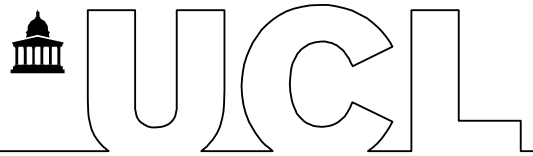


Dissertation:
Basic Income and Gender Empowerment: An
Intersectional Approach to Evaluating BI's Impact in
Finland

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Abstract

This dissertation investigates the gendered impact of Basic Income (BI) on empowerment in Finland, utilizing an expanded empowerment index and an intersectional approach. The research challenges contrasting theories surrounding UBI's effects on women's empowerment: some argue that UBI reinforces traditional gender roles, while others suggest it enhances women's autonomy.

The study addresses two key questions: how BI affects a comprehensive empowerment index across genders, and what intersectional factors influence this impact in Finland. Drawing from the 2017-2018 Finnish Basic Income experiment, this study develops an expanded empowerment index that includes various dimensions such as life satisfaction, health, mental well-being, cognitive function, social capital, and meaningful work. The study examines responses from the UBI-treated group (n = 569) and a control group (n = 1,028), employing χ^2 statistics and regression analyses to evaluate the effects of UBI on empowerment across various intersectional categories, including age, education, household composition, income, and urbanization.

Our findings, consistent with previous research (Kangas et al., 2023), indicate that UBI can equally enhance individual empowerment for both men and women. However, our intersectional analysis reveals nuanced variations in empowerment outcomes based on factors such as age, education and household composition. Notably, a marginally significant three-way interaction between treatment, gender, and household composition suggests that UBI's impact may vary depending on family structure, partially supporting theories regarding UBI's potential to alter traditional gender roles.

This research underscores the importance of considering intersectional factors in UBI policy design and evaluation, contributing to the ongoing debate about UBI's role in promoting gender equality and empowerment through nuanced, context-specific approaches.

Keywords: Basic Income, Gender Equality, Empowerment, Finland, Intersectionality

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2. Introduction

Universal Basic Income (UBI) is a social welfare concept gaining traction globally, particularly in light of increasing automation, joblessness, and precarious employment. As highlighted by United Nations Secretary-General António Guterres in 2018, governments may need to consider UBI as a response to these challenges (Guterres, 2018). The concept has featured in political campaigns across diverse nations, including India, Mexico, and the United States, reflecting its growing relevance in policy discussions.

UBI aims to transform societies by empowering citizens and promoting human flourishing. However, historical precedents suggest that ambitious political movements often deprioritize gender equality in favour of other interests (Koslowski and Duvander, 2018). In scholarly debates, UBI's effects on gender are typically centred around two main themes: emancipation and employment (Kangas et al., 2023).

Supporters contend that UBI, being both universal and allocated on an individual basis, enhances women's autonomy both within their families and in the broader societal context. By providing women with their own income, UBI is considered a tool for liberation from patriarchal power structures, empowering women to make autonomous decisions about their lives (McLean, 2016; Robeyns, 2001). Additionally, UBI is posited to address income disparities between genders and provide protection against poverty, potentially offering women greater flexibility in choosing between employment and care work (Pateman, 2004).

However, critics argue that UBI might reinforce traditional gender roles, potentially trapping women in caregiving responsibilities rather than encouraging labour market participation and broader societal engagement (Gheaus, 2008; Robeyns, 2001). This perspective suggests that UBI could inadvertently limit women's freedom of choice and hinder progress towards gender equality.

Despite the importance of these debates, there is a notable lack of empirical research examining whether UBI empowers women or reinforces traditional gender norms. The sole gender-focused study by Kangas et al. (2023) on the Finland BI pilot considered a limited range of empowerment factors and failed to account for important intersectional dimensions.

This study aims to bridge critical gaps in the existing literature by examining the gendered impact of UBI through an expanded empowerment index, thereby contributing to a deeper understanding of its role in shaping future social welfare policies. The research hypothesis posits that an Expanded Empowerment Index, building on previous studies but incorporating additional factors such as Life Satisfaction, Health and Work Capacity, Mental Wellbeing, Cognitive Functioning, Social Capital and Trust, Meaningful Work, and Material Wellbeing, will reveal significant improvements among female UBI recipients compared to male recipients and non-recipients.

The study addresses two specific research questions:

1. How does Basic Income affect a comprehensive Expanded Empowerment Index, and are there gender-specific differences in these effects?

2. What intersectional factors influence the impact of Basic Income on the comprehensive Expanded Empowerment Index in Finland, and how do these findings inform our understanding of UBI's potential effects on gender dynamics?

This research contributes to the broader debate on UBI's role in promoting or hindering gender equality in established welfare states. By employing an intersectional approach and a more comprehensive empowerment index, this study seeks to offer a nuanced perspective on UBI's impact on gender empowerment, taking into account various demographic factors, including age, education, income level, household composition, and degree of urbanization.

The following sections will review existing literature on UBI, its historical context, and implementations, with a focus on welfare states. The study will then explore conceptualizations of empowerment, feminist theories of empowerment and UBI, and intersectionality in the context of UBI. Subsequently, the methodology, drawing on various empowerment measurement approaches, will be outlined. The results will be presented and discussed, comparing findings with previous studies and exploring implications for gendered aspects of UBI. Finally, the study will discuss its limitations and propose avenues for future research.

