SENSE OF BELONGING IN FINNISH FOREIGN-BORN POPULATION AND ITS RELATION TO PSYCHOLOGICAL DISTRESS

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The proportion of the foreign-born population both in Finland and worldwide has grown rapidly in the last decades and this trend is only expected to continue. This has prompted research on the well-being and integration of migrant populations across many disciplines. In previous research, belonging has both been found to be linked to better health outcomes and used as an indicator of integration, but this has often been approached through a national dimension and an application of J.W. Berry's four acculturation profiles. This approach, and a general lack of conceptual congruence, have drawn attention to the need for a more diverse and unified approach to belonging. This research aims to investigate sense of belonging among the Finnish foreign-born population through an expanded perspective: how it is experienced, what factors affect it and what implications it holds for psychological distress.

In the analysis, a stratified sample of 6903 Finnish foreign-born persons with foreign backgrounds aged 20 to 74 was examined. The data was from THL's MoniSuomi -survey, which is a comprehensive cross-sectional population study on health, well-being, and service use among the Finnish foreign-born population. Eight questions concerning belonging were utilized to form a sense of belonging variable that divided the participants into five groups depending on how their sense of belonging related to locality: 1) Local 2) Non-local 3) Integrated 4) Other and 5) Little or no sense of belonging. Psychological distress was used as a dichotomous variable and measured with MHI-5. Ten background factors were included in this study: gender, age, country of origin, education level, socioeconomic status, reason for migration, years spent living in Finland, age of arrival, area of residence and marital status. The connection between the background factors and sense of belonging was studied with a contingency table, a Wald Chi-Squared test and comparison of 95% confidence intervals. The connection between sense of belonging and psychological distress was examined with a 4-stepped hierarchical logistic regression analysis, where the dependent variable was psychological distress and the background factors were added gradually and controlled for.

The results showed that the integrated group was the most common, containing over half of the participants. The local and non-local groups were similar in size and the second most common. The "other" and the "little to no" groups were the smallest groups and similar in size. For age, country of origin, reason for migration, years spent living in Finland, age of arrival, level of education and marital status, the connection to sense of belonging was significant. Sense of belonging predicted psychological distress at each of the analysis steps and the groups differed in terms of psychological distress. The local and integrated groups exhibited the least amount of psychological distress, the non-local and the "other" group significantly more, and the "little or no" group the most.

As the results varied in how they related to previous research, these findings emphasize the multidimensional and complex nature of belonging and the heterogeneity of the Finnish foreign-born population. They also suggest that some Finnish foreign-born

sub-populations are at higher risk of alienation and that belonging locally is a key aspect when addressing the possible effects belonging has for mental health. Questions of "How" and "Why" should be critically reflected upon whenever studying belonging and especially those in disadvantaged positions. To understand and nurture the local aspects of belonging that have been proven crucial for mental well-being, we need to broaden our conceptualization of belonging. This involves targeting local dimensions at the local level and in close cooperation with the people affected.

Keywords: Sense of belonging, belonging research, Finnish foreign-born population, psychological distress, locality, population research

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Psykologian laitos

TIITTA, VEIKKO: Kuulumisen kokemus Suomen ulkomailla syntyneessä väestössä ja sen suhde psyykkiseen kuormittuneisuuteen

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Ulkomailla syntyneen väestön osuus on viimeisten vuosikymmenten aikana kasvanut nopeasti sekä Suomessa, että maailmanlaajuisesti, ja tämän kehityksen oletetaan jatkuvan. Tämä on johtanut ulkomailla syntyneen väestön hyvinvointia ja kotoutumista koskevaan tutkimukseen monilla eri tieteenaloilla. Aiemmissa tutkimuksissa kuulumisen kokemuksen on löydetty olevan yhteydessä parempaan terveydentilaan. Lisäksi sitä on käytetty kotoutumisen indikaattorina, jolloin sitä on usein lähestytty kansallisen ulottuvuuden kautta tai soveltamalla J.W. Berryn neljää akkulturaatioprofiilia. Tämä lähestymistapa sekä käsitteellisen vhteneväisvyden vleinen puute. ovat nostaneet esille tarpeen yhteneväisemmälle monipuolisemmalle ja kuulumisen konseptualisaatiolle. Tässä tutkimuksessa pyrin tutkimaan kuulumisen kokemusta Suomen ulkomailla syntyneessä väestössä laajennetun kuulumisen käsityksen kehyksestä: miten se koetaan, mitkä tekijät

siihen vaikuttavat ja mitä vaikutuksia sillä on psykologiseen kuormittuneisuuteen.

Tutkimuksessa analysoitiin satunnaistetulla otannalla poimittua 6903 20–49 vuotiaan ulkomailla syntyneen ulkomaalaistaustaisen henkilön otosta. Otos on peräisin THL:n MoniSuomi -tutkimuksesta, ioka kattava poikkileikkaustutkimus on ulkomaalaissyntyisen väestön terveydestä, hyvinvoinnista ja palvelujen käytöstä. Kahdeksan kuulumista mittaavan kysymyksen pohjalta muodostettiin kuulumisen kokemus -muuttuja, joka jakoi tutkimukseen osallistuneet viiteen luokkaan sen mukaan, miten heidän kuulumisen kokemuksensa sisälsi paikallisuutta. Ryhmät olivat: 1) Paikallinen 2) Ei-paikallinen 3) Integroitu 4) Muu ja 5) Vain vähän tai ei lainkaan kuulumisen kokemusta. Psyykkinen kuormittuneisuus oli tutkimuksessa kaksiluokkainen muuttuja, jota mitattiin MHI-5 -patteristolla. Kymmenen taustamuuttujaa sisällytettiin tutkimukseen: biologinen sukupuoli, ikä, lähtömaa, koulutustaso, sosioekonominen asema, maahanmuuttosyy, Suomessa asutut vuodet, Suomeen muuttoikä, asuinalue ja siviilisääty. Yhteyttä taustamuuttujien ja kuulumisen kokemuksen välillä tutkittiin kontingenssitaulukkolla, Waldin Khii-neliö-testillä 95% luottamusvälien vertailulla. Kuulumisen kokemuksen ja ja psyykkisen kuormittuneisuuden välillä olevaa yhteyttä tutkittiin neliaskelisella hierarkkisella logistisella regressioanalyysillä, jossa selitettävänä muuttujana oli psyykkinen kuormittuneisuus ja taustamuuttujien vaikutus kontrolloitu askeleittain.

Tutkimuksen tulokset osoittivat, että integroituun ryhmään kuului yli puolet kaikista vastaajista ja se oli yleisin ryhmä. Paikallinen ja Ei-paikallinen -ryhmät olivat toiseksi yleisimmät ryhmät ja samankaltaisia koon suhteen. Muu ja Vain vähän tai ei lainkaan -ryhmät olivat harvinaisimmat ryhmät ja samankaltaisia kooltaan. Iän, lähtömaan, maahanmuuttosyyn, Suomessa asuttujen vuosien, saapumisiän, koulutustason ja siviilisäädyn osalta yhteys kuulumisen kokemukseen oli merkitsevä. Kuulumisen kokemus selitti psykologista kuormittuneisuutta analyysin jokaisella askeleella, ja kuulumisen ryhmät erosivat toisistaan psyykkisen kuormittuneisuuden osalta. Integroitu ja Paikallinen -ryhmillä

oli vähiten psyykkistä kuormittuneisuutta, Muu ja Vain vähän tai ei lainkaan -ryhmillä huomattavasti enemmän ja Vain vähän tai ei lainkaan -ryhmällä eniten.

Koska nämä tulokset vaihtelivat sen suhteen, miten ne peilaantuivat aiempaan tutkimukseen, korostavat ne kuulumisen moniulotteista ja kompleksista luonnetta sekä Suomen ulkomailla syntyneen väestön heterogeenisyyttä. Tulokset viittaavat myös siihen, että joillakin Suomen ulkomailla syntyneen väestön osajoukoilla on kohonnut riski vieraantua ja että paikallinen kuuluminen on keskeisessä asemassa, kun tarkastellemme kuulumisen kokemuksen vaikutuksia mielenterveydelle. Kysymyksien "Miten" ja "Miksi" tulisi olla aina kriittisen tarkastelun kohteena, kun kuulumisen kokemusta tutkitaan, varsinkin jos kyseessä on epätasa-arvoisessa asemassa olevia ihmisryhmiä. Ymmärtääksemme ja edistääksemme niitä kuulumisen paikallisia aspekteja, jotka ovat osoittautuneet ratkaisevan tärkeiksi psyykkisen hyvinvoinnin kannalta, meidän on laajennettava käsitystämme kuulumisesta. Tämä edellyttää paikallisen kuulumisen ulottuvuuksien tutkimista ja käsittelemistä siellä, missä ne koetaan: paikallistasolla ja tiiviissä yhteistyössä asianomaisten paikallisten ihmisten kanssa.

Avainsanat: Kuulumisen kokemus, kuulumisen tutkimus, Suomen ulkomailla syntynyt väestö, psyykkinen kuormittuneisuus, paikallisuus, väestötutkimus

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1. INTRODUCTION

The foreign-born population of Finland has doubled in the last decade, currently making up almost 10% of the total population (Tilastokeskus, 2014; 2023). This relative share is only expected to continue rising in the upcoming years (Castaneda et al., 2019; Kuusio et al., 2020). As well as being recognized as a phenomenon in Finland, similar trends have been observed globally. This has sparked an accelerating amount of research on the well-being of foreign-born populations with varying approaches and across different disciplines (e.g. Robertsson et al., 2023; Kuusio et al., 2020; Kazi et al., 2019; Hou et al., 2018; Jurado et al, 2017; Yoon et al., 2013). Whilst foreign-born populations are very heterogeneous due to the same variances in inter- and intrapersonal attributes as the native-born populations, there is an added layer of various country of birth related factors that arguably make foreign-born populations even more diverse than their native counterparts. Thus it could be problematized, whether it is sensible to examine or even refer to foreign-born populations as distinctive demographics.

Nonetheless, the research hitherto has highlighted that foreign-born populations are in many ways in disadvantaged and vulnerable positions, especially in the case of involuntary immigration, and thus more susceptible to mental health issues (Bas-Sarmiento et al., 2017; Rask et al., 2016; Gilliver et al., 2014; Kuusio et al., 2020; Robertsson et al., 2023). A concrete example of the aforementioned findings is the higher and increased levels of psychological distress among the foreign-born population in Finland observed in the most recent national survey on health, well-being and service use among foreign-born population, MoniSuomi (Kuusio et al., 2023b). A variety of factors have been suggested and found to be linked to the concerning findings like the former - such as pre-migration experiences, traumatic experiences, experiences of discrimination and loneliness - and more are identified as research continues (Barry et al., 2020; Drapeu et al., 2012; Kuusio et al., 2023a).

Whilst we may not be able to hone down on all the specific factors and challenges that might contribute to the psychological distress of the Finnish foreign-born population nor can we change the fait accompli pre-migration factors, we can nonetheless try and utilize what is already known about psychological distress in general. Psychological distress in the context of this study refers to a person's mental state marked by emotional suffering exhibiting as depression or anxiety symptomatology (Drapeau et al., 2012). Despite the fact that

psychological distress is not a diagnosis or a disorder in itself, it is often used as a tool in health screening and population surveys, as it gives an indicative snapshot of a respondent's mental health status (Viertiö et al., 2021; Cuijpers et al., 2009). Albeit many findings show that psychological distress levels highly vary depending on country of origin (Kuusio et al., 2023a; Kuusio et al., 2023b; Robertsson et al., 2023), targeting only certain country groups with for example mental health interventions or policies - could show challenging and be seen as exclusionary in the eyes of people not targeted, not to mention that it could concretely fail to reach a significant portion of psychologically distressed foreign-born persons.

Therefore, for the main purpose of this study, the foreign-born population of Finland is not examined through either the lens of country of origin, nor as a homogenous population per se - even though both are addressed - rather it is examined through the lens of five sub-groups derived from the self-reported sense of belonging experienced by the Finnish foreign-born population. More specifically, the sub-groups are based on whether respondents felt a sense of belonging locally, non-locally or in any other way. Sense of belonging, defined by Allen et al. (2021) as a subjective experience of profound connection with the people and things around us, is regarded as a fundamental human need in the field of psychology (e.g. Maslow, 1954; Leary et al., 2009) and the extent to which it is experienced, has a myriad of known implications for the mental, physical and social well-being of individuals (see for example Hawkley et al., 2015; Cacioppo et al., 2011; Choenarom et al., 2005; Cornwell et al., 2009; Holt-Lunstad, 2018; Leary, 2009; Slavich et al., 2010, Allen et. al, 2021). Research approaches applying similar, whilst not identical, divisions derived from sense of belonging as in this study, have been done both in Finland (most recently by Seppänen et al., 2020;2021;2022;2023) and world-wide (e.g. Hou et al., 2018). Notably, findings by Seppänen et al. (2022; 2023) suggest that having a sense of belonging towards Finland is positively linked to the mental health of the foreign-born population and that only roughly half of the foreign-born population feels a sense of belonging towards Finland. However, as Seppänen's studies are the first of their kind in Finland and they deploy a different division of belonging that does not directly address locality, more research is needed.

