力退居乡下

Socio-economic security\落户对比与政策收紧与自身条件相关

Socio-economic security\Housing and Environment

Socio-economic security\一线城市户口难

Socio-economic security\买房学位房优先

Socio-economic security\住房提供的稳定性

Socio-economic security\住房环境与未来子女成长相关

Socio-economic security\住房的优先考虑

Socio-economic security\住房购置考虑小，生活追求享受

Socio-economic security\城市以人为中心环境关联性不高

Socio-economic security\城市住房与收入相关问题

Socio-economic security\城市公平与学历及生存资本相关

Socio-economic security\城市宜居性，房价的联系

Socio-economic security\城市拆迁与生活环境条件相关

Socio-economic security\城市环境发展与老家，医疗

Socio-economic security\城市环境宜居，气候宜人

Socio-economic security\城市生活节奏，生活便利

Socio-economic security\城市空气质量好

Socio-economic security\城市空间拥挤密度高

Socio-economic security\外来务工归属感与租房个人能力相关联

Socio-economic security\子女教育选择与购房以及地方关联性

Socio-economic security\家庭房产父母定居与退路

Socio-economic security\小区生活物资充足，小区密度高

Socio-economic security\幼年居所变动

Socio-economic security\户口与住房相关

Socio-economic security\户口与房子相关联，必要性

Socio-economic security\户口与生活方便相关联

Socio-economic security\未来伴侣工作单位住房经济支持

Socio-economic security\未来城市选择以深圳为标准，气候宜人，城市新

Socio-economic security\未来子女教育与学区房购置必要性相关联

Socio-economic security\未来子女生活环境考虑

Socio-economic security\深圳原住民与通勤麻烦能接受相关

Socio-economic security\父母与独生子女住房退让

Socio-economic security\父母住房自身职业稳定与退路
Socio-economic security\父母房产情况与自身压力
Socio-economic security\父母社保住房年龄与自我照顾能力
Socio-economic security\独生子女优越感与父母房产相关联
Socio-economic security\环境与空气污染、交通方便
Socio-economic security\环境水平对比其他城市好公园多
Socio-economic security\生活环境考虑
Socio-economic security\生活环境选择
Socio-economic security\生活环境选择与周围教育程度收入等方面相关联
Socio-economic security\生活环境选择同辈相似群体
Socio-economic security\空气质量、幸福感、居民素质、生命威胁、经济环境延康
Socio-economic security\绿色空间关内外差异观察
Socio-economic security\返乡与城市房价高相关

Socio-economic security\Health and Care

Socio-economic security\个人教育与机会与不稳定感
Socio-economic security\养老考虑·城市包容性
Socio-economic security\区域选择与医疗教育资源相关
Socio-economic security\医疗方面政府投资认可
Socio-economic security\医疗条件教育资源与环境宜人
Socio-economic security\城市养老宜居考虑选择有限
Socio-economic security\城市医疗体系水平相对比较
Socio-economic security\父母健康
Socio-economic security\邻近城市医疗资源可获得性认可

Socio-economic security\Work

Socio-economic security\与伴侣的未来规划一致性
Socio-economic security\体制内工作有保障不裁员
Socio-economic security\家庭与事业考虑先后顺序
Socio-economic security\敬业选择与自身学历相关适配性高
Socio-economic security\求职阶段户口偏向深户
Socio-economic security\深圳就业前景可观
Socio-economic security\深圳户口求职优势
Socio-economic security\疫情条件与副业考虑相关
Socio-economic security\私企工作收入高但投入高风险与年龄相关
Socio-economic security\职业考虑与地方性相关联
Socio-economic security\行业前景好但加班太多太累