The key findings of this study reveal that while Basic Income (UBI) has a significant overall impact on empowerment, its effects are nuanced and complex. The lack of significant gender-treatment interaction in the Expanded Empowerment Index suggests that UBI's effect on empowerment is similar for men and women in Finland's highly egalitarian welfare state. However, the analysis uncovers significant gender-specific patterns in relation to age, education, and household composition, indicating that UBI interacts differently with these factors, influencing empowerment outcomes across various demographic groups. In particular, the marginally significant interaction between treatment, gender, and household composition, along with the higher empowerment scores for women in all-adult households and men in households with children, highlights how caregiving responsibilities and family structure play a crucial role in shaping UBI's impact. These findings suggest that UBI's potential to alter traditional gender roles and promote more equitable caregiving arrangements, as theorized by McKay (2007) and Van Parijs (2014), may only be partially realized and depends on broader societal contexts. This study contributes to the ongoing debate about UBI's role in promoting gender equality and empowerment, emphasizing the need for nuanced, context-specific approaches in UBI implementation and assessment.

3. Literature review

3.1 Introduction to Universal Basic Income (UBI)

3.1.1 Definition and Overview of UBI

The notion of Universal Basic Income (UBI) has an extensive and diverse background, with proponents across the political spectrum advocating for its implementation (Haagh, 2019; Francese and Prady, 2018). It is gaining attention as a potential solution following the COVID-19 pandemic's economic impact. Moreover, UBI is increasingly suggested as a strategy to tackle issues such as job market instability, economic growth without employment gains, and the rise in economic disparity and poverty, which are being exacerbated by technological progress like AI, automation, and machine learning, potentially eliminating many routine and manual jobs.

The proposal for Universal Basic Income is founded on the principles of universality, individuality, continuity, and unconditionality (Williams, 2021). Its universal and unconditional nature distinguishes it from current cash transfer programs supported by the state. A universal basic income would be a regular payment provided to every adult in society, with additional payments for children given to their parents or guardians. This income would be distributed universally, meaning it would be available to all individuals irrespective of their job status, earnings, or living situation, and it would be unconditional, requiring no specific criteria to be met.

These characteristics set Universal Basic Income (UBI) apart from most current social protection systems, although there is ongoing debate about its relationship with these systems. Universal Basic Income (UBI) is characterized by its non-contributory nature, meaning that eligibility and benefit amounts are not determined by previous contributions (Standing, 2017). This sets it apart from contributory social insurance systems, which primarily benefit those with consistent formal employment throughout their lives. Feminist critics have long pointed out that these traditional systems tend to reinforce conventional gender roles and family structures, often failing to provide adequate support for individuals who are unable to engage in full-time formal employment due to factors such as discrimination or caregiving responsibilities (Williams, 2021).

3.1.2 Historical Context and Implementation

The concept of a basic income has deep historical roots, far predating the contemporary debates surrounding welfare reform. Support for a government-backed income maintenance system aimed at ensuring a basic standard of living for all individuals has roots dating back to the 18th century (Van Parijs & Vanderborght, 2017). Historically, such proposals have often centred on concerns about personal freedom and the limitations of traditional labour markets in ensuring economic security. Modern advocates of basic income echo these concerns while

also pointing out the inadequacies of current social security systems within the complex socioeconomic landscape of contemporary capitalism (Standing, 2017).

Despite growing interest and the compelling conceptual and practical justifications for basic income, such as those presented by Philippe Van Parijs in 1992, no government has yet fully implemented this policy. Nonetheless, over the past few decades, state-supported income security programs in advanced capitalist societies have come under scrutiny for their sustainability and effectiveness. The ongoing discussion about the future direction of state welfare provision remains highly relevant, with the idea of a universal, unconditional, minimum-income guarantee being a significant part of this debate.

Throughout the past century, researchers and policymakers have explored various forms of Universal Basic Income (UBI) through diverse experimental designs. The 1960s and 1970s saw early iterations in the United States, such as the New Jersey Negative Income Tax Experiment and the Gary Income Maintenance Experiment, which examined the impact of cash transfers on low-income households (Hoynes & Rothstein, 2019). In recent years, UBI trials have expanded globally. Finland implemented a study providing unemployed adults with a monthly stipend of 560 euros to assess labor market effects (Kangas et al., 2021). In rural Kenya, an ongoing experiment by GiveDirectly allocates \$22 monthly to every adult in a selected village for a 12-year period (GiveDirectly, 2023). India witnessed a collaborative effort between the Self-Employed Women's Association (SEWA) and UNICEF, involving 6,000 participants, while Ontario, Canada conducted a similar initiative with 4,000 individuals (Kangas et al., 2019; Handa et al., 2018; Davala et al., 2015). These studies have varied in their approach, timeframe, and target populations, contributing to a growing knowledge base on UBI's potential impacts. Despite these experimental efforts, no national government has fully implemented a UBI policy to date (De Wispelaere, 2015). It's worth noting that gender-specific outcomes have not been a primary focus in any of these trials.

3.1.3 UBI in the Context of Welfare States

The idea of Universal Basic Income (UBI) is not new and has been considered within the broader context of welfare states, especially in Nordic countries like Finland. These countries have long engaged with the basic income concept, with some discussions tracing back to the years following the Second World War (Meade, 1964). Finland, in particular, is of interest due to its historical and contemporary efforts to experiment with basic income.

Recent academic research has explored incorporating basic income into current social support systems, often conceptualizing it as a supplementary component of established social welfare programs and democratic principles (Jordan, 2008; Haagh, 2011). The consideration of basic income as part of a broader welfare state reform acknowledges the global economic pressures, such as the marketization of public services and the financialization of economies, which challenge the sustainability of traditional welfare systems (Haagh, 2011, 2019). These

pressures impact the political feasibility and design of a potential basic income policy, influencing the outcomes it could achieve (De Wispelaere & Martinelli, 2017).

Austerity measures following the 2008 financial crisis have significantly influenced welfare policies across Europe, leading to increased economic insecurity. This has increased interest in basic income as a potential substitute for welfare programs based on means-testing, though different nations vary in their ability to implement such a policy change (De Wispelaere, 2017; Standing, 2017; Haagh, 2019). The Nordic model, particularly Finland's, presents a unique perspective on how UBI might fit within a welfare state, characterized by high levels of public spending and a commitment to individual rights and gender equality (Kettunen, 1999).