Adding on to the theoretical and empirical background of belonging-based examination, is the closely related field of acculturation studies and Berry's theory of acculturation (see Berry, 1997;2009, Sam et al., 2010). Acculturation is seen as the process of adaptation and weighing of new and old cultural aspects, identities, behaviors et cetera that takes place at the meeting ground of any two or more cultures (Yoon et al., 2013; Schwarz et al., 2010). Berry's theory is most widely recognized for outlining the four potential results,

referred to as acculturation strategies, that may arise during the acculturation process: integration, assimilation, separation, and marginalization. As sense of belonging is often viewed in acculturation research as a good indicator of a person's acculturation process and a dimension of acculturation itself, it is often used as an indicator in acculturation studies and thus offers beneficial and applicable knowledge for belonging research as well.

First, I will briefly review what the literature tells us about the current state of the Finnish foreign-born population and their state of well-being. Then I will open up the concept of sense of belonging to build emphasis on the role it plays on well-being and how it ought to be conceptualized to grasp just how beneficial fostering it could be. Then I will touch upon the aforementioned and related field of acculturation studies and Berry's theory, concluding with a concise summary of psychological distress as a psychological phenomenon. The purpose of this study is to highlight the beneficial role that belonging research itself could hold as well as provide further knowledge on the sense of belonging experienced by the Finnish foreign-born population and its relations to psychological distress.

1.1 Key concepts and theoretical background of the study

1.1.1 About the Finnish foreign-born population and their state of psychological well-being

When studying populations in nationwide settings, it is important to be conscious of who we are referring to with the definitions used. Firstly, the term "foreign-born" is not to be confused with the term "foreign background". The latter refers to those people whose both parents or only known parent was born in a country other than Finland (Tilastokeskus [from now on TK], n.d.). Conversely, Finnish background, at least in the context of population studies, refers to those who have at least one parent born in Finland (TK, 2023). Secondly, the implication this has is that a person being born abroad does not necessarily equate to having "a foreign background" and likewise being born in Finland does not necessarily equate to having "a Finnish background" - within these definitions. Moreover, as these background-suffixed categorizations are solely nationality based, their definitions exclude any subjective experiences of one's own ethnic identity. Whilst the term foreign-born defines itself, discussing its overlap and divergence from the term foreign background is crucial because much of the research concerning either of the terms has deliberately chosen one of the terms to use or discusses them laterally. Regardless, research on either demographic

significantly informs our understanding of the other and thus as research topics they are always interconnected in one way or another.

Furthermore, the term population refers to a different demographic than nationality. From the perspective of the body responsible for the monitoring and collection of the population data, Statistics Finland (TK), population refers to those people who on the last calendar day of the year had legal domicile in Finland, verifiable from the Population Information System, regardless of their nationality. In the case of foreign nationals, they are classified as domiciled, and therefore included in the population, if they intend to or have stayed in Finland for at least one year, an exception to this rule being those foreign nationals who are working in their respective embassies or international trade missions in Finland (TK, 2023). It is important to then deduce who are not included in the population count: people who are seeking asylum, but have not yet been granted it and people without apt documentation. Additionally, it is also important to note that whilst these definitions are used in the study at hand, no uniform definitions of the terms exist and as such definitions might differ depending on the context of the study.

In this study the population sampled, vis-a-vis the aforementioned terms, was Finnish foreign-born population with foreign backgrounds. According to Tilastokeskus (TK, 2023) the Finnish foreign-born population with foreign background was 422 121 in the year 2022. This number rose to 476 857 when also including foreign-borns with Finnish backgrounds. Furthermore, in the year 2022 there were 508 173 people with foreign backgrounds alone and when including all of the people who either were foreign-born or have a foreign background, the same number was 562 909, making up roughly 10% of the entirety of the Finnish population, which was 5 563 970 (TK, 2023). For a visual representation, see figure one. In comparison, the foreign-born population made up just 5% of the Finnish population only 12 years ago (TK, 2014). Not only does the foreign-born population already make up a significant proportion of the Finnish population, but the development to the status quo has also been accelerated and this trend is likely to continue, as the proportion of foreign-borns is only estimated to rise in the upcoming years both in Finland, and worldwide (Kuusio et al., 2020; Castaneda et al., 2019). The well-being of the foreign-born population thus, and intrinsically, calls for active study and promotion.

The Finnish foreign-born population is a very heterogeneous one that, just like the native population, differs from multiple factors, both from migration-specific ones, such as reason for immigration, country of origin, years spent in Finland, age of arrival, and individual level differences, such as education level, age, health status, economic status,

lifestyles and interpersonal history (Rask et. al., 2016; Kuusio et al., 2020; Hou et al., 2018; Robertsson et al., 2023). Some data is required to further illustrate this: In the year 2022 there were 30 countries of origin from which more than 3000 people had emigrated to Finland and many more that have less than that, four largest of them being former Soviet union (~63 000), then Estonia (~47 000), then Sweden (~34 000) and then Iraq (~22 000) (TK, 2023). In regards to reasons for migration, a common division is that of choice-based (voluntary) migration and more or less forced (involuntary) - having little choice towards - migration (Bas-Sarmiento et al., 2017; Verkuyten et al., 2018). In Finland, according to THL's MoniSuomi study (2023), the primary reasons for migration were other family reasons (25.4%), one's own employment (23.8%), refugee and asylum-seeking (19.2%), one's own studies (11.0%), return migration (8.3%), spouse's employment or studies (7.5%) and other reasons (4.7%). In addition to country of origin and reason for migration, other ways of examining foreign-born populations include age, gender and time spent in the country (TK, n.d.). All these different migration-related factors play a role in a person's well-being, highlighting the challenge of studying and referring to foreign-born population as a singular group (Robertsson et al., 2023).

Nevertheless, there are still both specific challenges and emerging study findings in terms of foreign-born populations' well-being. Migration and the acculturation process that follows are always challenging and the effects they bear depend on a variety of pre- and post-migration related factors as well as on the migration process itself (Bas-Sarmiento et al., 2017; Skogberg et al., 2019; Jurado et al., 2017). This being said, migration has been recognized as a risk factor for mental health problems in various different studies (e.g. Bas-Sarmiento et al., 2017; Rask et al., 2016; Gilliver et al., 2014; Robertsson et al., 2023). The evidence for the adversary effects of migration is particularly strong in the case of involuntary migration. Some known recognized related issues in Finland are experiences of loneliness and discrimination, difficulties in obtaining income support and inadequate access to necessary health services (Henkelmann et al., 2020; Skogberg et al., 2019, Kuusio et al., 2023a). Contrary findings have also been presented, such as the "healthy immigrant effect" wherein recently arrived migrants show better mental health compared to the native population (e.g. Salas-Wright et al., 2014; Ikonte et al., 2020; Bas-Sarmiento et al., 2017). Nonetheless, results like the former, wherein involuntary migrants show increased risk for mental health problems, have called for more studies with country specific examination and some have already been done, showing that people from certain source countries show significantly higher prevalence of mental health problems in comparison to the native

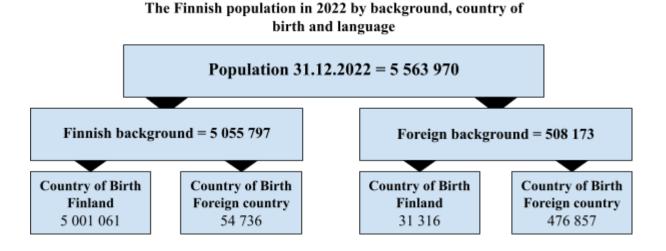
population, whereas people from other source countries might not differ from the native population's mental health prevalences at all (Rechel et al., 2012; Rask et al., 2016; Robertsson 2023, Kuusio et al., 2023a).

The most recent study on the foreign-born population done in Finland, MoniSuomi, showed that foreign-born population reported higher levels of psychological distress (23%) compared to the native population (18%) (Kuusio et al., 2023a). Specifically, 20% of foreign-born men reported experiencing psychological distress compared to 17% of native Finnish men, whilst the same numbers were 23% compared to 19% for women (Kuusio et al., 2023a). The prevalence rates were highly varied between countries of origin, being noticeably highest in the Middle East & North Africa group (31%) and lowest in the Estonia and the Africa (excluding North Africa) groups (18%). Gender differences were also found within groups. Not only do the prevalence rates of mental health problems differ from the native population, but they also seem to be on the rise: the same study also showed that psychological distress among the foreign-born population had increased from 17% in 2018 to 23% in 2022, albeit the increase also highly varied between different countries of origin, highest change being in the Russia and former Soviet Union group (from 15% to 24%) and lowest change being in the Middle East & North Africa group (from 30% to 31%). Whilst these results could be due to a variety of factors, such as the very common experiences of discrimination and racism, possible traumatic events pre- and during migration or acculturation stress, there is no one stand-out cause for these prevalences, rather the effects are cumulative and holistic and so should the tools we use to face them be (Kuusio et al., 2023b; Bas-Sarmiento et al., 2017, Rudmin et al., 2009, Castaneda et al., 2019).

Lastly, it is important to note that whilst in this study I focus on psychological distress, many of the prior findings are not as bleak as they may at first glance appear. Roughly the same percentage of the foreign-born population (48%) as the native-born population (52%) felt that their quality of life was (on average) good or better and 78% of the foreign-born population did not exhibit enough symptoms to be classified as "psychologically distressed" on the Mental Health Inventory 5 (MHI-5) battery scale (Kuusio et al., 2023a; Kuusio et al., 2023b). Moreover, roughly two-thirds of the participants of the MoniSuomi 2022 study considered their health to be good or better (Kuusio et al., 2023a). In addition, the same study showed results indicating that most participants do in fact feel safe in their environment and also have a sense of belonging and participation in Finnish society, which are all positive findings from the perspective of mental well-being (Kuusio et al., 2023a). The biggest differences were not found between the foreign-born and native-born population, but

rather within the foreign-born population when comparing countries of origin: psychological distress and other health issues were particularly accentuated in those countries of origin where the reason for immigration was often refugee or asylum seeking. Bearing all mentioned in mind, we can conclude that the Finnish foreign-born population varies largely by both their background factors and current health statuses. As the size of the foreign-born population keeps growing and their levels of psychological distress as well, this heterogeneity must be considered, if we aim to tackle the issues concerning psychological distress.

Figure 1. The Finnish population in 2022 sectioned by background and country of birth according to Statistics Finland (2023).



1.1.2 Sense of belonging

Sense of belonging is widely recognized in the current field of psychology as a fundamental human need that has a plethora of direct and indirect implications for an individual's mental, physical, social and economic well-being (Maslow, 1954; Leary et al., 2009). It is defined by Allen et al. (2021) in their extensive integrative review article as "the subjective feeling of deep connection with social groups, physical places, and individual and collective experiences". Although the extent to which people feel the need to belong varies between individuals, belonging has nonetheless been shown to be "a robust predictor of meaningfulness [in life]" (Leary, 2022 as cited in Allen et al., 2022; Lambert et al., 2013). In turn, a lack of belonging has been linked in numerous studies to an increased risk for not only many different mental health issues - for example depression - and self-reinforcing antisocial behavior, but also to an increased risk of physiological issues, such as lowered immune

functioning, physical illness and earlier mortality (Hawkley et al., 2015; Cacioppo et al., 2011; Choenarom et al., 2005; Cornwell et al., 2009; Holt-Lunstad, 2018; Leary, 2009; Slavich et al., 2010, Allen et. al, 2021). Conversely, a positive experience of belonging is linked to better psychosocial outcomes, such as better psychological well-being and better sleep quality (Hawkley et al., 2015).