Socio-economic security\Education

Socio-economic security\中考户口优势

Socio-economic security\公立私立学校教育资源质量比较

Socio-economic security\城市教育平台作为跳板

Socio-economic security\城市教育竞争压力大不公

Socio-economic security\外来务工归属感与教育水平相关

Socio-economic security\女生学位房与子女教育相关联

Socio-economic security\学校强项与地域选择或者户口无关

Socio-economic security\家庭子女城市选择发展

Socio-economic security\家庭教育水平对观念的影响积极

Socio-economic security\居住环境与子女教育倾向现代化

Socio-economic security\居住环境与子女教育居民素质相关

Socio-economic security\户口淘汰分流深二代

Socio-economic security\户口类型在考试上的影响

Socio-economic security\户口限制与子女教育相关

Socio-economic security\教育与户口优先考虑排序

Socio-economic security\教育升学及未来选择户口影响

Socio-economic security\教育发展局势认可

Socio-economic security\教育水平与中考成绩相关

Socio-economic security\教育水平与其他城市对比

Socio-economic security\教育认可与自我教育经历挂钩

Socio-economic security\教育资源缺乏·中考升学率低

Socio-economic security\深圳的教育投资带来了自身想法转变

Socio-economic security\深圳高等教育建设投资具有吸引力

Socio-economic security\父母对教育认可度低

Socio-economic security\父母对自身教育培训投资积极

Socio-economic security\父母教育经济所限

Socio-economic security\父母生存资本或学历水平与个人不安全感·及未来子女考虑

Socio-economic security\研究生学校质量好及地理位置近

Socio-economic security\社会资本与教育水平相关

Socio-economic security\非深户和深户学校区别

Social Cohesion

Social Cohesion\Trust

Social Cohesion\Other Integrative Norms

Social Cohesion\体制内员工调离工作为人民服务

Social Cohesion\党员身份与自身责任相关

Social Cohesion\工作调离为防疫工作

Social Cohesion\Social Networks

Social Cohesion\与外省独生子女家族观念差异

Social Cohesion\人脉资源与地方相关联

Social Cohesion\住房环境包容·外地本地区分

Social Cohesion\同辈影响见世面

Social Cohesion\父母归乡有基础对比

Social Cohesion\Identity

Social Cohesion\同辈身份认同

Social Cohesion\地域文化认同

Social Cohesion\城市与家关联·认可

Social Cohesion\城市家乡认同感

Social Cohesion\城市对外来人口包容性认可

Social Cohesion\城市居民素质水平

Social Cohesion\城市归属感与家相关联

Social Cohesion\城市情感认同低

Social Cohesion\城市成长环境认同·社交网络·家庭亲戚朋友·认同度高

Social Cohesion\城市节奏比较差异以及优先选择

Social Cohesion\城市节奏认同比较

Social Cohesion\家庭环境与独生子女差异

Social Cohesion\家族地域文化认同·家庭教育与地域认同

Social Cohesion\幼年生活环境认同

Social Cohesion\深二代身份认同

Social Cohesion\深二代身份认同与户口

Social Cohesion\深二代身份认同与户口联系

Social Cohesion\深圳认同感

Social Cohesion\父母对城市认同感低

Social Cohesion\身份认同与故乡的唯一性相关

Social Cohesion\身份认同与教育、同学相关联

Social Cohesion\身份认同与籍贯区别

Coorelation

Coorelation\城市发展先行示范区独立地位政策试验

Social Inclusion

Social Inclusion\Citizenship Rights

Social Inclusion\城市发展包容性与个人实力相关联

Social Inclusion\城市吸引力与年轻化、包容、行政效率

Social Inclusion\城市行业与人群包容性

Social Inclusion\居民素质水平与自我约束能力及道德标准相关

Social Inclusion\Labour Market

Social Inclusion\工作责任担当但为防疫工作分配不合理

Social Inclusion\Services-Public

Social Inclusion\交通便利与生活必须项相关联

Social Inclusion\交通便利覆盖广与联系社交网络相关联，感情联系

Social Inclusion\城市交通规划体验便捷

Social Inclusion\城市发展受益及城市不利影响考虑

Social Inclusion\生活设施，交通快递，便利程度

Social Inclusion\Services-Private

Social Inclusion\Social Networks

Social Inclusion\个人倾向与现实父母希望

Social Inclusion\亲戚照顾

Social Inclusion\住房与家庭生意地点相近

Social Inclusion\住房距离家庭近

Social Inclusion\回老家的孩子与父母分离，无人照顾

Social Inclusion\在城市的个人发展的家庭基础的代际差异

Social Inclusion\城市选择与家庭背景相关

Social Inclusion\城市选择未来发展与父母资本

Social Inclusion\子女学习情况与父母教育相关

Social Inclusion\家庭亲戚朋友关系

Social Inclusion\家庭和社会网络资源

Social Inclusion\家庭照顾与子女相关联

Social Inclusion\家庭联系紧密，距离近

Social Inclusion\家族传统

Social Inclusion\家族传统，亲戚朋友

Social Inclusion\对父母考虑与非独生子女家庭背景相关

Social Inclusion\文化语境与研究生学校选择

Social Inclusion\未来家庭关系与现在父母联系

Social Inclusion\求学选择，家庭希望，地理距离近

Social Inclusion\父母与子女关系，束缚

Social Inclusion\父母对个人空间支持

Social Inclusion\父母对个人管束与教育相关

Social Inclusion\父母教育与子女成长相关

Social Inclusion\父母经济和态度对于未来学业考虑的支持

Social Inclusion\生活环境认同，消费水平高，交通繁忙

Social Inclusion\自主选择，考虑家庭，地理位置近

Social Empowerment

Social Empowerment\Knowledge Base

Social Empowerment\Labour Market

Social Empowerment\个人意愿，工作选择

Social Empowerment\体制内工作时间分明

Social Empowerment\体制工作外出限制

Social Empowerment\工作环境良性竞争

Social Empowerment\职业压力，岗位行政工作多