In 2015, Finland launched a notable basic income experiment, initiated by a centre-right coalition, which provided a monthly cash payment to unemployed individuals to assess its impact on employment and well-being (Kangas et al., 2017; De Wispelaere et al., 2018). Although Finland and other Nordic countries are often seen as leaders in gender equality, some policies, like the child home care allowance, have been critiqued for reinforcing traditional gender roles (Hiilamo & Kangas, 2016).

Overall, UBI's potential to complement and reform welfare states, particularly in the context of Nordic countries, remains a critical area of study and debate.

3.2. Conceptualizing Empowerment

The literature on women's empowerment often adopts one of two primary perspectives. The first group of studies investigates the theoretical underpinnings, frameworks, and factors that influence women's empowerment. The second group of studies explores various indicators and measures that can be used to assess women's empowerment. In this section, I will focus only on the empowerment angle and focus on the measurement of empowerment in the methodology section.

3.2.1 Defining Empowerment in a Gendered Context

Empowerment, a term widely used in development discourse over the past 30 years, has undergone significant transformation. Originally, it was a politically charged concept, rooted in collective struggles for social justice, equality, and the transformation of power relations (Gaventa, 2002, cited in Batliwala, 2007). The term empowerment can be traced to the Protestant Reformation in Europe and has subsequently resonated within various social and political movements, including Quakerism, early capitalism, and the Black Power movement (Gaventa, 2002, cited in Batliwala, 2007). In the latter half of the 20th century, feminist movements, liberation theology, and other progressive causes revitalized the concept of empowerment, utilizing it to describe grassroots initiatives aimed at challenging and transforming oppressive and unequal power structures (Cornwall, 2016).

In a gendered context, empowerment is understood as a process that enables women to gain control over their lives by making strategic choices (Kabeer, 1999) and influencing decisions

that affect their social and economic conditions. Women's empowerment is closely linked to rights such as access to education, legal autonomy, and reproductive rights, all essential for achieving gender equality (Sen, 1999). Economic independence, including employment opportunities and financial control, is crucial for reducing dependency (Agarwal, 1994).

Moreover, empowerment encompasses social agency, with women acting as agents of change within their communities. This involves challenging social norms and influencing policies to advance gender equality (Rowlands, 1997). However, the mainstreaming of empowerment in development has often reduced it to an economic tool, sidelining its original emphasis on collective action and social justice. While widely discussed today, empowerment has sometimes lost its transformative depth, becoming more focused on individual achievements rather than collective struggles for systemic change (Cornwall & Edwards, 2014).

3.2.2 Theories of Empowerment: A Feminist Perspective and UBI

Empowerment has been central to feminist scholarship, viewed both as a process and an outcome enabling women to participate fully in societal decision-making. Theories of empowerment offer nuanced insights, particularly relevant when applied to UBI, which could potentially address systemic inequalities. This section explores key feminist theories and their relevance to UBI and gender.

Sen and Nussbaum's Capabilities Approach

Amartya Sen and Martha Nussbaum's Capabilities Approach provides a foundational framework for understanding empowerment. Sen (1999) defines empowerment as the expansion of individual capabilities—the real opportunities to lead a life of value. In the context of gender, the approach emphasizes creating conditions that enable women to develop and exercise these capabilities, such as education, health, and political participation.

Nussbaum (2000) expands this by identifying specific capabilities essential for women's empowerment, including bodily health, emotional well-being, and social relationships. This approach emphasizes that true empowerment requires more than access to resources—it also demands the freedom to pursue and achieve valued goals. In a gender analysis, the Capabilities Approach highlights the need for structural changes to eliminate barriers that limit women's potential. For UBI, this approach suggests that financial support alone may not suffice without removing social and institutional obstacles.

Srilatha Batliwala's Empowerment Framework

Srilatha Batliwala's Empowerment Framework offers a nuanced perspective on the complex power dynamics women face. Batliwala (1994) conceptualizes empowerment as a transformative process through which marginalized groups, particularly women, gain control over resources, ideologies, and institutions. This framework emphasizes both individual and collective dimensions of empowerment, necessitating challenges to societal structures that perpetuate inequality. In the context of Universal Basic Income (UBI), Batliwala's model

suggests that while UBI could serve as a catalyst for economic independence, enabling women to resist dependence and engage more fully in societal roles, true empowerment requires broader structural changes. Batliwala argues that financial autonomy alone is insufficient; it must be accompanied by systemic reforms addressing inequalities in institutions and social norms (Batliwala, 1994). Thus, while UBI might provide a stable financial foundation, its effectiveness as an empowerment tool depends on its integration with wider societal transformations that dismantle oppressive power structures and challenge entrenched gender inequalities.

Andrea Cornwall's Belonging Framework

Cornwall's (2002) 'spaces for change' concept offers a nuanced perspective on empowerment in the context of Universal Basic Income (UBI). She argues that empowerment occurs when individuals can actively engage in decision-making processes that impact their lives, shifting focus from empowerment as an outcome to a process of creating inclusive spaces where individuals feel valued (Cornwall, 2002). This framework suggests that empowerment extends beyond mere financial resources or political gains, encompassing how these resources enable individuals to engage more fully in their communities and societal processes. In relation to UBI, Cornwall's approach raises important questions about how such policies might create new 'spaces' for women's participation in social and political life, fostering a sense of belonging within communities. For instance, does the financial security provided by UBI allow women to engage more in community activities, local politics, or voluntary work? This perspective encourages looking beyond economic indicators to consider how UBI might reshape social dynamics, power structures, and social cohesion at the community level. Cornwall's framework thus highlights the need for UBI to not only provide material resources but also to build inclusive social networks that recognize individuals' identities and contributions (Cornwall, 2002).