A large proportion of studies concerning belonging have so far focused on the social aspect of belonging and in school settings, where belonging has a heightened relevance (Allen et al., 2021; Sedgwick et al., 2010; Abdollahi et al., 2020). Another prominent point of interest recently has been minority populations' sense of belonging both from the perspective of belonging within minority communities and from the perspective of felt belonging to the surrounding culture (e.g. Keyes et al., 2004; Hou et al., 2018; Castaneda et al., 2019; Caxaj et al., 2010; Caxaj et al., 2017; Wu et al., 2011). These latter studies have highlighted not only the social dimension, but importantly the cultural and spatial ones that have received less attention in the prior studies. This broader understanding of belonging not just as a social phenomenon, but as a multidimensional one, has varied implications for belonging research going forward: on the one hand, a diverse and holistic approach to belonging is needed to grasp all the aspects it includes and affects, but on the other hand, this widening naturally brings with it a challenge of conceptualisation and definition.

Studies have not only focused on different aspects of belonging, but also approached the topic from various different standpoints. These different approaches can be roughly summarized by a generalization of the research questions into four:

- 1) What is belonging and how is it experienced?
- 2) What does belonging affect?
- 3) What affects belonging?
- 4) How do we foster belonging?

From these questions, it is deducible that belonging has been studied as an independent, dependent, and correlated variable. For example, Alisaari et al. studied the sense of belonging and its relation to absences for pupils with a migrant background in their 2022 study, which not only showed that pupils with migrant backgrounds who spoke a language other than the school's teaching language at home, had on average a lower levels of belonging in school, but also that this sense of belonging in school was linked to absences, although it did not explain the group differences. Another study done in Finland examined the relation of Finnish immigrants' local sense of belonging to the voting turnout in municipal elections (Seppänen et al., 2021). In other words, belonging still births many different research questions.

Nonetheless, a semi-stable consensus seems to have been formed that sense of belonging is a phenomenon and a feeling worth striving for with a myriad of (positive) effects for social, psychological and physical well-being, and thus the focus on belonging research seems to be shifting more and more towards question number four (Allen et al., 2021).

Despite the consensus mentioned and the respectable amount of studies done, there still seems to exist a lack of definitive conceptual clarity concerning belonging and its related terms. Admittedly, this is at least partly due to the fact that belonging research has been multidisciplinary, with lacking standardization across the disciplines (Allen et al., 2021). The key question here seems to be: what does belonging entail, how can it be measured and how does it differ from its' closely related terms? Moreover, it still remains shrouded whether "not belonging" corresponds to such negative phenomena as loneliness, disconnection and isolation, or if these belong to a different spectrum (Allen et al., 2021). Nonetheless, one important distinction to be made is that of state and trait belongingness (Allen et al., 2021). Belongingness as a state refers to situation-specific senses that can be more influenced by daily variables such as mood, stress and events, whereas belongingness as a trait refers to the semi-stable and lasting sense of belonging (Sedgwick et al., 2010; Trampe et al., 2015; Allen et al., 2021). Studies seem to suggest that the latter is more crucial for mental health and well-being, which is also what I aim to study and measure in this paper (Clark et al., 2003).

Concerning the conceptual clarity issue, for this thesis' purposes I lean on the integrative framework of belonging presented by Allen et al. (2021), as it includes and brings together a wide array of the most recent studies concerning belonging. The integrative framework consists of four different, but intertwined, factors that all exist in the contexts they are experienced in. Allen's four belonging components are as follows:

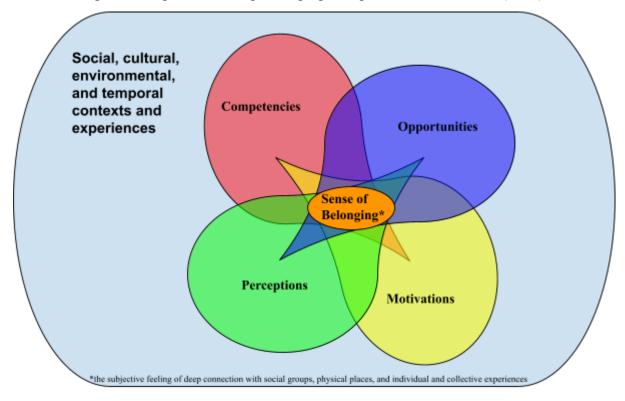
- 1) competencies (the baseline skills needed for connecting and experiencing)
- 2) opportunities (the concrete possibilities to belong; people, time, space etc.)
- 3) motivations (the individual want and need to belong)
- 4) perceptions of belonging (subjective feelings, interpretations and feedback)

This model emphasizes the dynamic nature of these categories as well as the effects of the context at hand. For a visual representation of the framework, see figure two.

Conclusively, when we look at the studies done on the belonging of foreign-born populations, we find results indicating that the experiences do differ from those of the native populations. Firstly, we know that only roughly half of immigrants in Finland feel a sense of belonging to the Finnish population (Seppänen et al., 2023). Secondly, we know that the effects of stress factors related to belonging may be stronger for those who identify with

out-groups (Walton et al., 2017). Lastly, we know that immigrants' tendency to have a higher risk for mental health disorders is a recognized factor that can have negative effects on the different aspects of belonging (Roberttson et al., 2023; Gilliver et al., 2014; Rask et al., 2016; Castaneda et al., 2019; Hou et al., 2018). It is safe to say that studies done on belonging among migrant populations show reason for concern. However, encouraging findings also exist: A study done in Finland by Castaneda et al. (2019) found that high levels of social well-being among migrants (less loneliness, more participation in leisure-time activities, many good friends, relationship satisfaction) were systematically linked to the experience of local belonging as well as better integration and lower levels of psychological distress. These findings are notable because the used indicators of social well-being can be relatively easily targeted in the Finnish context (Castaneda et al., 2019). Although there still are underlying factors we are unaware of, studies suggest that promoting belonging among migrants is feasible, beneficial and needed for the overall well-being of said population.

Figure 2. The Components of Belonging -model visualizing the integrative framework for understanding, assessing and fostering belonging. Adapted from Allen et al. (2021).



1.1.3 Berry's theory of acculturation and related literature

When studying foreign-born populations and their relations to the receiving societies, Berry's theory of acculturation, the related terminology and the research that has followed with it, play an important role (see Berry, 1997, 2009; Sam et al., 2010). Thus, a concise overview of the concepts from said theoretical framework most relevant to this study is needed. Firstly, acculturation at large refers to the process of recalibrating cultural values, identities, behaviors and other culture-related factors, that takes place when any two or more cultures meet (Schwarz et al., 2010; Yoon et al., 2013). This process is both multidimensional and bilinear. Another common conceptualisation of acculturation especially in the case of immigrants and ethnic minorities, per Yoon et al's (2013) meta-analysis on acculturation and mental health, is that of acculturation as "cultural socialization to mainstream culture" and its peer-term enculturation as "cultural socialization to one's culture of origin". It is in relation to this dichotomy that "bilinearity" is referred: socialization to the mainstream culture and of origin can both develop independently from one another (Yoon et al., 2013).

The most well known part of Berry's theory is the four possible outcomes of the acculturation process: integration, assimilation, separation and marginalization. Integration refers to the simultaneous maintenance of the culture of origin and the acquisition of a new one, assimilation to the acquisition of a new culture and the depreciation of the old one, separation to the rejection of the new culture and commitment to the old one, and marginalization to the rejection of both cultures (Berry 1997, 2009: Yoon et al., 2013). Even though the terminology depicts clear categories, the categories are not absolute refusals of any given cultures, rather they reflect the value, engagement and importance of said cultures that either heighten or diminish. The categories are also not final nor are they absolute. For example, the shared experience of common culture of origin can play a heightened role in the beginning of the resettling phase (Wu et al., 2011). Nonetheless, of the four categories, integration is often seen as the best from the perspective of mental health outcomes, both by Berry (1997, 2007) and subsequent research. Adversary results have also been found wherein separation and assimilation have yielded more positive or similarly favorable associations with mental health compared to integration (Yoon et al., 2013; Hou et al., 2018; Choy et al., 2021). Separation and assimilation do not significantly seem to differ from each other in terms of mental health outcomes and marginalization is deemed the most harmful outcome to

mental health (Schwarz et al., 2010; Yoon et al., 2013; Choy et al., 2021). Herein it is important to note, that the results of both the acculturation processes themselves and the research done on said processes are heavily influenced by how researchers conceptualize and operationalize acculturation and what the context and sample characteristics of the study are, which can all vary from study to study (Berry et al., 2011; Yoon et al., 2013).

Although sense of belonging as a phenomenon is discernible from acculturation, sense of belonging is often used as an indicator of acculturation "level" and acculturation viewed through the lens of belonging (Schwarz et al., 2010; Yoon et al., 2013; Hou et al., 2018). Likewise, the dimensions of belonging used in this study take influence from the four theorized outcomes of an individual's acculturation process, as is also done for example by Hou et al (2018) in their study examining the "patterns and determinants of immigrants' sense of belonging to Canada and their source country" or by Seppänen et al. (2021) in their study on "Finnish immigrants' voting turnout in municipal elections" and its relation to belonging. Whereas sense of belonging is not always used as a variable in acculturation studies and other acculturation indicators such as self-defined ethnic identity or mastery of the mainstream language are used instead, most theoretical viewpoints recognize belonging as one dimension of acculturation along others such as behavioral acculturation, value acculturation and knowledge acculturation (Yoon et al., 2013; Schwarz et al., 2010; Drapeau et al., 2012). Thus, belonging research benefits acculturation research and vice versa.

A venerable amount of research shows that various factors play a role in a person's likeness to belong to different acculturation profiles. For example, integration and assimilation profiles are found more often as a person's residency in said country grows in time (Schwartz et al., 2010; Hou et al., 2018). Factors such as racial minority status, age, gender, reason for immigration, age of immigration, country of origin related factors, marital status and education have also been studied and identified as variables having an affect on acculturation profiles, albeit the findings vary depending on context, operationalization and sample characteristic as noted above and thus no clear consensus exists on the effect sizes or directions (Berry, 1997; Schwartz et al., 2010; Berry et al., 2011; Yoon et al., 2013; Hou et al., 2018; Seppänen et al., 2022). Although divergent findings exist, some factors have been found to have more consistent and recognizable effects. For example, many studies have found that being a visible minority increases one's likelihood to belong to the separation profile (Hou et al., 2018). This tendency is sometimes explained through the concept of reactive ethnicity (see Rumbaut, 2008). In addition, a lot of studies have noted that a younger age of immigration is linked to acculturation profiles wherein country of departure plays a

lesser role, i.e. integration and assimilation (Berry, 1997; Schwartz et al., 2010; Yoon et al., 2013). Being or having been married are both found to be linked to a higher likelihood of belonging to either assimilation or integration profiles, and conversely having never been married to the marginalization profile (Hou et al., 2018; Seppänen et al, 2022).

Such diverse findings, whilst not offering a pre-paved path towards solving non-belonging, highlight the importance of attributing and accounting for the plethora of background factors playing a role in both the phenomenona of acculturation and belonging as well as their scientific research. As such, some of the recognized background variables are weighed and discussed in the study at hand. Furthermore, as suggested by Hou et al. (2018) and Berry (2017), the cumulative research on acculturation and belonging, despite its diverse findings, has produced and continues to produce generalizable findings that could be of use when making policies concerning integration, immigration and intercultural relations, such as enabling chances for shared involvement and interpersonal connections (participation), advocating for the stability of the environment both culturally and economically and supporting the identity moratorium that takes place.

1.1.4 Psychological distress

As per American Psychiatric Association's (2013) Diagnostic and statistical manual of mental disorders (DSM-V) psychological distress refers to "A range of symptoms and experiences of a person's internal life that are commonly held to be troubling, confusing, or out of the ordinary". These symptoms can be seen to consist of three dimensions: depression, anxiety and loss of emotional control (Hennessy et al., 2018). Although psychological distress' symptomatology includes both anxiety and depression, it differs from said disorders by its' generic and descriptive nature. Moreover the critical distinction of disorder and distress is that of whether the root cause lies within an internal dysfunction of a psycho- or physiological system or in an external stressor (Horwitz et al., 2007). It is not an indicator of a specific mental health issue, but rather a broad statement about the mental state of an individual. Another used definition of psychological distress is that of "a state of emotional suffering characterized by symptoms of depression and anxiety", which sometimes can also be somatically symptomatic (Drapeau et al., 2012). This being said, having high levels of psychological distress is, in general, an indication of impaired mental health and may then be anticipatory and reflective of common mental health disorders like anxiety and depression (Cuijpers et al., 2009). Psychological distress is commonly measured with self-reporting

scales, such as the Mental Health Inventory used here or General Health Questionnaire, and is utilized in both population studies and primary health care screening (Viertiö et al., 2021).