Social Empowerment\职业考虑创造性与种类

Social Empowerment\职场氛围年轻化学历偏见竞争力

Social Empowerment\Openness and Supportiveness of Institutions

Social Empowerment\城市行政效率高

Social Empowerment\行政手续简化

Social Empowerment\量化与形式主义

Social Empowerment\Public Space

Social Empowerment\养老设施缺乏

Social Empowerment\文化艺术体育运动公众空间

Social Empowerment\精神享受匮乏

Social Empowerment\Personal Relationships

Social Empowerment\大学个人发展能力塑造

Social Empowerment\家庭资本对个人选择独立性的支持

Social Empowerment\教育水平与环保行为关联

Social Empowerment\环保宣传好，知识普及欠缺

9.3.2 Translated version of codes

Socio-economic security

Socio-economic security\Financial Resources

Socio-economic security\ Personal Development vs. Education vs. Local Capital Income

Socio-economic security\ personal economic independence, personal dependence on family capital

Socio-economic security\ intergenerational development purpose differences

Socio-economic security\ housing is related to future work place, cost of living (price)

Socio-economic security\ Housing and Economic Consideration Necessity Related to Family Choice

Socio-economic security\ Housing income and lack of parental capital as personal motivation for education

Socio-economic security\ housing conditions economic pressure parents retirement psychological backing support

Socio-economic security\ The business concept in the region is heavy, and the policy is convenient and preferential

Socio-economic security\ Urban and labor respect and human rights

Socio-economic security\ The slowdown of urban talent attraction is related to the advantages of urban location and economic employment

Socio-economic security\ The city relies on uniqueness and occupational income, family and upbringing

Socio-economic security\ Urban equity correlates with individual ability

Socio-economic security\ The attractiveness of urban innovation and development level

Socio-economic security\ Urban pressure correlates with rapid growth

Socio-economic security\ Urban Development Level and Personal Capital

Socio-economic security\ The level of urban development has nothing to do with hukou considerations

Socio-economic security\ High level of urban development, not limited to consumption and commerce, but also cultural activities

Socio-economic security\ The level of urban development is higher than that of the hometown

Socio-economic security\ Inadequate foresight in urban development correlates with prioritization of economic indicators

Socio-economic security\ City attractiveness lies in high salaries

Socio-economic security\ city comparison of population pressure restrictions

Socio-economic security\ Urban well-being is related to economic work stress environment, high affluence

Socio-economic security\ Overall city policy related to equity priorities

Socio-economic security\ Urban Improvement Considers Issue Prioritization

Socio-economic security\ Urban political system, economic and financial status, advantages of enterprise cooperation, legal application

Socio-economic security\ The attitude of urban renewal and transformation is related to the historical and cultural accumulation of the city

Socio-economic security\ Urban Atmosphere

Socio-economic security\ The pace of urban life correlates with work and economic stress

Socio-economic security\ City Economic Pressure Prospect Salary and Growth Space

Socio-economic security\ urban planning indicators are related to performance requirements

Socio-economic security\ Household economic situation is optimistic good salary in shenzhen

Socio-economic security\ jobs linked to city choice priorities

Socio-economic security\ work benefits linked to work location choice

Socio-economic security\ work stability, good pay, clear positions, and not boring work content