Kalpana Wilson's Critique of Empowerment Metrics

Kalpana Wilson (2011) critiques the neoliberal co-option of empowerment, often reducing it to economic participation while ignoring the structural inequalities that underpin gender oppression. Wilson argues that true empowerment must go beyond mere inclusion in the market economy and address issues of social justice and autonomy. She argues against the 'instrumentalization' of women's empowerment, where it's viewed merely as a means to achieve economic growth rather than as an end in itself. This perspective challenges the notion that UBI's success should be measured solely by increased labour market participation or economic productivity.

Wilson's critique is essential when evaluating UBI, as it challenges simplistic success metrics based solely on economic outcomes. It suggests that we should be cautious about interpreting improvements in economic indicators as automatically translating to genuine empowerment, especially if these improvements don't address underlying structural inequalities. Her

perspective calls for a broader understanding of how UBI might transform gender relations, focusing on shifts in power structures and societal norms, particularly within marginalized communities.

3.2.3 Comparative Analysis of Theoretical Approaches

The feminist perspectives outlined offer diverse lenses through which empowerment can be understood and applied to Universal Basic Income (UBI). Sen and Nussbaum's Capabilities Approach emphasizes expanding individual freedoms and opportunities, suggesting that UBI should enhance women's capabilities beyond mere financial support. Batliwala's Empowerment Framework stresses the need for collective action and structural change, implying that UBI should be part of a broader strategy for social transformation. Cornwall's Belonging Framework shifts focus to creating inclusive spaces for participation, suggesting that UBI's success should be measured by how it enables women to engage in community and political life.

Wilson's critique of empowerment metrics provides a crucial counterpoint, warning against reducing empowerment to purely economic terms and challenging simplistic measures of UBI's success. When applied to UBI, these theories collectively suggest that empowerment is multi-dimensional, requiring not just financial resources but also social, structural, and cultural transformations. This analysis underscores the importance of adopting a holistic approach to UBI and empowerment, which considers not only economic outcomes but also qualitative changes in power dynamics, agency, and social cohesion.

3.3. Gender and Empowerment in the Context of UBI

The introduction of Universal Basic Income (UBI) has sparked significant debate, particularly regarding its potential gendered impacts (Williams, 2021; Lombardozzi, 2020). Proponents argue that UBI could empower women by providing a stable and independent income source, enhancing their bargaining power within households, promoting financial independence, and enabling greater participation in decision-making processes (Davalala et al., 2015; McKay, 2001). Critics caution that UBI might inadvertently reinforce traditional gender roles by encouraging women to remain in unpaid caregiving roles, perpetuating economic dependency (Haagh, 2019; Francese & Prady, 2018).

This section explores these contrasting perspectives, examining the gendered impacts of UBI and its potential to either reinforce traditional gender roles or serve as a mechanism for women's empowerment. Academic discussions on the gendered impacts of UBI have yielded two primary theories. The first posits that UBI could empower women by enhancing their financial independence, expanding their choices, and providing greater security and stability (Zelleke, 2011; Schultz, 2017; Cox, 2019). The second theory asserts that UBI could incentivize women to stay at home, perpetuating their traditional roles as primary caregivers (Robeyns, 2008).

3.3.1 For UBI as an Empowerment Tool

Proponents of Universal Basic Income argue that UBI can significantly contribute to gender equality by offering a reliable financial safety net that is not dependent on participation in the labour market. This financial security could be especially impactful for women, particularly those experiencing marginalization or multiple, intersecting forms of discrimination. UBI might empower women to explore less lucrative career paths, initiate entrepreneurial ventures, or pursue artistic endeavours without the constant burden of financial survival. The resulting economic stability has the potential to enhance women's autonomy across various spheres, including domestic life, professional environments, and community engagement (Davala et al., 2015; Kangas et al., 2023).

Additionally, UBI is considered a potential way to acknowledge and compensate for unpaid care work, a responsibility that largely falls on women (Williams, 2021). By offering a consistent financial foundation, UBI could facilitate women's efforts to juggle professional commitments with caregiving duties. This equilibrium is particularly crucial in cultures where traditional gender roles remain deeply rooted, as it could enable women to engage more comprehensively in both public and domestic domains. The autonomy derived from financial self-sufficiency might also catalyze changes in household power structures, potentially leading to increased decision-making authority and personal freedom for women (Williams, 2021).

Empirical data from UBI initiatives in India, Kenya, and Namibia confirms the potential of UBI to substantially increase women's economic stability and autonomy. In these contexts, UBI has been linked to increased financial independence for women, better health outcomes, and enhanced opportunities for education and entrepreneurship. These outcomes suggest that UBI could play a significant role in reducing gender inequalities, particularly in societies where social security systems are underdeveloped (Lombardozi, 2020).

3.3.2 Against UBI: The Risk of Reinforcing Traditional Gender Roles

Critics of UBI argue that it could reinforce traditional gender roles by encouraging women to stay at home, entrenched in caregiving responsibilities (Gheaus, 2008; Bergmann, 2008) while failing to encourage men to share domestic responsibilities, thus perpetuating the undervaluation of care work. One potential concern is that UBI might unintentionally encourage some women to withdraw from the labor market, thereby perpetuating traditional gender roles and divisions of labor (Kangas et al., 2023). This risk is particularly acute in contexts where UBI replaces more comprehensive social security systems, potentially reducing support for care services and shifting the burden of care back onto women.

Additionally, the significant fiscal costs of UBI could limit public investment in other critical areas, including healthcare and childcare, further exacerbating gender inequalities (Williams, 2021). In countries burdened with significant debt, introducing UBI without proper debt alleviation measures could potentially undermine existing social welfare systems. This erosion

might have a disproportionate impact on women, especially those belonging to vulnerable demographics, including single mothers and women living with disabilities (Williams, 2021).