On top of being a predictor of possible larger mental health issues, higher levels of psychological distress are found to increase the overall risk of poor health outcomes in life, such as higher mortality rates and disease-specific and related issues (Barry et al., 2020). In addition to this, studies show that psychological distress is negatively related to things such as social well-being, loneliness, experiences of discrimination and work satisfaction, although the direction of the effect remains unclear (Casteneda et al., 2019; Viertiö et al., 2021). Psychological distress is not only linked to a variety of negative outcomes across different dimensions of health, but the hindrance and research of psychological distress also hold intrinsic value, as they directly aim to lessen suffering and improve the quality of life.

Thus far a myriad of risk factors have been identified to be related to psychological distress, such as low socio-economic status, inadequate internal and external resources, traumatic experiences, (physical) health problems, some personality traits (neuroticism in particular) and immigrant status (Drapeau et al., 2012; Barry et al., 2020). Nonetheless, the etiology and underlying factors of psychological distress still remain a bountiful topic of research. This is at least partly due to the fact that, as mentioned before, it is challenging to distinguish if people experience more psychological distress because they are lonely, or if people experience more loneliness because they are distressed (Drapeau et al., 2012). As such, many of the studies thus far have not aimed to do so as it would require more complex study settings, like for example longitudinal research designs, which are always more demanding and resource-intensive. In addition to the aforementioned risk factors, psychological distress seems to be more common in women than men, across all age groups and most nations (Viertiö et al., 2021; Drapeau et al., 2012; Barry et al., 2020). A variety of proposed hypotheses explaining the gender difference exist, both biological, social and psychological, but as the effect is most likely cumulative, no conclusive theory has yet been identified (Viertiö et al., 2021). Additionally, the general trend seems to be that psychological distress levels tend to lessen gradually with age after late adolescence (Drapeau et al., 2012).

The current understanding of psychological distress emphasizes the stress-distress model: different groups of people, for example immigrants or the working population, face varying amounts of stressful life conditions or events and the impact these stressors have is dependent on the internal and external resources allocatable to coping with said stressors, which too varies from group to group and person to person (Drapeua et al., 2012; Barry et al., 2020). What this means in practice, is that those groups and individuals who are already more

vulnerable, ill or in need of support, disproportionately feel the cascading effects and thus suffer from more psychological distress (Lönnqvist et al., 2017). There is a silver lining to be found: we have an understanding of which groups within societies are often most vulnerable and therefore we know who to target with preventive and nursing measures. The question then remains; what are efficient and applicable methods of preventing and reducing psychological distress? From the perspective of the study at hand, the aim is to study whether and how certain experiences of belonging are linked to psychological distress in Finland, hoping then to gain an understanding on whether fostering said experiences of belonging could be used as a preventative or an intervening step in lessening psychological distress.

1.2 Aims of the study, research questions and hypothesis

The purpose of this master's thesis is to investigate sense of belonging and its relationship with psychological distress in the Finnish foreign-born population by creating and examining a five-grade grouping of belonging. More specifically the aims are twofold. Firstly, the aim is to broaden the understanding about the sense and experiences of belonging in the Finnish foreign-born population. Secondly, the aim is to understand how sense and experiences of belonging are related to psychological distress. The overarching goal is to acquire and present information on how having a sense of belonging in Finnish society affects the mental well-being of the foreign-born population in Finland. This study has three research questions:

- 1) How does the Finnish foreign-born population experience belonging?
- 2) What background factors are associated with sense of belonging and how?
- 3) How do groups based on different experiences of belonging differ in terms of psychological distress?

1.2.1 Research hypotheses

For research question one, I presume the following based on Findings by Seppänen et al. (2022;2023) in Finland and similar literature elsewhere (Berry et al., 2006; Schwartz et al., 2010; Hou et al., 2018): I presume that those who exhibit a sense of belonging towards both Finland or the area where they live (local) and their country of birth or origin, its citizens, or to their ethnic group (non-local), will be the most prevalent group. Those who either experience only local or only non-local sense of belonging, I presume will not differ in size and that they are the 2nd most common groups. For those who exhibit a sense of belonging

towards something not characterizable by either locality or non-locality (other), hypotheses prove difficult due to lack of comparable studies, but due to the sizes of the other groups, I presume this group to be the smallest. I presume that those who exhibit little or no sense of belonging, will be the least common group but similar in size as the other group.

For research question two, I presume that all of the background factors selected for the study will have an influence on the likelihood to exhibit certain experiences of belonging. For the most recurrent and discernible factors in literature, I assume the following:: Lower age of immigration, higher amount of years spent living in Finland and having or being married characterize those groups that experience local belonging (Schwartz et al., 2010; Hou et al., 2018; Seppänen et al, 2022). For those groups of belonging that do not exhibit a local sense of belonging, I presume country of origin, level of education and having never been married will play a heightened role (Schwarz et al., 2010; Yoon et al., 2013; Hou et al., 2018; Seppänen et al., 2022). Additionally, I presume that having lower levels of socioeconomic status and education will be more prominent in those who experience no belonging at all (Hou et al., 2018; Choy et al., 2021). Higher age I presume to be connected to those groups that include a local sense of belonging (Seppänen et al, 2023). For gender and reason for migration, findings are particularly varied and I will make no hypotheses. Finally, as the area of residence is specific to Finland, I will make no specific presumptions on it.

Lastly, for research question three I presume that the group that exhibits both local and non-local forms of belonging will have the lowest levels of psychological distress and differ from all other forms of belonging (Choy et al., 2021; Seppänen et al., 2022). For those whose experiences of belonging contain either only local or non-local aspects, I presume that they will not differ from one another in terms of levels of psychological distress but that these levels will be higher than those of the group experiencing integrated belonging (Berry, 1997; 2007; Yoon et al., 2013; Choy et al., 2021). For those whose belonging does not contain any aspects of locality (other), hypotheses prove difficult due to a lack of comparable studies. However, based on the fact that respondents experiencing this form of belonging nonetheless have a strong sense of belonging towards something, I presume that the levels of psychological distress in this group are similar to those groups who experience belonging only locally or non-locally. For the group that experiences little to no sense of belonging, I presume the levels of psychological distress to be the highest and differ from all other groups (Hou et al., 2018; Choy et al., 2021). Overall, I presume that belonging predicts psychological distress.

2. METHODS

The dataset utilized for this research is from the Finnish Institute for Health and Welfare's (THL) MoniSuomi -survey, which receives its funding from the Ministry of Economic Affairs and Employment of Finland, the Centre of Expertise in Immigrant Integration and the cities of Helsinki, Espoo, Vantaa, and Turku. Due to data privacy regulations and concerns, individual data points could not be provided outside of the THL's organizational structures. This meant that whilst the author of this thesis planned, instructed, reasoned and chose what was to be done to said data, as well as described, explained and interpreted the data and results of statistical analyses, the running of analyses were done by THL. MoniSuomi Survey received an ethical approval from the Research Ethics Committee of THL.

2.1 The MoniSuomi -survey

The data used in this study is from the quadriennial National survey on health, well-being and service use among foreign-born population (MoniSuomi), which is a part of the Healthy Finland population study project and conducted by the Finnish Institute for Health and Welfare. MoniSuomi is a cross-sectional study, quantitative of nature, and a continuation to the Survey on Well-Being among foreign-born Population (FinMonik). The data were collected predominantly and initially via an internet-based questionnaire, but the data-collection was also supplemented by a paper questionnaire and telephone interviews (n = 491). The collected data was augmented with register data from the Digital and Population Data Service Agency. The questionnaire was roughly 20 pages long and consisted in its most comprehensive form of 77 questions covering a wide array of topics such as inclusion, social relations, trust, health status, experiences of discrimination, lifestyles and work situation. The questionnaire and related material was also translated from the original (Finnish) version into 19 different languages. This meant that the majority of the sample (76%) received said material in their native language as well as in Finnish and Swedish. The data collection was conducted between September 2022 and March 2023. The Healthy Finland -survey (2022) and FinMonik -survey (2018 - 2019) were used as reference data. More in-depth description of the MoniSuomi -study can be found on THL's homepage for the study and in the methodological description report (THL, 2023; Lilja et al., 2023; Kuusio et al., 2023b).

2.2 Study participants

In the MoniSuomi -study, from the Digital and Population Data Service Agency registry a representative sample of the Finnish foreign-born population - who were both themselves, as well as their parents, born outside of Finland - was drawn by stratified random sampling. It is this population I will be referring to in this study when speaking of the Finnish foreign-born population. Those chosen had to have lived in Finland for a minimum of 12 months and be 20 to 74 years old. Those who moved to Finland through adoption were excluded. Of the 18,600 selected respondents-to-be, a final sample of 17 789 was achieved after removing those who had either moved out, the postal office could not reach or had died before the final part of the data gathering process (over-coverage). From the final sample, a response rate of 44% was achieved (n = 7838). To account for non-response, analytical weights were calculated for the data using an inverse probability weighting -method (IPW), details of which are further elaborated elsewhere (Kuusio et al., 2023b). Weighted data was used in all of the statistical analyses and results published by THL, the thesis at hand included, unless stated otherwise.

For the thesis at hand, the participant count became sieved to a slightly smaller number of n = 6903. This was largely due to the fact that the version of the survey used when conducting a phone interview was more condensed and did not include some of the questions needed for this study. Thus answers gathered via phone call (n = 491) had to be excluded. Furthermore, some answers had to be excluded due to them being either incomplete or inconclusive in the required sections for this study.

The participants were additionally examined in this study by ten different background factors: gender, age, country of origin, education level, socioeconomic status, reason for migration, years spent living in Finland, age of arrival, area of residence and marital status. These background variables were chosen, as they had emerged from previous research as potential variables linked to the sense of belonging, excluding area of residence which was chosen due to its potential relation to the questions used in the survey. Of the sample, 51.6% were male (n = 3296) and 48.4% (n=3607) female, 16.8% (n=983) aged 20 - 29 years, 57.1% (n=3989) aged 30 - 49 years and 26.1% (n=1931) aged 50 - 74 years. Country of origin was divided into seven different groups by size: Russia and the Soviet Union (n=1528, 21,4%), Estonia (n=650, 13.7%), rest of Europe (n=1406, 17%), Middle-East and Northern Africa (n=998, 18.9%), Rest of Africa (n=433, 8,4%), Southeast Asia (n=674, 8.2%) and other countries (n=1214, 12.4%). All background variables and their distributions can be seen from

Appendix table 1. Notable is that whilst the observed values (n) are raw, the percentages (%) are weighted and the distributions (n vs %) may therefore differ slightly. Weighted values should be considered, as they are corrected to be representative of the sampled population and used in the analyses, but raw data are provided for transparency's sake.

2.3 Principles for forming the five groups of belonging

The groups of belonging used in this study are roughly based on Berry's theory of the four possible acculturation process outcomes as discussed above (see Berry, 1997;2009, Sam et al., 2010). Similar study setting with a four-fold division of belonging have been used before (see Seppänen 2020;2022, Hou et al., 2018), but for this study, an additional fifth group was added to screen for individuals, whose sense of belonging was not reached with the strictly country or ethnicity affiliated questions, but who nonetheless felt a sense of belonging. By forming this additional group, the goal was to bring multidimensionality to the belonging variable of the study. Additionally operationalization of belonging was widened to be defined through locality instead of national belonging. The five groups of belonging are:

Group 1) Local (Finnish) sense of belonging only

Group 2) Non-local (Own ethnic group or country of origin) sense of belonging only

Group 3) Integrated (both local and non-local sense of belonging)

Group 4) Other (neither local or non-local) sense of belonging

Group 5) Little or no sense of belonging

These groups were formed on the basis of seven questions concerning belonging related to ethnic or national identity and one question relating to sense of belonging in general. The first seven questions were "To what extent do you feel like you belong to the following groups or areas?": 1) My residential area 2) My local municipality 3) Finns 4) Finnish society 5) The citizens of my country of birth or origin 6) My ethnic group and 7) Europeans. Participants were to answer each question either a) Fully b) Quite a lot c) A little and d) Not at all. The eighth question was a part of the THL-made Experiences of Social Inclusion Scale (ESIS), but was deemed applicable as a stand-alone to the study at hand: "What is your opinion of the following statements: I belong to a group or community that is important for me." This statement was answered on a five-grade likert scale: a) Strongly disagree b) Somewhat disagree c) Neither agree nor disagree d) Somewhat agree and e) Completely agree. How the groups were formed based on the answers can be seen from Table 1 below. Question eight was only considered once no locality was found as it was presumed to be contained within

questions one through seven. Question number seven ,"Europeans", was deemed neither as an exclusionary or inclusionary criterion for locality and nonlocality due to its ambiguity.