Socio-economic security\ work, stable income, no layoffs

Socio-economic security\ wage level comparison in Beijing and Shenzhen

Socio-economic security\ high wages

Socio-economic security\ helping family earn money

Socio-economic security\ Adults enjoy Hukou benefits

Socio-economic security\ The distinction of account division is not strict

Socio-economic security\ account is convenient for handling affairs

Socio-economic security\ Hukou Policy Undergraduate or technical settlement is simple

Socio-economic security\ High house prices

Socio-economic security\ The relationship and experience of government investment in urban construction

Socio-economic security\ Teachers with high qualifications and high wages

Socio-economic security\ Education Hong Kong Scholarship High

Socio-economic security\ Future partner considers matching with their own situation

Socio-economic security\ The choice of future partner is related to personal future development and conditions

Socio-economic security\ natives features

Socio-economic security\ Job- seekers resume hukou hints

Socio-economic security\ Shenzhen household registration does not need to consider whether it plans to develop in Shenzhen in the future

Socio-economic security\ Shenzhen Hukou has nothing to do with restrictions

Socio-economic security\ Shenzhen's policy independence has relatively advantages, compared with other cities

Socio-economic security\ Shenhu provides independence for future decisions

Socio-economic security\ Correlation between parental residence and economic conditions

Socio-economic security\ Parents Years of Economic Pursuit

Socio-economic security\ Comparison of living stress levels

Socio-economic security\ The province is close to the geographical location, opportunities

Socio-economic security\ economic burden to leave school and earn money to support

Socio-economic security\ The elderly retreat to the countryside due to the pressure of the policy environment

Socio-economic security\ settlement comparison and policy tightening are related to their own conditions

Socio-economic security\ Housing and Environment

Socio-economic security\ The difficulty of hukou in first-tier cities

Socio-economic security\ buying a degree house is preferred

Socio-economic security\ Stability provided by housing

Socio-economic security\ Housing Environment and Future child growth

Socio-economic security\ housing priority

Socio-economic security\ The consideration of housing purchase is small, and the pursuit of enjoyment in life

Socio-economic security\ The city is people-centred low environmental relevance

Socio-economic security\ Urban Housing and Income-Related Issues

Socio-economic security\ Urban equity is related to education and survival capital

Socio-economic security\ city livability, housing price link

Socio-economic security\ Urban demolition is related to living environment conditions

Socio-economic security\ Urban environment development and home, medical

Socio-economic security\ Urban environment is livable and the climate is pleasant

Socio-economic security\ Rhythm of urban life, convenience of life

Socio-economic security\ good urban air quality

Socio-economic security\ Urban space with high crowding density

Socio-economic security\ migrant worker belonging correlates with personal ability to rent

Socio-economic security\ Children's education choices and home buying and local relevance

Socio-economic security\ Family real estate parent settlement and retreat

Socio-economic security\ The living materials of the community are sufficient and the community density is high

Socio-economic security\ Infant residence changes

Socio-economic security\ Hukou related to housing

Socio-economic security\ hukou is associated with the house, a necessity

Socio-economic security\ Hukou is associated with convenience of living

Socio-economic security\ Future Partner Workplace Housing Economic Support

Socio-economic security\ The future city selection is based on Shenzhen, with a pleasant climate and a new city

Socio-economic security\ Future Children's Education Linked to Necessity of School District Housing Purchases

Socio-economic security\ Consideration of future children's living environment

Socio-economic security\ Shenzhen aborigines are related to commuting troubles

Socio-economic security\ Parents and only child housing concessions

Socio-economic security\ Parents housing own occupational stability and retreat

Socio-economic security\ Parents' real estate situation and their own pressure

Socio-economic security\ Parent Social Security Housing Age and Self-Care Ability

Socio-economic security\ Only child superiority linked to parental property

Socio-economic security\ Environment and air pollution, convenient transportation

Socio-economic security\ environmental level is more than other cities with good parks

Socio-economic security\ living environment considerations

Socio-economic security\ living environment choice

Socio-economic security\ living environment choices are related to the surrounding education level and income, etc.