Feminists also express concerns that UBI may fail to address the structural inequalities in paid and unpaid work (Goldblatt, 2020). Instead of challenging existing gender norms, UBI could result in women reducing their paid work hours while men continue in full-time employment, effectively becoming a "housewife's wage" (Robeyns, 2008). These dynamic risks reinforcing stereotypes about women's roles in the home, limiting their economic opportunities and contributing to long-term financial insecurity (Robeyns, 2008). In this context, UBI might act as a temporary fix rather than a transformative solution, diverting attention from more comprehensive approaches needed to tackle structural gender inequalities in both domestic and labour market spheres.

In conclusion, the debate on UBI's gendered impacts is complex and multifaceted, reflecting broader discussions about the intersection of economic policy and gender equality. While UBI offers the potential to empower women by providing financial security and enhancing their agency, there is also a concern that it could inadvertently reinforce traditional gender roles and perpetuate economic dependency. The effectiveness of UBI in promoting gender equality will likely depend on its implementation and the broader social and economic factors within which it operates.

3.4 Intersectionality in UBI

The concept of intersectionality, introduced by Kimberlé Crenshaw (1991), provides a crucial framework for understanding how multiple social categories interact to shape individual experiences and societal structures. In the context of UBI, an intersectional approach allows for a more nuanced understanding of how gender intersects with other factors such as age, education, household composition, income, and urbanization.

3.4.1 Historical Context of Intersectionality in Welfare Movements:

In the UK, the intersection of gender, class, and family structure played a critical role in the Welfare Claimants' Movement, which emerged in the late 1960s (Miller, Yamamori and Zelleke, 2023). Women, particularly those subject to the "cohabitation rule," were disproportionately affected by policies that enforced economic dependence on men. This rule assumed women were financially supported by male partners, leading to intrusive investigations by social security officers. The movement, which advocated for a Guaranteed Adequate Income (GAI), highlighted how social policies could reinforce or challenge traditional gender roles (Dalla Costa and James, 1975). Working-class women saw the GAI as a way to gain economic independence, while middle-class women were more concerned about reinforcing domestic roles (Miller, Yamamori and Zelleke, 2023).

In the U.S., the National Welfare Rights Organization (NWRO) of the 1960s and 70s similarly underscored the intersection of race, gender, and class in discussions around UBI (Nadasen,

2012). Predominantly led by Black women, the NWRO fought for a GAI that would recognize and compensate the unpaid care work typically performed by women, independent of their marital status or employment. The organization argued that economic security through a GAI would allow women to escape exploitative labour and oppressive welfare systems that treated them as dependents rather than as individuals with inherent rights (Miller, Yamamori and Zelleke, 2023). This movement demonstrated the differing needs and perspectives within feminist movements, where middle-class white women prioritized access to employment, while Black and working-class women sought autonomy over their economic and personal lives.

These examples from the UK and US demonstrate that the gender effects of UBI are deeply intertwined with class, race, and family structure. While UBI can potentially reinforce traditional gender roles, especially among middle-class women, it also offers a pathway to economic autonomy for low-income women (Miller, Yamamori and Zelleke, 2023). Therefore, any UBI implementation must consider these intersectional factors to ensure it supports, rather than hinders, gender equality.

3.4.2 Theoretical Frameworks for Intersectional Analysis in UBI

Several theoretical frameworks provide a foundation for conducting an intersectional analysis in Universal Basic Income (UBI) research, each offering distinct perspectives on how UBI might affect various social groups.

Feminist Economics, particularly the work of Folbre (1994), sheds light on the intersection of UBI with household dynamics and unpaid labour. Folbre's research emphasizes the economic value of care work, predominantly performed by women, and suggests that UBI could potentially reshape the distribution of this labour within households. This is particularly important as it highlights how UBI might influence the often-overlooked contributions of care work, creating opportunities for a more equitable distribution of responsibilities within families.

Social Capital Theory, as conceptualized by Putnam (2000), is another crucial framework for understanding the potential impact of UBI on social networks and community engagement. This theory suggests that UBI might influence the formation and maintenance of social connections, potentially impacting community cohesion and individual well-being. However, these effects may vary across different intersectional categories, as UBI could affect various social groups differently in terms of their ability to build and sustain social capital.

Sumi Madhok's (2013) work on 'contextual agency' contributes significantly to the intersectional analysis of UBI, emphasizing the importance of understanding empowerment in diverse socio-political contexts. Madhok argues that agency, and by extension, empowerment, is shaped by specific social, cultural, and political environments. In the context of UBI, this approach suggests that the policy's impact cannot be universally defined; women in different socio-political environments may experience and exercise empowerment

differently. For example, the empowerment effects of UBI might vary between young, urban, educated women and older, rural women with less formal education. Madhok's framework thus calls for a nuanced understanding of UBI's potential to empower women, considering the specific cultural, economic, and political contexts in which they live.

Moreover, Madhok's approach underscores the limitations of applying a Finnish UBI model to other contexts. It highlights the need for context-specific UBI policies that account for local gender norms, economic structures, and social expectations, particularly in countries with different levels of gender equality or welfare state models.

In addition, the Capabilities Approach, developed by Sen (1999) and Nussbaum (2000), offers a complementary perspective by focusing on expanding individuals' real opportunities to pursue valued goals. This framework is particularly relevant for intersectional analysis, as it emphasizes the enhancement of people's freedom to achieve their aspirations, which could be influenced by UBI in different ways across various demographic groups.

3.4.3 Recent Intersectional Studies on UBI

Building on the theoretical frameworks discussed, recent research highlights the necessity of adopting an intersectional approach to evaluate the impacts of UBI. These studies emphasize that UBI's effects are not uniform but vary across different demographic groups based on the interplay of gender, age, education, and household dynamics.