Table 1. Requirements for being classified into the groups of belonging. Question posed for Q1-Q7: "To what extent do you feel like you belong to the following groups or areas?" and Q8: "What is your opinion of the following statements: I belong to ...?"

	Group 1: Local	Group 2: Non-local	Group 3: Integrated	Group 4: Other	Group 5: little to no
Q1: My residential area					
Q2: My local municipality Q3: Finns	YES to at least one of these	NO to all of these	YES to at least one of these		
Q4: Finnish society				NO to all of these	NO to all of
Q5: The citizens of my country of birth or origin	NO to all of	YES to at	YES to at		these
Q6: My ethnic group	these	least one of these	least one of these		
Q7: Europeans				YES to at least one of	
Q8: A group or community that is important for me		Not considered	these		

Note. YES means having answered a) Fully or b) Quite a lot in questions one through seven and d) somewhat agree or e) completely agree in question eight. NO means having answered c) A little or d) None at all in questions one through seven and a) strongly disagree, b) somewhat disagree or c) neither agree nor disagree in question number eight.

2.4 Mental Health Inventory-5 (MHI-5)

The Mental Health Inventory-5 (MHI-5) was used as an indicator of psychological distress in both the larger MoniSuomi study as well as in the study at hand. MHI-5 is a standardized self-reporting scale widely used in population studies and primary health care screenings, effective for measuring psychological distress with good internal consistency as cronbach's

alpha values consistently stay in the 0.74 to 0.89 range (Rumpf et al., 2001; Strand et al., 2003; Talala et al., 2008; Nearchou et al., 2019). MHI-5 consists of five questions measuring positive mood (1), symptoms of anxiety (2) and depression (2). Respondents are asked to rate "How much of the time during the past 4 weeks" Q1) Have you been a very nervous person? Q2) Have you felt so down in the dumps that nothing could cheer you up? Q3) Have you felt calm and peaceful? Q4) Have you felt downhearted and blue? and Q5) Have you been a happy person? Questions are answered on a continuum of six answer possibilities, wherein one extreme depicts psychological distress and the other positive mood: 1) All of the time 2) Most of the time 3) A good bit of the time 4) Some of the time 5) A little bit of the time and 6) None of the time.

Answers are graded from 1 to 6, inverted in questions three and five, and then summed together (sum range 5-30) and finally scaled to 0 - 100. Psychological distress can then be either assessed as a continuous variable where lower points indicate high levels of psychological distress and higher points indicate the opposite. Alternatively, the results can be assessed with a standardized cut-off point of 52 points, wherein points below 52 are reported as having clinically significant levels of psychological distress. The latter is often used when reporting percentages of populations experiencing psychological distress and the former when studying psychological distress' links to other variables. For the study at hand, a dichotomous conceptualization is used.

2.5 Statistical analysis

All statistical analyses included in this study were run with pre-treated weighted data that accounted for non-response and corrected each data point to be representative of the sampled Finnish foreign-born population. Weights were calculated using the inverse probability weighting -method (IPW), details of which can be found in the statistical report by Kuusio et al. (2023b). The analyses were run using the SUDAAN 11.0.3 -software. For all tests and analyses used, the required assumptions to run each analysis were checked and deemed sufficiently met. Whilst multicollinearity was present in some of the background variables, it was seen as not affecting the functionality of the analyses in light of the research questions: the function of the used analyses vis-a-vis the background variables was not to see how they predicted psychological distress, but to account for their possible effect on sense of belonging. To answer research question number one, the first step of the analysis was to create the five groups of belonging (grounds of which are articulated above in section 2.3)

and divide the sample into these groups. Seeing as the two smallest groups (4 & 5) still had over 300 participants each, all five groups were deemed satisfactory in size.

For research question number two, a contingency table was then created to see if any of the ten chosen - literacy emergent - background variables were associated with participants' classification in the five different groups of belonging. For example, whether age of arrival was a factor affecting belonging group classifications. Based on this table, a Wald Chi-Squared test was performed to test whether the found connections between the different groups of belonging and background variables were statistically significant. The results of the Wald Chi-Squared test were then reviewed. In addition to Wald Chi-Squared -tests, 95% confidence intervals of the groups of belonging -specific frequencies of background factors' values were assessed to examine where and how these variables were interconnected, i.e. which sub-groups within the variables were (significantly) over- or underrepresented in certain groups of belonging. After this point, the area of residence -variable was left out of further analyses as it showed no significant connections with any of the groups of belonging and did not play a heightened role in previous research concerning sense of belonging.

Lastly, to address research question three, a 4-stepped hierarchical logistic regression analysis was done, wherein the dichotomous dependent variable was psychological distress. Variances were computed using the Taylor Linearization Method, which assumes a stratified without replacement (STRWOR) design, standard errors using Binder's Robust method, and approximate F-values using the Satterthwaite's approximate F-test to compare variances. Odds ratios were procured to examine how the groups of belonging differed in terms of psychological distress. F-values were additionally calculated for each possible pairing of the different groups of belonging (1 through 5, total of 10 comparison pairs) during each step of the regression analysis to broaden the answer for research question number three: whilst the Satterthwaite's approximate F-test for the sense of belonging -variable and the Odds ratios along with the regression coefficients tell us "if" and "how much" the groups differ in terms of psychological distress, the pairwise F-test tells us specifically "how" each group compares to one another.

For the regression analysis, reference groups were to be chosen from each variable. In the case of sense of belonging, the reference group was the integrated sense of belonging (3) -group, which was chosen due to it having the smallest prevalence of psychological distress from the five groups as well as this finding being supported by the literature. For the rest of the variables, the chosen reference groups were as follows: 50-74 -years old for Age, Male for gender, Primary (or lower) for Level of Education (highest completed), Full-time

employed for Socioeconomic status, Married or cohabiting for Marital status, Over 10 years for Years spent in Finland, Over 30 for Age of arrival (years), Other countries for Country of origin and Status as an Ingrian Finn or other returnee with roots in Finland for Reason for migration. The reference group for each variable was chosen on the grounds of whichever group had the most explicit relation to psychological distress recognizable from the literature or from the analyses already run. Where no distinct group stood out, the reference was chosen on the grounds of statistical readability.

The stepwise approach for the logistic regression analysis was chosen in order to be able to control for the effect of background variables. Background variables were chosen to be implemented into the analysis in four steps both for the means of statistical control as well as to see if the amount- or the quality - of the background variables added affected how sense of belonging predicted psychological distress and how the relationship between sense of belonging and psychological distress may change as additional background variables are added. For the 1st step, sense of belonging was used as an explanatory variable. In step 2, age and gender were added as they had been present in most of the previous research. In step 3, the remaining sociodemographic variables - level of education, socioeconomic status and marital status - were added. Finally, in step 4, the variables relating to the immigration process were added: country of origin, years spent living in Finland, reason for migration and age of arrival. Each of the tests mentioned in the previous paragraph were done in each of the steps. After each step, the odds ratios, regression coefficients and Satterthwaithe's f-values as well as their respective p-values were examined to see if and how the added variables had affected how the groups of belonging predicted psychological distress. As the focus of this study was particularly on how sense of belonging affects psychological distress and the used regression analysis was not linear, the Chi-Squared values for the significance of the complete model and Cox & Snell Pseudo-R-squared -values estimating the goodness of fit for the whole model were not necessarily concerned, but are nonetheless provided both for transparency's sake and for the proportionality perspective of the results.

3. RESULTS

Due to the large number of background variables used in the statistical analyses, a lot of data was "by-produced" concerning said background variables' relation to not only sense of belonging, but also to psychological distress itself. However, these findings were not the main focus of this study and therefore are not further expanded upon in this study. Findings concerning the relation of the background variables and psychological distress can nevertheless be found from Appendix tables 2, 3 and 4 for those curious.

3.1 Experiences of belonging and the background factors connected to them

The prevalence for the groups of belonging were: 19.7% (n=1273) in Group 1: Local (Finnish) sense of belonging only, 13.9% (n=1066) in Group 2: Non-local (Own ethnic group or country of origin) sense of belonging only, 56.5% (n=3884) in Group 3: Integrated (both local and non-local) sense of belonging, 4.5% (n=313) in Group 4: Other (neither local or non-local) sense of belonging and 5.4% (n=367) in Group 5: Little or no sense of belonging. The Wald Chi-Squared test showed seven statistical significant results between background factors and the groups of belonging, which were for age, country of origin, reason for migration, years spent living in Finland, age of arrival, level of education and marital status. The results were non-significant for gender, socioeconomic status and area of residence. These results alongside background variable distributions are articulated in appendix table 1.

From the confidence interval comparisons the following notable findings emerge. In the case of age, 50-74 year olds were more likely to belong in the integrated group than the 30-49 year olds and less likely to belong in the non-local and little to no groups than both the 20-29 year olds and the 30-49 year olds. Additionally 30-49 year olds were more likely to belong in the other group than the other two age groups. Country of origin had varying findings: those from Russia or the former Soviet Union were much more likely to belong in the only local group than any other country of origin, excluding the Middle East and Northern Africa, which in turn was more strongly represented in said belonging group than the rest of Africa, Southeast Asia and other countries. Rest of Africa was the least represented group in the only local category, though it did not significantly differ from those of Southeast Asia and other countries. Non-locality was significantly more common in the rest of Europe and other countries groups than in the other country groups besides Southeast Asia whose CI upper

limit just coincided with the lower limits of the two aforementioned groups. Notably no group stood out when the integrated, other or little to no groups of belonging were concerned.

Reason for migration did not differentiate the integrated group. For the only local group, those who migrated due to "status as an Ingrian Finn or other returnee with roots in Finland" were significantly more likely to belong to this group besides "other reasons" and "refugee or asylum seeking". Those who migrated due to "Own job or job seeking", were the least represented in the only local group and this was significant when compared to the three aforementioned reasons. The non-local sense of belonging was significantly more common in those who migrated for their own studies than for any other reasons, though the difference was significant only when comparing to "Own job or job seeking" or "Spouse's job or studies". Non-locality was the least common in those migrating for "status as an Ingrian Finn or other returnee with roots in Finland", "refugee or asylum seeking" or "other reasons" and this difference was significant except for "other family reasons". Those migrating for "other reasons" were significantly more likely to belong in the little to no sense of belonging group than any other migration reasonings. Those with higher education were more likely to belong in the non-local group, though this was significant only compared to secondary education.

For years spent living in Finland, those who had lived in Finland for over ten years were significantly more likely to belong in the integrated and only local groups as well significantly less likely to belong in the only non-local group. No significant differences between the groups of belonging were found between the 1 to 5 and 5 to 10 years -groups. Age of arrival was related to the sense of belonging, such that those who arrived at ages 0-17 were significantly more likely to belong to the local group and less likely to belong to the non-local group. No statistical differences were found between the arrival age of 18 to 29 and over 30. Lastly, those married or cohabiting were significantly more likely to belong in the integrated group than those single or unmarried. Those married or cohabiting were also the least likely to belong in the little to no belonging -group and this difference was significant to single or unmarried.

As the Wald Chi-Squared test results were already reported in Appendix table 1 and the cross tabulations of confidence intervals were seen as breakdown of those same results, it was decided that for readability's sake the numerical values of confidence intervals be left out of the thesis at hand and that the verbal description above was sufficient. The numerical data is however available once requested by contacting the author of this thesis. Lastly, even though research question three was primarily addressed with the regression analysis and its sub-tests, the frequencies of psychological distress provide indicative and descriptive results

and are thus articulated in this section. Prevalences of psychological distress in each group of belonging were: 24.3% in group 1, 29.6% in group 2, 18.3% in group 3, 30.7% in group 4 and 52.1% in group 5. In total 23.5% of the respondents were psychologically distressed.

3.2 Groups of belonging as explicators of psychological distress

The overall performance of the regression analysis was as follows: In step one, the logistic regression model was statistically significant, $X^2(4, N=6551)=222.91$, p=<.001, and explained 3.3% (Cox & Snell pseudo-R2) of the variance in psychological distress. In step two and three, the logistic regression model was likewise statistically significant, explaining 4.0% (Cox & Snell pseudo-R2) of the variance of psychological distress in step two, $X^2(7, N=6551)=268.69$, p=<.001, and 6.2% (Cox & Snell pseudo-R2) in step three, $X^2(14, N=5667)=375.86$, p=<.001. In the fourth step where all background variables were included, the model explained 7.5% (Cox & Snell pseudo-R2) of the variance in psychological distress, $X^2(30, N=5618)=452.80$, p=<.001.