Socio-economic security\ living environment select peers and similar groups

Socio-economic security\ air quality, sense of happiness, quality of residents, life-threatening, economic and environmental health

Socio-economic security\ Green space clearance observation of internal and external differences

Socio-economic security\ Returning home is associated with higher housing prices in cities

Socio-economic security\Health and Care

Socio-economic security\ Personal Education and Opportunity and Instability

Socio-economic security\ retirement considerations, urban inclusion

Socio-economic security\ regional selection related to medical education resources

Socio-economic security\ medical government investment recognition

Socio-economic security\ Medical conditions educational resources and pleasant environment

Socio-economic security\ Urban retirement and livable consideration options are limited

Socio-economic security\ Comparison of the level of urban medical system

Socio-economic security\ Parent Health

Socio-economic security\ Recognition of the availability of medical resources in neighboring cities

Socio-economic security\Work

Socio-economic security\ future planning consistency with partner

Socio-economic security\ work within the system is guaranteed without layoffs

Socio-economic security\ Family and Career Consideration Priorities

Socio-economic security\ professional choices are highly compatible with their academic qualifications

Socio-economic security\ The hukou in the job search stage is biased towards deep households

Socio-economic security\ Shenzhen employment prospects are considerable

Socio-economic security\ Shenzhen Hukou Job Search Advantages

Socio-economic security\ epidemic conditions are related to sideline considerations

Socio-economic security\ Private enterprise jobs with high pay but high investment risk are age-related

Socio-economic security\ Career Considerations Associated with Locality

Socio-economic security\The industry has good prospects but too much overtime is too tiring

Socio-economic security\Education

Socio-economic security\ advantages of high school entrance examination account

Socio-economic security\ comparison of educational resource quality in public and private schools

Socio-economic security\ Urban education platform as a springboard

Socio-economic security\ Urban education competition pressure is unfair

Socio-economic security\ migrant workers' sense of belonging correlates with education level

Socio-economic security\ Girls' degree rooms are linked to children's education

Socio-economic security\ School strengths have nothing to do with geographic selection or hukou

Socio-economic security\ Family children city choice development

Socio-economic security\ family education level has a positive impact on perceptions

Socio-economic security\The modernization of living environment and children's education tendency

Socio-economic security\The living environment is related to the quality of children's education and residents

Socio-economic security\ account elimination and diversion to the deep second generation

Socio-economic security\ Hukou type on the exam

Socio-economic security\ Hukou restrictions related to children's education

Socio-economic security\ Education and Hukou Priority

Socio-economic security\ Education and further studies and the impact of choosing a hukou in the future

Socio-economic security\ Educational Development Situation Recognition

Socio-economic security\ education level correlates with high school entrance examination scores

Socio-economic security\ education level compared with other cities

Socio-economic security\ educational recognition linked to self-education experience

Socio-economic security\ lack of educational resources, low rate of admission to high school entrance examination

Socio-economic security\ Shenzhen's education investment has brought about a change in its own thinking

Socio-economic security\ Shenzhen higher education construction investment is attractive

Socio-economic security\ low parental recognition of education

Socio-economic security\ Parents actively invest in their own education and training

Socio-economic security\ Parents Educational Economic Restrictions

Socio-economic security\ Parents' survival capital or educational level and personal insecurity, and consideration for future children

Socio-economic security\ Graduate school of good quality and close proximity

Socio-economic security\ Social capital correlates with education level

Socio-economic security\ The difference between non-Shenzhen and Shenhu schools

Social Cohesion

Social Cohesion\Trust

Social Cohesion\Other Integrative Norms

Social Cohesion\ The transfer of employees within the system to serve the people

Social Cohesion\ Party membership is related to own responsibility

Social Cohesion\ Work transferred to epidemic prevention work

Social Cohesion\Social Networks

Social Cohesion\ and one-child families in other provinces

Social Cohesion\Connections to places

Social Cohesion\ Housing Environment Inclusive, Field Local Distinction

Social Cohesion\ Peer influence sees the world

Social Cohesion\ Parents return home with basic comparison

Social Cohesion\Identity

Social Cohesion\ Peer Identity

Social Cohesion\ Regional Cultural Identity

Social Cohesion\ City and Home Association, Recognition

Social Cohesion\ City Hometown Identity

Social Cohesion\ City's Recognition of Inclusiveness of Migrants

Social Cohesion\ Quality Level of Urban Residents

Social Cohesion\ Urban Belonging Associated with Home

Social Cohesion\ low urban emotional identity

Social Cohesion\ City growth environment recognition, social network, family relatives and friends, high degree of recognition

Social Cohesion\ Urban rhythm comparison differences and preferences

Social Cohesion\ Urban Rhythm Identity Comparison

Social Cohesion\ Differences between family environment and only child

Social Cohesion\ Family Regional Cultural Identity, Family Education and Regional Identity