For example, Calasanti's (2010) work on gendered experiences of aging and empowerment underscores the importance of considering age alongside gender when assessing UBI's effects. Her research suggests that UBI may have distinct impacts at different life stages, as the needs, roles, and social expectations for men and women evolve over time. This highlights how UBI could potentially support older adults by providing financial security while also enabling younger generations to balance work and caregiving responsibilities.

Kabeer's (1999) research on women's empowerment further demonstrates the need to account for educational background when analyzing UBI's potential outcomes. Kabeer argues that education plays a critical role in shaping individuals' capacity to exercise agency, and this is particularly relevant when considering how UBI might empower women. Her work suggests that UBI's effectiveness in enhancing empowerment could be contingent upon individuals' educational opportunities and levels, indicating that more educated women may be better positioned to leverage UBI to improve their economic and social standing.

In addition to these gendered dimensions, McKay (2007) explores how UBI could influence traditional gender roles within households. Her research suggests that UBI might encourage men to take on more part-time work and share domestic responsibilities, thus challenging established norms around unpaid care work. This potential shift points to UBI's capacity to promote more flexible work arrangements and foster greater gender equality in both paid and unpaid labour.

Taken together, these studies underscore the importance of considering multiple intersecting factors—such as gender, age, education, and household composition—when analyzing UBI's potential effects. They reveal that UBI's impact on empowerment and social dynamics is likely to be complex and multifaceted, varying significantly across different social groups and contexts. In this way, recent empirical research complements the theoretical perspectives outlined earlier, offering a more nuanced understanding of how UBI might reshape power relations, social roles, and opportunities for empowerment within diverse populations.

3.5 Previous Studies and their pitfalls

While no comprehensive national-level Universal Basic Income (UBI) scheme has yet been implemented, various pilot studies have provided insights into the gendered impacts of such programs. Although there remains a scarcity of gender-sensitive analyses, findings from existing income transfer experiments shed light on the potential implications of UBI for women.

3.5.1 Pilot studies in US, India and Finland

One significant example is the negative income tax experiment carried out in the United States and Canada in the 1970s and 1980s, specifically the Mincome project. These studies revealed a disturbing trend: when offered a guaranteed income, women, particularly those from lower socioeconomic origins, tended to limit their labour-force participation. Many chose to prioritize caregiving and domestic responsibilities instead of pursuing paid employment (Francese & Prady, 2018). The U.S. experiments highlighted a significant decline in female labour supply, particularly among mothers with young children, who opted to remain at home rather than work (Haagh, 2019). Similar trends were observed in Sweden, where lottery winners also reduced their working hours, reinforcing concerns that UBI could inadvertently perpetuate traditional gender roles (Cesarini et al., 2017).

Another promising pilot research was conducted in India's Madhya Pradesh state between 2011 and 2012. In this effort, the Self-Employed Women's Association (SEWA) worked with UNICEF to give low-income families with unconditional cash transfers (Davalá et al. 2015). Preliminary findings indicated significant improvements in food sufficiency and increased school attendance, particularly for girls. Women's decision-making power in household spending also grew, reflecting enhanced agency, even though overall labour force participation did not change significantly. Notably, women shifted towards more lucrative self-employment opportunities, thereby increasing their incomes and economic independence (Davalá et al., 2015).

In contrast, the Finnish Basic Income Experiment (2017–2018) aimed to assess whether UBI could enhance personal empowerment and employment opportunities for both men and women. Participants reported improvements in confidence regarding their future prospects, economic situations, and ability to manage difficult life situations. However, the results indicated that while UBI improved individuals' confidence, it did not significantly impact

employment rates. Notably, the benefits were equitably distributed across genders, suggesting that in a gender-equal welfare state like Finland, UBI does not function as a gender-specific empowerment tool (Kangas et al., 2023).

Together, these pilot studies highlight the nuanced impacts of UBI on gender dynamics, suggesting both potential benefits and risks that warrant further investigation.

3.5.2 Limitations of the Finland Empowerment Index

Finland, renowned for its commitment to gender equality, was the focus of a previous study on the gendered effects of the Basic Income (BI) pilot, where empowerment was assessed using an index based on Sen and Nussbaum's capabilities approach (Kangas et al., 2023). This index emphasized individuals' ability to lead self-determined lives and participate in society, reflecting Nussbaum's distinction between internal capabilities (related to personal agency) and combined capabilities (enabled by societal structures) (Nussbaum, 2000).

While the index incorporated key dimensions of empowerment by considering confidence in coping with difficult situations, confidence in future prospects, and confidence in the economic situation (Kangas et al., 2023), it did not fully capture the broader aspects that are crucial to Finland's welfare state. The study concluded that UBI did not exhibit gender-specific effects on empowerment. Both male and female UBI recipients reported increased confidence in their future, improved ability to cope with life challenges, and enhanced economic prospects (Kangas et al., 2023). In essence, UBI strengthened recipients' self-confidence, thereby bolstering both their internal and combined capacities. However, this effect was observed equally for men and women, suggesting that UBI can serve as an empowering tool within an already gender-equal welfare state (Kangas et al., 2023).

The index's focus on economic stability, however, overlooked crucial aspects such as life satisfaction, cognitive capabilities, social participation, influence over societal issues, and subjective well-being, which are essential for a comprehensive understanding of empowerment (Richardson, 2018). Moreover, it lacked a gender-specific intersectional analysis, which is necessary to evaluate UBI's impact on gender norms (Wilson, 2011; Batliwala, 2007). By concentrating primarily on individual confidence, the index failed to consider the complex interaction between personal agency and societal structures—particularly in terms of how these factors may differentially affect women. These limitations underscore the need for a more inclusive and expansive measure of empowerment that better reflects Finland's socio-economic and gender dynamics.