The hierarchical logistic regression analysis along with its complementary tests were done in order to answer research question three whilst controlling for background variables. First, results of the Satterthwaite's approximate F-tests are to be considered. Satterthwaite's approximate F-test results for the sense of belonging -variable (see Table 2 below) showed that for each step of the regression analysis, sense of belonging explained variance in psychological distress on a statistically significant level. In other words, this meant that groups of belonging were a significant predictor of psychological distress, even when all background factors were accounted for.

Furthermore, as articulated in Table 3, in step one of the regression analysis where no background factors were controlled, Satterthwaite's approximate F-test showed that eight out of the ten pairs of groups differed from each other significantly in terms of psychological distress. Of the remaining two pairs, group one and four as well as group two and four did not differ from one another statistically significantly. Although values varied numerically after each step of the analysis, the aforementioned levels of significance held true through each step in all cases except the following: From step three onwards, the difference between group one and four was significant. Additionally, in step four where all background variables were accounted for, group one no longer statistically significantly differed from group three.

The results of the regression analysis were then addressed group- and step-wise for each of the groups of belonging. Regression coefficients and their standard errors, p-values as well as their respective Odds Ratios (95% CI) are displayed in Table 4. For the full results of each step of the hierarchical logistic regression analysis, see Appendix tables 2, 3 and 4 respectively. Interpreting the regression coefficients and their p-values, it can be seen that in step one where no background factors were controlled for, belonging in any of the other four groups of belonging increased the probability of being classified as psychologically distressed as well as explained this difference in prevalence statistically significantly. Likewise in step one, from Odds Ratios it was deductible that Group 1 was roughly 1.4 times, group 2 was 1.9 times, group 4 was 2 times and group 5 was 4.9 times more likely to be classified as psychologically distressed than group 3. These results remained similar in nature throughout each step and for each group both numerically and in terms of statistical significance, excluding the findings for group one in step three and four, where the difference in reference to group three was no longer statistically significant.

Table 2. Results of the Satterthwaite's approximate F-tests for the Sense of belonging -variable, articulated by each step of the regression analysis.

Step	Df	Df (Adj)	F (Adj)	p
Step 1	4	3.987	32.808	<.001
Step 2	4	3.981	32.979	<.001
Step 3	4	3.978	24.993	<.001
Step 4	4	3.973	27.022	<.001

Note. Step 1 included only belonging as an explanatory variable. Step 2 added gender and age. Step 3 added level of education (highest completed), socioeconomic status and marital status. Step 4 added country of origin, years spent living in Finland, reason for migration and age of arrival.

Table 3. Results of the Satterthwaite's approximate F-test for comparison of psychological distress variance between the different groups of belonging, articulated by each step of the regression analysis.

Step	Value	Group 1 vs 2	Group 1 vs 3	Group 1 vs 4	Group 1 vs 5	Group 2 vs 3	Group 2 vs 4	Group 2 vs 5	Group 3 vs 4	Group 3 vs 5	Group 4 vs 5
Step 1	$F_{adj}(1)*$	4.714	12.180	4.242	53.917	33.326	0.074	31.082	16.423	104.35 2	17.914
	p	0.030	<.001	0.072	<.001	<.001	0.785	<.001	<.001	<.001	<.001
Step 2	$F_{adj}(1)*$	4.236	12.379	3.679	53.756	32.385	0.222	32.413	17.634	103.57 8	17.343
	p	0.040	<.001	0.055	<.001	<.001	0.638	<.001	<.001	<.001	<.001
Step 3	$F_{adj}(1)*$	4.569	6.081	5.038	45.783	22.653	0.480	25.459	15.577	77.967	12.446
	p	0.033	0.014	0.025	<.001	<.001	0.488	<.001	<.001	<.001	<.001
Step 4	$F_{adj}(1)^*$	8.348	3.161	7.973	22.438	24.850	0.421	26.002	17.471	84.989	13.625
	p	0.004	0.075	0.005	<.001	<.001	0.516	<.001	<.001	<.001	<.001

^{*}Both the adjusted degrees of freedom and the non-adjusted degrees of freedom were the same (1.000).

Note. Step 1 included only belonging as an explanatory variable. Step 2 added gender and age. Step 3 added level of education (highest completed), socioeconomic status and marital status. Step 4 added country of origin, years spent living in Finland, reason for migration and age of arrival.

Table 4. Results of the hierarchical logistic regression analyses for groups of belonging and their Odds Ratios articulated step- and group-wise and without background variables, where the reference group was group 3 and the dependent variable psychological distress.

Group	Step	В	SE B	p	OR (95% CI) [Min;Max]
Group 1:	Step 1	0.358	0.103	<.001	1.430 [1.170;1.748]
Local sense of belonging only	Step 2	0.362	0.103	<.001	1.436 [1.174;1.757]
·	Step 3	0.277	0.112	0.014	1.319 [1.058;1.644]
	Step 4	0.204	0.115	0.075	1.226 [0.979;1.535]
Group 2:	Step 1	0.629	0.109	<.001	1.876 [1.515;2.323]
Non-local sense of belonging	Step 2	0.619	0.109	<.001	1.858 [1.501;2.299]
only	Step 3	0.570	0.120	<.001	1.769 [1.398;2.237]
	Step 4	0.611	0.123	<.001	1.843 [1.449; 2.344]
Group 4: Other sense of belonging	Step 1	0.679	0.167	<.001	1.971 [1.420;2.738]
	Step 2	0.705	0.168	<.001	2.023 [1.456; 2.812]
	Step 3	0.704	0.178	<.001	2.022 [1.425;2.869]
	Step 4	0.735	0.176	<.001	2.086 [1.477;2.944]
Group 5:	Step 1	1.578	0.154	<.001	4.846 [3.580;6.560]
Little to no sense of belonging	Step 2	1.595	0.157	<.001	4.930 [3.626;6.703]
20101181118	Step 3	1.511	0.171	<.001	4.532 [3.240;6.338]
	Step 4	1.565	0.170	<.001	4.782 [3.429; 6.671]

Note. Step 1 included only belonging as an explanatory variable. Step 2 added gender and age. Step 3 added level of education (highest completed), socioeconomic status and marital status. Step 4 added country of origin, years spent living in Finland, reason for migration and age of arrival.

4. DISCUSSION

The purpose of this study was to examine how sense of belonging in the Finnish foreign-born population is experienced in reference to locality and non-locality and whether these experiences of belonging differ in terms of or hold an effect over psychological distress. The purpose thus consisted of two main focuses: 1) Sense of belonging in the Finnish foreign-born population itself and 2) How it affects psychological distress. These questions were approached with a division into five different groups of belonging based on whether respondents showed sense of belonging locally, non-locally or in any other way.

Results indicated that the vast majority of the Finnish foreign-born population experiences some form of sense of belonging and that most of those experiences include both local and non-local aspects. However, at the same time, notable proportions of the experiences of belonging were unidimensional in terms of locality, containing either only a local or a non-local sense of belonging - the former being more common. Interestingly, a discernible yet small minority of the belonging experiences contained no dimension of locality. Of the background variables used in this study, age, country of origin, reason for migration, years spent living in Finland, age of arrival, level of education and marital status were found to be linked with certain groups of belonging and affecting sense of belonging experienced in general.

When taking into account said variables, the results showed that the groups of belonging differed significantly from one another in terms of psychological distress. Those whose experiences of belonging contained a local aspect had lower levels of psychological distress than those whose did not. Experiencing a sense of belonging in a way that did not include a local dimension was still better than having little to no sense of belonging from the perspective of psychological distress, but it did not differ whether the focus of said belonging was non-local or other.

4.1 Framing belonging through locality recalibrates findings on background factors

Breaking down the results concerning research questions one and two and the hypotheses affiliated with them, divergent findings emerged in relation to how they compare to previous research. Firstly, when we look at how sense of belonging was distributed between the five

groups, we find that related hypotheses set in this study held mostly true: the integrated group was the largest in size, followed by the local and non-local, then the other and little to no -groups, which were also similar in size. However, the local and non-local groups did differ in size, unlike what was hypothesized in this study. This finding is not in opposition to findings in previous studies, rather actually quite in line with them. The combined percentage these groups represent of the entirety of the belonging experiences mirrors those of previous studies and it is mostly their bilateral size differences that seem prone to variance depending on the study (Berry et al., 2011; Yoon et al., 2013; Choy et al., 2021). This draws focus on the notion noted by Yoon et al. (2013) and Berry et al. (2011) that when we study belonging, both the context and how belonging is conceptualized greatly affect the findings that are produced.

This notion is even more prominent when we compare the notably higher combined share of those whose experiences contained local aspects in this study, three-fourths, to the recent share of the foreign-born population who experienced a sense of belonging towards Finns, which was roughly half (Seppänen et al., 2022; 2023). Whereas the latter have studied a more narrow sense of belonging "towards" Finland, I have aimed to study a broader sense of belonging "in" Finland - that is within Finland's borders. This is not only a conceptual difference, but also an implicational one. As many of the previous studies have focused on belonging as an indicator of integration, I have focused on belonging from the perspective of mental health. My conceptualization has aimed to highlight the multidimensional and bilateral aspects of belonging emphasized by Allen et al. (2021) and Yoon et al. (2013) belonging consists of various different dimensions and if we only inspect it from the perspective of national belonging, we end up with a monotonic and admittedly inadequate representation of the phenomenon at hand. Additionally, the emergence of the "other" group as a distinctive category in this study, even when it was used as a safety net of sorts, and the general finding that 95% of respondents experienced some degree of sense of belonging, reinforces the growing need for more plural research concerning sense of belonging.

Expanding further on the plurality of belonging, are the findings related to the ten background factors used in this study. I presumed that all of the chosen factors would have an effect on sense of belonging, but three of them did not: gender, socioeconomic status and area of residence. For gender, findings have been varied and even though psychological distress seems to be somewhat gendered, no conclusive findings have been found concerning belonging. This could be due to the fact that whilst psychological distress may vary by gender due to physiological mechanisms and gender-specific external stressors, such as societal stigmas and expected gender-roles, the need to belong is more or less universal and thus the

experiences could be more normally distributed. I hypothesized that the area of residence would affect the sense of belonging, because locality played a central role in how sense of belonging was conceptualized and operationalized in this study and therefore I assumed that where you lived in Finland would contribute to this experience. Significant findings would have indicated regional disparities, which in turn would have meant that your sense of belonging could have depended on whether you lived for example in the Helsinki metropolitan area or in a smaller municipality. For the benefit of all concerned, this was not the case, rather sense of belonging did not differ based on where you lived.

Lastly, socioeconomic status did not affect sense of belonging, even though prior studies suggested otherwise (Hou et al., 2018; Choy et al., 2021). Whilst this is a wonderfully encouraging finding, it poses the question, "Why are prior findings not replicated here?" One potential reason for this could be that socioeconomic status was addressed only very generally in the questionnaire used (see Appendix table 1) and it could be too broad an approach to be distinctive. An alternative explanation could lie in the locality aspect utilized here that accounts for things like neighborhoods and municipalities. Socio-economic status is often reflected in where people live, largely due to the cost of housing, and therefore, people are often surrounded by those with similar socioeconomic statuses or backgrounds (Lockwood et al., 2018). Thus it could be theorized that sense of belonging is experienced laterally even when socioeconomic differences could have an impact on more narrow definitions of belonging. Furthermore, the hypothesis made concerning lower levels of education being linked to the group of no belonging did not hold true in light of the results. Here again a experience of lateral belonging could be an explanatory factor and results may have varied had the questionnaire asked only for societal belonging, as we know alienation from society and education are connected to one another (Paananen et al., 2019).

As for the remaining hypotheses concerning background factors and their connections to the groups of belonging - they held true on all parts. The integrated group was characterized by higher age, having been or being married as well as having resided in Finland for over 10 years. These findings are consistent with previous research done in Finland (Seppänen et al, 2022;2023). Notable here is that the connection between higher age and integrated sense of belonging might also be reflective of the years resided factor as those of higher age are more likely to have resided in Finland for a longer period of time. The local group was characterized by having migrated before the age of 18, having resided in Finland for over 10 years, migrating from Russia or the former Soviet Union and migrating due to status as an Ingrian Finn or other returnee with roots in Finland. Whilst these findings are

also consistent with previous research (Kuusio et al., 2020), it is important to note the prevalence of lower age of immigration within this group. The younger one arrives in a new country, the more likely they are to spend their critical years of development in the new country as well as form important bonds with peers and the less time they have had time to do so in their country of origin. Therefore, it is reasonable that local experience of belonging would prove dominant. The non-local group on the other hand was characterized by age of arrival over 18, age of under 50, residing for under 10 years, having migrated due to their own studies, higher education and migrating either from Southeast Asia, Rest of Europe or Other countries. Findings concerning age were in line with previous research: migrating in adulthood means that, for example, learning a new language is more challenging and as the person has already grown in a different culture, the role of said culture could become heightened (Wu et al., 2011; Yoon et al., 2013; Castaneda et al., 2019). Migrating due to own studies and higher education being related to non-locality could be interpreted through the often-seen phasic nature of education meaning that migrants could be more likely to view their arrival and residency in Finland more instrumental in a sense that their intents might be to apply acquired education elsewhere as well as knowing that those with higher education are more likely and more armed to re-mobilize in search of better opportunities resulting in lesser motive to belong locally (Handler, 2018; Allen et al., 2021).