Social Cohesion\ Infant Life Environment Identity

Social Cohesion\ Deep Second Generation Identity

Social Cohesion\ Deep Second Generation Identity and Account

Social Cohesion\ Deep Second Generation Identity and Account Connection

Social Cohesion\ Shenzhen Identity

Social Cohesion\ Parents have low identification with the city

Social Cohesion\ Identity is related to the uniqueness of hometown

Social Cohesion\ Identity linked to education, classmates

Social Cohesion\ Identity and Origin Difference

Social Inclusion

Social Inclusion\Citizenship Rights

Social Inclusion\ Urban Development Inclusion Linked to Personal Strength

Social Inclusion\ Urban Attraction and Rejuvenation, Inclusion, Administrative Efficiency

Social Inclusion\ Urban Industry and Crowd Inclusion

Social Inclusion\The quality of residents is related to self-discipline and moral standards

Social Inclusion\Labour Market

Social Inclusion\ Responsible for work but unreasonable allocation for epidemic prevention work

Social Inclusion\Services-Public

Social Inclusion\ Transportation convenience is associated with life necessities

Social Inclusion\ Convenient transportation and wide coverage are associated with contact with social networks, emotional connections

Social Inclusion\ Urban transportation planning experience is convenient

Social Inclusion\ Urban Development Benefit and Urban Adverse Impact Consideration

Social Inclusion\ Life facilities, transportation express, convenience

Social Inclusion\Services-Private

Social Inclusion\Social Networks

Social Inclusion\ Personal Inclinations and Realistic Parental Hopes

Social Inclusion\ Relative Care

Social Inclusion\ Housing close to home business location

Social Inclusion\ Housing close to home

Social Inclusion\ Children who return home are separated from their parents and have no one to take care of them

Social Inclusion\ Generational Differences in Family Basis of Personal Development in the City

Social Inclusion\ City choice is related to family background

Social Inclusion\ City Choices for Future Development and Parent Capital

Social Inclusion\ Children's learning is related to parental education

Social Inclusion\ Family Relatives and Friends

Social Inclusion\ Family and Social Networking Resources

Social Inclusion\ Family Care Associated with Children

Social Inclusion\ Families are closely connected and close

Social Inclusion\ Family Tradition

Social Inclusion\ Family Traditions, Relatives and Friends

Social Inclusion\ Consideration of parents is related to non-only child family background

Social Inclusion\ Cultural Context and Graduate School Choice

Social Inclusion\ Future Family Relationships Connecting with Present Parents

Social Inclusion\ Study Options, Family Hope, Geographical Proximity

Social Inclusion\ Parent-child relationship, bondage

Social Inclusion\ Parents Support for Personal Spaces

Social Inclusion\ Parents' Personal Discipline Related to Education

Social Inclusion\ Parent education is related to child growth

Social Inclusion\ Parental Economic and Attitude Support for Future Academic Considerations

Social Inclusion\ Living environment identity, high consumption level, heavy traffic

Social Inclusion\ self-selected, consider family, close geographical location

Social Empowerment

Social Empowerment\Knowledge Base

Social Empowerment\Labour Market

Social Empowerment\ Personal Will, Job Choice

Social Empowerment\ The working hours within the system are clearly defined

Social Empowerment\ Institutional work travel restrictions

Social Empowerment\ Work Environment Healthy Competition

Social Empowerment\ Occupational pressure, post administrative work too much

Social Empowerment\ Career Considers Creativity and Variety

Social Empowerment\ Workplace Atmosphere Younger Educational Prejudice Competitiveness

Social Empowerment\ Openness and Supportiveness of Institutions

Social Empowerment\ High administrative efficiency

Social Empowerment\ Administrative Procedures Simplified

Social Empowerment\ Quantification and Formalism

Social Empowerment\ Public Space

Social Empowerment\ Lack of aged care facilities

Social Empowerment\ Culture, Arts and Sports Public Space

Social Empowerment \ lack of spiritual enjoyment

Social Empowerment\ Personal Relationships

Social Empowerment\ University Personal Development Capability Shaping

Social Empowerment\ Family Capital Support for Independence of Individual Choice

Social Empowerment\ Education level is associated with environmental behavior

Social Empowerment\ Environmental protection publicity is good, knowledge popularization is lacking