4. Methodology and Methods

4.1 Research design and rationale

After reviewing existing studies on Universal Basic Income (UBI) and gender, it is clear that gaps remain in the literature, particularly in how empowerment is conceptualized and measured. Previous research lacked a comprehensive approach to empowerment, which limits the understanding of UBI's potential impact on gender equality. To address these gaps, my investigation adopts a holistic perspective on empowerment, utilizing a nuanced Empowerment Index that assesses seven distinct aspects of empowerment. These aspects are measured using sub-indices, with each sub-index constructed from a few key data points. In total, sixteen data points are analysed, with detailed information about data sources provided in a subsequent section.

To ensure that the Expanded Empowerment Index accurately reflects well-being, I will reverse code responses to certain questions where necessary. For instance, for the question, "How often do you feel lonely?" with responses ranging from 1 (Never) to 6 (Can't say), the coding is reversed so that higher scores consistently indicate higher well-being and empowerment. This allows for a clearer interpretation of the data, where higher scores across all metrics represent greater empowerment.

Each data point is standardized, enabling comparison across different metrics. The mean of the standardized data points is then calculated for each sub-index, representing the various aspects of empowerment. Subsequently, the average of these seven sub-indices forms the "Expanded Empowerment Index." While the process of standardization introduces a methodological weakness—discussed further in the Limitations section—making a comprehensive empowerment index is essential for a detailed analysis, despite potential flaws.

As a final step, I conduct an intersectional analysis, examining how the Expanded Empowerment Index varies across different demographics, such as age, education, income, household category and degree of urbanisation. Although this intersectional analysis is constrained by the available data, particularly in its limited consideration of race and other critical factors, it offers valuable insights. By comparing the results with previous studies, this investigation seeks to determine whether UBI empowers women or perpetuates gender inequality through the lens of the Expanded Empowerment Index.

4.2 Data source: Finnish UBI experiment

The primary data source for this study is the FSD3488 Basic Income Experiment Survey 2018, which includes survey data collected after the Basic Income pilot in Finland. The Finnish Basic Income Experiment, conducted over two years from 2017 to 2018, involved a treatment group of 2,000 randomly selected unemployed individuals, aged 25 to 58, who were receiving

unemployment benefits from the Social Insurance Institution of Finland (Kela) as of the end of 2016 (Jauhiainen et al., 2021).

Finland's unemployment benefit system operates on a dual-tiered structure. Individuals who are members of voluntary unemployment funds qualify for earnings-related benefits, whereas those who are not receive a flat-rate benefit from Kela, unless they fail to meet the eligibility criteria, in which case they may receive social assistance (Kangas and Simanainen, 2021). The 2,000 participants in the treatment group received a UBI of EUR 560 per month for two years, which is equivalent to the net amount of the basic unemployment benefit (Kangas et al., 2023). Unlike traditional unemployment benefits, the UBI was not reduced by earned income, providing a key difference in financial security for recipients. The control group comprised approximately 170,000 unemployed individuals who continued to receive unemployment benefits from Kela (Kangas et al., 2023). Due to the random selection process, the treatment and control groups were comparable at the start of the experiment. Participation in the UBI experiment was mandatory for the treatment group to avoid the selection bias that often affects voluntary experiments (Kangas et al., 2023).

To evaluate the impacts of the UBI experiment, multiple data sources were collected, including administrative records, surveys, interviews, and media analysis (Jauhiainen et al., 2021). This study primarily relies on survey data gathered at the end of 2018 from both the experiment participants and a control group of 5,000 individuals (Kangas et al., 2023). Despite the survey's intention to be comprehensive, the response rates were relatively low, with 31% for the treatment group and 20% for the control group (Kangas et al., 2023). To mitigate potential non-response bias, the data were weighted and compared against the original target group characteristics, revealing no significant disparities (Kangas et al., 2023).

While previous gender studies using this dataset reported on responses from 1,633 participants (586 in the UBI treatment group and 1,047 in the control group), the publicly available data contains responses from 1,597 individuals (569 in the treatment group and 1,028 in the control group). This discrepancy, a reduction of 36 participants (2.20%), is due to some respondents not consenting to have their data transferred to the Finnish Social Science Data Archive (FSD), resulting in their exclusion from the dataset available for public use.

To ensure the validity of our analysis using this publicly available dataset, I conducted a comprehensive comparison with the original study's sample. I performed a chi-square test of independence to examine potential differences in group distribution, yielding $\chi^2(1) = 0.0098$, $p = 0.9211$. Additionally, I conducted proportion tests for both control ($z = -0.1628$, $p = 0.8707$) and treatment groups ($z = 0.1628$, $p = 0.8707$). These tests consistently demonstrated no statistically significant differences between the original and public datasets in terms of group distribution or proportions. The maintenance of the control-to-treatment ratio (approximately 64% to 36% in both datasets) further supports the representativeness of the public data.

While the slight reduction in sample size might marginally affect statistical power for detecting very small effect sizes, the overall consistency suggests that analyses conducted on the public

dataset should yield results comparable to those from the original study. This rigorous comparison justifies our use of the publicly available data for subsequent analyses, with the caveat that any divergent findings will be scrutinized in light of this minor sample size difference.

4.3 Variables, measures and justification

The selection of proxies for measuring empowerment in this study is grounded in both theoretical and empirical considerations. Empowerment, as established in the literature, is a multi-dimensional concept encompassing economic, psychological, social, and cognitive elements (Kabeer, 1999; Batliwala, 1994). Given the breadth of these dimensions, no single indicator can capture the full spectrum of empowerment, necessitating the use of multiple proxies to provide a comprehensive measure.