Concerning the factors relating to the other group of belonging, it is important to note that the other group was formed as a sieve to catch those experiences of belonging that had no aspects of locality within them but who would otherwise be incorrectly classified as having no sense of belonging. What this means is that those experiences of belonging that included locality can not be distinguished in terms of what other forms of belonging they included, even though it is known that some of these other forms of belonging, like belonging in religious communities, are fairly common among some foreign-born populations as noted by Seppänen et al. (2018). This being said, the other group was only characterized by an age of 30-49. Due to the way this group was formed and the resulting small prevalence of it, these results are not surprising. However, the emerged age factor raises further discussion - why is this certain age group more often without any experiences of locality? As these findings are first of their kind, literature proves limited, but one possible explanation could be that the ages of 30 to 49 are more generally characterized by children and work and thus belonging through the lens of locality could lessen in importance. This could be further supported by the fact that after 50 years, the other group of belonging is no more common than the other groups. Lastly, the little to no sense of belonging group was characterized by immigrating due to other reasons, being single or unmarried and having resided in Finland for less than 10 years. These findings are consistent with previous findings (Kazi et al., 2019; Kuusio et al., 2020). As to why this could be the case for being single or unmarried, is that romantic relationships are a highly valued aspect of belonging and not being in one despite the desire to do so, could result in feelings of non-acceptance and thus non-belonging. Immigration due to other reasons could result in little to no sense of belonging precisely because of the ambivalence that the reasoning holds. If the reasoning for immigration is not easily discernible, it could mean that said person might themselves feel adrift in their life. Admittedly, we can only hypothesize, as it is not known what the other reasonings include.

All in all results concerning how the Finnish foreign-born population experiences belonging and what factors relate to it unearthed, recalibrated and solidified important findings. Firstly, the results shed light on and emphasize the fact that whether we study sense of belonging "in" or "towards" Finland, has a large impact on the results and picture of the phenomenon we end up with. Framing belonging from a standpoint of locality produces better results in terms of percentages of who belongs than nation-specific standpoints as it is a broader, more inclusive, approach. This brings forth a question of whether we should reconsider how we approach integration or if we should at least take a step back to re-evaluate why we choose to focus on national belonging. The breakdown of the used groups of belonging and the underlying factors help us identify which parts of the foreign-born population are at risk for not belonging or falling outside of local groups, i.e. those who do not feel at home, at home (Castaneda et al., 2019). Identifying the at-risk groups is only the first step, but understanding why they are at risk is crucial for effective action. To do so, applying Allen et al.'s (2021) conceptualization of the four building blocks of sense of belonging, as I have aimed to do when discussing the hypothesized reasons for the found connections, could prove a viable way to address this: a person's lack of belonging is caused either due to lack of competencies, opportunities, motivations or perceptions. If we are able to identify the components of belonging that are faulty, we can then try and improve the factors affecting them.

4.2 Local sense of belonging decreases levels of psychological distress

Research has thus far reached a consensus that integration is the best outcome of the acculturation process in terms of what implications it has on the individual's overall well-being (Berry et al., 2007; Hou et al., 2018; Choy et al., 2021). As sense of belonging is

considered a dimension of the aforementioned findings, I set out to figure if these findings would hold true even if the conceptualization of belonging was altered. First and foremost, the hypothesis that sense of belonging would be a predictor of psychological distress held true throughout all the analytical steps. Herein it is important to note the polyetiological nature of psychological distress as exemplified by the finding concerning the overall fit of the model: although sense of belonging explained a significant portion of the variance in psychological distress - especially when all background factors were accounted for - the percentages of variance explained were not particularly high. This was presumed, as the function of the chosen regression analysis was to control for and provide information on how the different background variables affected the relationship between sense of belonging and psychological distress. Additionally, whilst the focus of interest was predominantly in steps one and four, steps two and three provided important added information on the multidimensionality of belonging as a phenomenon. As the steps did not substantially differ in terms of how much they added to the model, it suggests that neither sociodemographic nor migration related factors alone can explain sense of belonging nor its relation to psychological distress and therefore a broad and aptly controlled approach is warranted.

Surprisingly, the hypotheses set on how the five different groups of belonging would differ did not for the most part prove correct. Even though the hypotheses did not prove correct verbatim, most of the findings are still not necessarily contrary to previous research. In general, the results not supporting these hypotheses suggest that those findings concerning acculturation strategies or a national sense of belonging, on which they were based, do not directly translate to how belonging was utilized in this study. Nonetheless, some hypotheses held partially true: the integrated group had the lowest prevalence of psychological distress, the non-local group had a higher prevalence - similar to that of the other group - of psychological distress than the integrated group, and the little to no sense of belonging group had the highest prevalence of psychological distress. The remaining hypotheses did not hold, which meant that the relationships between the groups were as follows: the integrated and local groups had similar and the lowest level of psychological distress, whilst the other and the non-local groups had higher - but comparable to one another - levels of psychological distress, and the little to no belonging group stood out as having the highest level of psychological distress that differ from all groups substantially.

The findings that the local and integrated group did not differ in terms of psychological distress, or that the local and non-local did, are not particularly anomalous when comparing to previous research as the local and non-local groups have been prone to

variance more than the integrated and the no-belonging groups have (Yoon et al., 2013; Hou et al., 2018; Choy et al., 2021). Moreover, these results yet again epitomize the susceptibility to influence that change in contexts, operationalizations and conceptualizations hold (Berry et al., 2011; Yoon et al., 2013). Nonetheless, what was potentially enriching, was the scale of the findings in terms of how many were grouped in those groups that were better off vis-a-vis psychological distress. When compared to Seppänen's (2022;2023) findings of roughly half experiencing sense of belonging to Finns and that this was connected to the psychological strain, we not only replicate the findings but also build atop of them. Approaching sense of belonging through locality still yields a strong connection to psychological distress but in doing so we effectively see a larger proportion of the Finnish foreign-born population experiencing sense of belonging in Finland. The finding seems to suggest both that local sense of belonging differs from national sense of belonging and that when examining sense of belonging as a predictor of psychological distress, the physical and spatial proximity of the object of belonging is of key importance.

4.3 Strengths and limitations

There are several strengths to this study. A prominent one is the size of the sample even further enhanced by the stratified method of participant selection and the usage of the IPW-method used to give the data used in the analysis an accurate weighing when compared to the sampled population of Finnish foreign-born people. This means that the findings in this study can be interpreted as quite accurately, albeit generally, representing the sampled population and thus aptly generalizable to said population. A second strength is the fact that the sense of belonging grouping was developed by applying and expanding upon robust empirical evidence from the closely related field of acculturation research as well as upon belonging research that was both of integrative and analogous nature.

Additionally, the number of background factors used in this study provided statistical reliability in terms of that the more factors controlled for, the more likely the results concerning belonging are to measure belonging and not something different unbeknownst to us (Faber et al., 2014; Barnwell-Ménard et al., 2015). Furthermore, the used measure of psychological distress, MHI-5, has been validated in numerous studies and thus data concerning psychological distress can be seen as reliable (Rumpf et al., 2001; Strand et al., 2003; Talala et al., 2008; Nearchou et al., 2019). MHI-5 has however received criticism due to its failure to account for somatic symptomatology, which are common manifestations of

psychological distress in some cultures (Bagayogo et al., 2013). Lastly, a unique strength of this study was the implementation of the other group, which not only succeeded in its purpose of preventing participants from being falsely categorized as having no sense of belonging - effectively halving the potential group in size - but also showed that this measure proved substantial in terms of psychological distress experienced between these groups.

Even though a large sample and a broad conceptualization of belonging have notable strengths, they also come with their drawbacks. First and foremost, it is important to emphasize the limitations that come with population studies in general that apply here as well. The results produced are always built upon averages, thus general and broad by nature, and can not therefore provide detailed individual-level breakdowns. Thus, especially in the case of such a varied, complex and subjective phenomenon as sense of belonging, further highlighted by the high variance between background factors observed here, and such a heterogenous population as the Finnish foreign-born one, it is important to interpret these results with caution and relativity. Moreover, larger sample sizes, and to some extent, the usage of a logistic regression model, increase the likelihood for Type 1 errors (Austin et al., 2004; Faber et al., 2014; Barnwell-Ménard et al., 2015). Therefore, the significance levels should be interpreted with this in mind and in conjunction with the values for which they are calculated for. Conversely, Type 1 and Type 2 errors have an inverse relationship, which in the context of this study means that the likelihood of a significant connection being missed is relatively low. Relating to the large size of the study, was also the size of the questionnaire, roughly 20 pages long, that could have understandably affected the participants' quality of answers. The questionnaire also had a restricted amount of answering languages (20), excluded illiterate people as well as had other exclusion criteria, which could all have an effect on the results. Those excluded here could also face exclusion elsewhere in society, which would likely translate to their experiences of belonging. An affecting factor could have also been that the survey was done by THL - a quasi-governmental organization. How likely is one to answer truthfully that they do not feel like they belong, when the question is posed by a national institute of the nation you are "supposed" to feel belonging towards?

The broad definition of belonging proved a strength precisely because it was broad, but has limitations for the same reason. Because the groups of belonging were composed of multiple questions, we lose the information these questions hold as stand-alone questions and we can not differentiate what different combinations of answers the groups held for each participant. Retrospectively speaking, additionally dividing the local grouping into Finnish and Local based on if sense of belonging was felt towards Finns and Finnish society or to

municipality and residential area, could have provided more in-depth results. The only thing we can say is, whether or not the participants felt a sense of belonging in the national, spatial and geological (local) frames that may be present in Finland such as neighborhood or country. Moreover, we can not accurately assess what aspects each individual question holds which is particularly important when we talk about residential areas - if they consist of other people born abroad or whether there is an even distribution of Finnish-born people as well. It is then of debate, what sense of belonging experienced in residential areas actually tell us in terms of integration. Moreover quantitative data collection leaves no room for subjective experiences and we can not grasp how differently respondents might have or could have interpreted belonging or the questions related to it. Even though the other group existed in this study and proved fruitful, it was not deductible from this study how non-locality-related experiences of belonging were present in the groups that were categorized based on locality.

Lastly, as the groupings were made by an applied categorization rather than using individual answers, the decision on how respondents were divided into the groups were made by the author of this study - which is typical to belonging research due to its lacking methodological congruence critiqued by both Allen et al (2021) and Yoon et al. 2013). Thus, the extent to which these groups succeed in measuring what they aim to, has not been tested outside of this study. Nonetheless, as long as the results of this study are interpreted with apt understanding of its limitations, they can be of value either as a reflective tool when discussing or choosing approaches to belonging research or as a starting point when trying more accurately assess the issues of not only sense of belonging, but also of psychological distress prevalent in the Finnish foreign-born population.

4.4 Going forward: From theoretical population studies to subjective experiences and local action

As I have hopefully successfully managed to highlight, sense of belonging among the Finnish foreign-born population is a highly multidimensional and -etiological phenomenon that has direct implications on psychological distress. Whilst what causes psychological distress and whether people experiencing psychological distress are more likely to feel like they do not belong or whether feeling like one does not belong results in psychological distress continue to be researched, the results of this study indicate that on a general level, improving local experiences of belonging among the Finnish foreign-born population could prove a beneficial way to improve psychological well-being in said population. To do so requires more in-depth

studies on both what local belonging entails and how it is experienced on different levels of lived and experienced environments such as families, homes, residential areas, communities and cities, as well as how experiences of local belonging could be fostered.

From the perspective of future research, this means that the focus ought to be more diversified. For example, to see if targeting local experiences of belonging actually manages to lessen psychological distress, longitudinal research designs should be utilized and the used metrics and questionnaires of belonging be more consistent. Comparing the results from the last study on well-being of Finnish foreign-born persons, FinMonik, could prove beneficial, but since the questions in the survey differed and data points can not be connected, no direct comparisons can be made or changes over time addressed. As this study, and prior studies, found significant connections between sense of belonging and background factors as well as identified certain demographics to be more at risk for non-belonging or lack of local belonging, these connections should be further inspected - preferably individually and with more specific approaches.