9.4 Social quality indicators

Social quality conditions	Domains	Subdomains (sub-subdomains)	indicators
Socio-economic security	Financial resources	Income sufficiency; income security	<ul style="list-style-type: none"> Part of household income spent on health, clothing, food and housing (in the lower and median household incomes) How do certain biographical events affect the risk of poverty on household level. Proportion of total population living in households receiving entitlement transfers (means-tested, cash and in-kind transfers) that allow them to live above EU poverty level
	Housing and environment	Housing security; housing conditions Environmental conditions	<ul style="list-style-type: none"> Proportion of people who have certainty of keeping their home Proportion of hidden families (i.e., several families within the same household) Number of square metres per household member Proportion of population living in houses with lack of functioning basic amenities (water, sanitation, and energy)

		(social and natural)	<ul style="list-style-type: none"> • People affected by criminal offences per 10.000 inhabitants • Proportion living in households that are situated in neighbourhoods with above average pollution rate (water, air and noise)
	Health and care	Security of health provisions; health services; care services	<ul style="list-style-type: none"> • Proportion of people covered by compulsory/ voluntary health insurance (including qualitative exploration of what is and what is not covered by insurance system) • Number of medical doctors per 10.000 inhabitants • Average distance to hospital, measure in minutes, not in metres • Average response time of medical ambulance • Average number of hours spent on care differentiated by paid and unpaid
	work	Employment security; working conditions	<ul style="list-style-type: none"> • Length of notice before employer can change terms and conditions of labour relation/contract • Length of notice before termination of labour contract • Proportion employed workforce with temporary, non-permanent, job contract • Proportion of workforce that is illegal • Number of employees that reduced work time because of interruption (parental leave, medical assistance of relative, palliative leave) as a proportion of the employees who are entitled to these kinds of work time reductions • Number of accidents (fatal / non-fatal) at work per 100 employed persons (if possible: per sector) • Number of hours a full-time employee typically works a week (actual working week)
	education	Security of education; quality of education	<ul style="list-style-type: none"> • Proportion of pupils leaving education without finishing compulsory education (early school leavers) • Study fees as proportion of national mean net wage • Proportion of students who, within a year of leaving school with or without certificate, are able to find employment
Social cohesion	trust	Generalised trust; specific trust (institutional; personal)	<ul style="list-style-type: none"> • World Values Survey (WVS) or Hall (1999) generalised trust indicator questions • Fear of using public spaces. I Where people turn to for help in times of need • WVS institutional trust questions • Trust in: government; elected representatives; political parties; armed forces; legal system; the media; trade unions; police; religious institutions; civil service; major companies; financial institutions; banks I (and some C) Trust in community leaders • WVS personal trust question • Trust in: family; friends; neighbours; peers (work colleagues etc.); people in daily interactions
	Other integrative norms	Altruism; justice (formal/institu	<ul style="list-style-type: none"> • Volunteering • Charitable / voluntary body membership • Blood donations

		tional legal framework; Practice); Commonality and reciprocity;	<ul style="list-style-type: none"> • Charitable contributions • Adherence to UN Declaration of Human Rights; Index of civil liberties; Gastill's Index of Political Rights; independence of judiciary Integrity in administration of justice; extent of arbitrary imprisonment; bribery; index of corruption; percentage of population facing political discrimination; index of intensity of political discrimination; civil rights activism; contract enforceability, access to information • Political stability; protests and demonstrations; strikes, murder rates, suicide rates; unemployment rates
	Social networks	horizontal networks; vertical networks Cross-cutting ties	<ul style="list-style-type: none"> • Number and type of associations or local institutions; extent of membership; extent of participatory decision making; reliance on networks of support • Links between local/community and national organisations; links between local/community organisations and government agencies • Extent of cross-membership of groups and associations (a) horizontally(b) vertically. the former can be measured using standard social network analysis techniques
	identity	National / European; regional/community/local; interpersonal	<ul style="list-style-type: none"> • Prejudice against foreigners; treatment of immigrants, refugees, asylum seekers; proportion of population who are citizens; sense of national pride; support for national sporting teams; percentage of population involved in separatist movements • Prejudice against outsiders; sense of community identity • Sense of belonging to a family and kinship network
Social inclusion	Citizenship rights	Constitutional / political rights; social rights; civil rights	<ul style="list-style-type: none"> • Per cent among ethnic groups with citizenship/ residence permit • Per cent of ethnic groups registered to vote and voting • Per cent of ethnic groups in highest socio-economic group (SEG) • Per cent with right to benefits in case of unemployment • Per cent with right to public pension (i.e. a pension organised or regulated, at least to some extent, by the government) • Per cent with right to free legal advice • Per cent experiencing discrimination (race, gender, age) and availability of redress in cases of discrimination
	Labour market	Access to paid employment; quality of employment	<ul style="list-style-type: none"> • Per cent economically active and types of employment • Per cent long-term unemployment (12+ months) Per cent underemployed (part-time, discontinuous • moving to full-time employment; gap between level of education and job status) • Per cent deaths/accidents at work • Per cent in jobs that pose a health risk • Per cent in insecure employment (temporary, seasonal) • Per cent with access to work-based training

	Services public -	Health services; housing; education; social care	<ul style="list-style-type: none"> • Per cent with access to primary care • Per cent homeless, sleeping rough • Per cent with access to different types of housing • Per cent with access to primary, secondary, or higher education • Per cent with access to social care and availability of support for carers
	Service private -	Financial services; transport; commercial facilities; leisure services	<ul style="list-style-type: none"> • Per cent with a bank account • Per cent with a mortgage or owning home outright Per cent denied credit • Per cent car ownership/access • level of availability of public transport • Proximity of grocery shops • Frequency of visits to cafes, bars, pubs • Per cent participating in sports or related activities (e.g., swimming baths/facilities) • Per cent participating in cultural pursuits (cinema, theatre, concerts)
	Social networks	Friendships; neighbourhood participation; family life	<ul style="list-style-type: none"> • Level and duration of contact with friends • Per cent feeling lonely/isolated • Per cent participating in local clubs etc. • Per cent attending a place of worship • Per cent regular contact with neighbours • level and duration of contact with relatives (cohabitating and non-cohabiting) • levels and duration of intra- and inter-generational help and support
Social empowerment	Knowledge base	Application of knowledge; availability of information; User friendliness of information	<ul style="list-style-type: none"> • Extent to which social mobility is knowledge based (formal qualifications). • Per cent of population literate and numerate. • Availability of free media. Access to the Internet. • Provision of information in multiple languages on social services. • Availability of free advocacy, advice and guidance centres.
	Labour market	Control over employment contract; prospects of job mobility; reconciliation of work and family life (work/life balance)	<ul style="list-style-type: none"> • Percent of labour force that is member of a trade union (differentiated to public and private employees). • Percent of labour force covered by a collective agreement (differentiated by public and private employees). • Percent of employed labour force receiving work-based training. • Percent of labour force availing of publicly provided training (not only skills based). • Percent of labour force participating in any 'back to work scheme' • Percent of organisations operating work life balance policies. • Percent of employed labour force actually making use of work/life balance measures (see indicator above).

	Openness and supportiveness of institutions	Openness and supportiveness of political system; openness of economic systems; openness of organisations	<ul style="list-style-type: none"> • Existence of processes of consultation and direct democracy (e.g., referenda). • Number of instances of public involvement in major economic decision making (e.g., public hearings about company relocation, inward investment, and plant closure). • Percent of organisations/institutions with work councils. • Percent of the national and local public budget that is reserved for voluntary, not-for-profit citizenship initiatives. • Marches and demonstrations banned in the past 12 months as proportion of total marched and demonstrations (held and banned). • Proportion of local and national budget allocated to all cultural activities. • Number of self-organised cultural groups and events. • Proportion of people experiencing different forms of personal enrichment on a regular basis.
	Public space	Support for collective action; cultural enrichment	<ul style="list-style-type: none"> • Percent of the national and local public budget that is reserved for voluntary, not-for-profit citizenship initiatives. • Marches and demonstrations banned in the past 12 months as proportion of total marched and demonstrations (held and banned). • Proportion of local and national budget allocated to all cultural activities. • Number of self-organised cultural groups and events. • Proportion of people experiencing different forms of personal enrichment on a regular basis.
	Personal relationships	Provision of services supporting physical and social independence; personal support services; support for social interactions	<ul style="list-style-type: none"> • Percentage of national and local budgets devoted to disabled people (physically and mentally). • Level of pre-and-post-school childcare. • Extent of inclusiveness of housing and environmental design (e.g., meeting places, lighting, layout).