Additionally, like factors not used here. language proficiency, and individualism-collectivism -scale, have been found connected to sense of belonging and more specific groups at risk for non-belonging have been reported (Yoon et al., 2013; Hou et al., 2018; Kazi et al., 2019; Renvik et al., 2024). These naturally call for more in-depth examination. It should also be kept in mind that, whilst assessing pre-migration factors might help us identify who might be at risk for increased psychological distress or lack of belonging, pre-migration factors like cultural differences should not be used as a way to explain these phenomena as noted for example by Jäppinen et al. (2023), but rather applying and addressing conceptualizations like Allen et al.'s (2021) four components of belonging competencies, opportunities, motivations, and perceptions - could help target the causes behind the phenomena.

The chosen focus of this study, sense of belonging, is only one approach to hopefully diminishing psychological distress. Many of the same issues that stand if the way of belonging in the Finnish foreign-born population, also affect the psychological strain and mental well-being experienced, like discrimination, racism, income disparities and being in a disadvantaged position in the job market (Yoon et al., 2013; Eid et al., 2023; Rask et al., 2023). Finding solutions to higher levels of psychological distress and issues of non-belonging also means addressing and researching the aforementioned factors. Especially experiences of discrimination and racism, in all of the levels and forms they present, are strongly associated with poorer quality of life and integration into the Finnish society among

the Finnish foreign-born population (Eid et al., 2023). Furthering research and taking action towards local sense of belonging thus requires adopting an anti-racist approach in all aspects of society and life in Finland - not as a tool to be utilized when necessary, but as an all-encompassing and omnipresent mindset in everything we do.

More than anything else, this study has emphasized the need to approach the concept of belonging among the Finnish foreign-born population far more multidimensionally than merely through integration or national sense of belonging and highlights the importance of local experiences of belonging as crucial for mental well-being. This shift towards a more diverse approach is already being made, like can be partly seen from the overview of integration (Kotoutumisen kokonaiskatsaus 2023: Näkökulmana väestösuhteet) published by the Ministry of Economic Affairs and Employment (Renvik et al., 2024) and Centre for Economic Development, Transport and the Environment's Hyvät väestösuhteet -project (ELY-keskus, 2024). To understand the highly subjective phenomenon of sense of belonging, subjective experiences are required. This means that quantitative population studies, whilst having their strengths and roles to play, will almost always be too broad of an approach and thus insufficient to grasp what local belonging entails and more importantly how it is experienced. If the goal is to improve local sense of belonging and make use of the research that is produced, action will always require close relationships and inclusion of the people affected. This means that organizations, decision makers, researchers and individuals alike must make decisions together: local sense of belonging can only be experienced locally, thus research and action concerning it must take place locally.

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6. APPENDIX'

Appendix table 1. Wald Chi-Squared Test values for independence of the ten background variables and five groups of belonging.

Value	N	Percentage (weighted)	χ2	df	<i>p</i> -value
Gender	6903	100.0	5.239	4	.264
Male	3296	51.6			
Female	3607	48.4			
Age (years)	6903	100.0	31.781	8	<.001
20-29	983	16.8			
30-49	3989	57.1			
50-74	1931	26.1			
Country of origin	6903	100.0	131.281	24	<.001
Russia and the Soviet Union	1528	21.4			
Estonia	650	13.7			
Rest of Europe	1406	17.0			
Middle-East and Northern Africa	998	18.9			
Rest of Africa	433	8.4			
Southeast Asia	674	8.2			
Other countries	1214	12.4			
Level of Education (highest completed)	6486	100.0	19.228	8	.015
Primary (or lower)	953	20.3			
Secondary	2003	34.7			
Higher	3530	45.0			

Value	N	Percentage (weighted)	χ2	df	<i>p</i> -value
Socioeconomic status	6712	100.0	16.750	12	.159
Full-time employed	3726	55.2			
Part-time employed	614	9.8			
Student	732	10.7			
Other	1640	24.3			
Reason for migration	6810	100.0	96.542	24	<.001
Own job or job seeking	1567	23.7			
Own studies	852	11.3			
Spouse's job or studies	674	7.9			
Other family reasons	1932	25.6			
Refugee or asylum seeking	900	18.0			
Status as an Ingrian Finn or other returnee with roots in Finland	610	8.9			
Other reasons	275	4.5			
Years spent living in Finland	6903	100.0	103.072	8	<.001
1-5 years	1787	16.0			
5-10 years	1788	29.8			
Over 10 years	3328	54.2			
Age of arrival	6903	100.0	51.720	8	<.001
0-17 years old	582	13.2			
18-29 years old	2674	40.5			
Over 30 years old	3647	46.4			

Value	N	Percentage (weighted)	χ2	df	<i>p</i> -value
Area of residence	6903	100.0	11.346	16	.789
Helsinki metropolitan area	2899	49.2			
Rest of capital region	468	7.9			
Rest of Southern Finland	1764	18.2			
Western Finland	1234	15.1			
Northern and Eastern Finland	538	9.6			
Marital status	6604	100.0	43.454	8	<.001
Married or cohabiting	4825	68.9			
Single or unmarried	1098	19.1			
Separated, divorced or widowed	686	12.1			

Appendix table 2. Supplementary results for the hierarchical logistic regression analysis predicting psychological distress including the added background variables and their Odds Ratios for step 2.

Step 2

	Value	В	SE B	t	p	OR (95% CI) [Min;Max]
Groups of belonging	Group 1	0.362	0.103	3.518	<.001	1.436 [1.174;1.757]
5 5	Group 2	0.619	0.109	5.691	<.001	1.858 [1.501;2.299]
	Group 3	0.000	0.000	-	-	1.000 [1.000;1.000]
	Group 4	0.705	0.168	4.199	<.001	2.023 [1.456; 2.812]
	Group 5	1.595	0.157	10.177	<.001	4.930 [3.626;6.703]
Age	20-29	0.494	0.124	3.990	<.001	1.639 [1.286;2.090]
	30-49	0.035	0.096	0.368	0.713	1.036 [1.286;2.090]
	50-74	0.000	0.000	-	-	1.000 [1.000;1.000]
Gender	Male	0.000	0.000	-	-	1.000 [1.000;1.000]
	Female	0.155	0.079	1.956	0.050	1.167 [1.000;1.363]

Appendix table 3. Supplementary results for the hierarchical logistic regression analysis predicting psychological distress including the added background variables and their Odds Ratios for step 3.

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	Value	В	SE B	t	p	OR (95% CI) [Min;Max]
Groups of belonging	Group 1	0.277	0.112	2.466	0.014	1.319 [1.058;1.644]
	Group 2	0.570	0.120	4.570	<.001	1.769 [1.398;2.237]
	Group 3	0.000	0.000	-	-	1.000 [1.000;1.000]
	Group 4	0.704	0.178	3.947	<.001	2.022 [1.425;2.869]
	Group 5	1.511	0.171	8.830	<.001	4.532 [3.240;6.338]
Age	20-29	0.333	0.169	1.970	0.049	1.395 [1.002;1.941]
	30-49	0.258	0.107	2.408	0.016	1.295 [1.049;1.598]
	50-74	0.000	0.000	-	-	1.000 [1.000;1.000]
Gender	Male	0.000	0.000	-	-	1.000 [1.000;1.000]
	Female	0.090	0.088	1.025	0.305	1.095 [0.921;1.301]
Level of Education,	Primary (or lower)	0.000	0.000	-	-	1.000 [1.000;1.000]
highest completed	Secondary	-0.139	0.138	-1.007	0.314	0.871 [0.665;1.140]
	Higher	0.150	0.126	1.192	0.233	1.162 [0.908;1.486]
Socio- economic status	Full-time employed	0.000	0.000	-	-	1.000 [1.000;1.000]
status	Part-time employed	0.241	0,157	1.532	0.126	1.272 [0.935;1.731]
	Student	0.249	0.159	1.561	0.119	1.282 [0.938;1.752]
	Other	0.666	0.105	6.334	<.001	1.946 [1.584;2.392]
Marital status	Married or cohabiting	0.000	0.000	-	-	1.000 [1.000;1.000]
	Single or unmarried	0.614	0.119	5.139	<.001	1.848 [1.462;2.336]
	Separated, divorced or widowed	0.536	0.136	3.952	<.001	1.709 [1.310;2.230]

Appendix table 4. Supplementary results for the hierarchical logistic regression analysis predicting psychological distress including the added background variables and their Odds Ratios for step 4.

Sten	4
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	Value	В	SE B	t	p	OR (95% CI) [Min;Max]
Groups of belonging	Group 1	0.204	0.115	1.778	0.075	1.226 [0.979;1.535]
ovionging	Group 2	0.611	0.123	4.985	<.001	1.843 [1.449;2.344]
	Group 3	0.000	0.000	-	-	1.000 [1.000;1.000]
	Group 4	0.735	0.176	4.180	<.001	2.086 [1.477;2.944]
	Group 5	1.565	0.170	9.219	<.001	4.782 [3.429;6.671]
Age	20-29	0.209	0.219	0.954	0.340	1.223 [0.802;1.894]
	30-49	0.201	0.129	1.559	0.119	1.223 [0.949;1.576]
	50-74	0.000	0.000	-	-	1.000 [1.000;1.000]
Gender	Male	0.000	0.000	-	-	1.000 [1.000;1.000]
	Female	0.105	0.094	1.117	0.264	1.110 [0.924;1.334]
Level of Education, highest	Primary (or lower)	0.000	0.000	-	-	1.000 [1.000;1.000]
completed	Secondary	-0.164	0.146	-1.120	0.263	0.849 [0.637;1.131]
	Higher	0.107	0.140	0.763	0.445	1.113 [0.846;1.464]
Socio- economic	Full-time employed	0.000	0.000	-	-	1.000 [1.000;1.000]
status	Part-time employed	0.230	0.162	1.415	0.157	1.258 [0.915;1.730]
	Student	0.187	0.168	1.115	0.265	1.206 [0.868;1.675]
	Other	0.617	0.110	5.618	0.000	1.854 [1.496;2.300]
Marital status	Married or cohabiting	0.000	0.000	-	-	1.000 [1.000;1.000]
	Single or unmarried	0.577	0.124	4.653	<.001	1.780 [1.396;2.269]
	Separated, divorced or widowed	0.576	0.136	4.243	<.001	1.779 [1.363;2.321]

	Value	В	SE B	t	p	OR (95% CI) [Min;Max]
Country of origin	Russia and the Soviet Union	0.571	0.157	3.643	<.001	1.771 [1.302;2.408]
	Estonia	0.245	0.191	1.285	0.199	1.278 [0.879;1.857]
	Rest of Europe	0.516	0.147	3.522	<.001	1.676 [1.257;2.233]
	Middle-East and Northern Africa	0.650	0.168	3.866	<.001	1.916 [1.378;2.664]
	Rest of Africa	-0.001	0.218	-0.004	0.997	0.999 [0.652;1.530]
	Southeast Asia	0.344	0.188	1.832	0.067	1.411 [0.976;2.039]
	Other countries	0.000	0.000	-	-	1.000 [1.000;1.000]
Years spent	1-5 years	0.000	0.000	-	-	1.000 [1.000;1.000]
living in Finland	5-10 years	0.209	0.131	1.596	0.111	1.232 [0.953;1.593]
	Over 10 years	0.088	0.145	0.606	0.544	1.092 [0.821;1.452]
Reason for migration	Own job or job seeking	0.056	0.200	0.278	0.781	1.057 [0.714;1.566]
	Own studies	0.585	0.214	2.733	0.006	1.794 [1.180;2.729]
	Spouse's job or studies	0.377	0.231	1.633	0.102	1.458 [0.927;2.293]
	Other family reasons	0.140	0.189	0.743	0.457	1.151 [0.795;1.166]
	Refugee or asylum seeking	0.324	0.228	1.420	0.156	1.382 [0.884;2.161]
	Status as an Ingrian Finn or other returnee with roots in Finland	0.000	0.000	-	-0.457	1.000 [1.000;1.000]
	Other reasons	0.296	0.271	1.093	0.274	1.345 [0.791;2.287]

	Value	В	SE B	t	p	OR (95% CI) [Min;Max]
Age of arrival	0-17	0.027	0.224	0.121	0.904	1.027 [0.662;1.595]
(years)	18-29	0.039	0.113	0.347	0.729	1.040 [0.833;1.299]
	Over 30	0.000	0.000	0.000	0.000	1.000 [1.000;1.000]