Proxies offer a practical approach to operationalizing empowerment in empirical research, especially in the context of large-scale studies such as those involving Universal Basic Income (UBI) programs. While direct measurements of empowerment may be elusive due to its abstract nature, well-chosen proxies—such as life satisfaction, mental well-being, social trust, and decision-making capacity—allow for the quantification of empowerment-related outcomes that are otherwise difficult to measure. These proxies are not only supported by feminist empowerment theories (Cornwall, 2002; Wilson, 2011) but also reflect established best practices in gender studies and development economics (Folbre, 1994; Sen, 1999).

Furthermore, the selected proxies align with the expanded understanding of empowerment advocated in this study, which integrates both individual agency and structural factors. By capturing key aspects such as psychological well-being, social capital, and material security, the chosen proxies offer a holistic view of how UBI may affect women's empowerment in a gender-specific context. The justification for these proxies is rooted in their ability to reflect the diverse nature of empowerment, thus providing a more accurate assessment of UBI's impacts across different socio-political environments.

Building upon these theoretical foundations, the Expanded Empowerment Index (EEI) is a comprehensive, multidimensional tool developed to measure the full range of women's empowerment within the context of Universal Basic Income (UBI). Unlike conventional indices that primarily emphasize economic empowerment, the EEI adopts a more holistic perspective, integrating economic, psychological, social, and cognitive dimensions. This broad approach is critical to accurately assessing the complex ways in which UBI impacts women's lives, considering empowerment as more than just financial autonomy but also incorporating the capacity to exercise agency and achieve well-being.

Economic proxies such as income stability and financial independence are crucial components of the EEI. These proxies capture the extent to which UBI supports women's financial autonomy, a dimension widely regarded as foundational to empowerment (Kabeer, 1999; Batliwala, 1994). However, the EEI moves beyond economic measures by incorporating

psychological well-being and life satisfaction, thus reflecting a broader, more nuanced understanding of empowerment. Ryff's (1989) Psychological Well-being Theory underpins the inclusion of variables such as self-acceptance, autonomy, and personal growth, acknowledging that true empowerment requires emotional and psychological resilience.

Life satisfaction serves as another critical proxy, aligning with Sen (1999) and Nussbaum's (2000) Capabilities Approach, which emphasizes expanding individuals' opportunities to live a life they have reason to value. This proxy measures whether UBI enhances subjective well-being, capturing the extent to which financial stability translates into a fulfilling and autonomous life. By including life satisfaction, the EEI reflects a growing recognition in empowerment research of the importance of subjective measures in addition to material resources.

Social capital, a dimension grounded in Putnam's (2000) Social Capital Theory, is another key feature of the EEI. Social capital reflects the networks of trust, reciprocity, and community engagement that enable individuals to access collective resources and opportunities. In the context of UBI, this is particularly relevant for women, who often rely on social networks to navigate both formal and informal support systems. By incorporating social capital indicators such as community participation and interpersonal trust, the EEI addresses how UBI can enhance women's social engagement and collective empowerment, thus fostering both individual agency and community-level change.

Cognitive functioning is another essential yet underexplored dimension of empowerment that the EEI seeks to capture. This proxy relates to a woman's ability to make informed decisions and navigate complex systems, an aspect particularly relevant in contexts where negotiating power dynamics requires strategic thinking and cognitive resilience. Cognitive functioning, therefore, provides a more comprehensive view of empowerment, recognizing the intellectual and decision-making capabilities required for exercising agency in both private and public spheres.

Furthermore, the EEI includes measures related to meaningful work and material well-being, informed by Madhok's (2013) concept of contextual agency. Besides financial security, meaningful work provides a sense of fulfilment and self-respect, both of which are crucial for empowerment. Similarly, material well-being ensures that women have the resources to meet their basic needs with dignity. Together, these dimensions capture the socio-economic context in which empowerment occurs, ensuring that the EEI provides a nuanced understanding of how UBI affects women's ability to thrive both economically and personally.

In conclusion, the Expanded Empowerment Index represents an innovative and comprehensive approach to measuring empowerment in the context of UBI. By integrating economic, psychological, social, and cognitive dimensions, the EEI offers a multidimensional view of empowerment that goes beyond financial autonomy as explored in the previous study. It captures the interplay of individual agency, social networks, and broader structural factors

that shape women's empowerment. This holistic approach allows for a robust and nuanced assessment of UBI's impact, providing valuable insights into how financial and social structures intersect to empower or disempower women across diverse socio-political contexts.

Operationalizing Sub Index development:

To ensure consistency and comparability across different measures, I developed the sub-indexes through a systematic process of data conversion and index creation. This involved recoding variables to a standardized 5-point scale and combining relevant data points into meaningful sub-indexes. The following sections outline the procedures for each set of variables and the corresponding indexes.

a) Old Empowerment Index:

The Old Empowerment Index, as referred to in this study, replicates the index used in a previous study. The outcome survey asked respondents about changes in their confidence over the past two years, specifically:

Q12_1: "How confident are you about your future?"

Q12_2: "How confident are you about your economic situation?"

Q12_3: "How confident are you in your ability to handle difficult situations?"

These aspects were rated on a 5-point scale, from 1 (bad) to 5 (good), with an option for "I don't know," which was treated as missing data. Unlike the previous study, where all variables were summed to create an index ranging from 3 to 15, I averaged the three confidence variables, producing an index from 1 to 5. To assess the new index's reliability, I performed a factor analysis, revealing a single factor with robust loadings across all three variables (future: 0.890, economic situation: 0.858, coping: 0.836). The calculated Cronbach's Alpha coefficient of 0.825 suggests strong internal consistency, aligning with the standards outlined in previous research (DeVellis, 2012).

b) Life Satisfaction Index:

Life satisfaction was measured using question 11: "How satisfied are you with your life nowadays?" Respondents rated their current life satisfaction on a 0-10 scale, where 0 indicated "very dissatisfied" and 10 indicated "very satisfied." The option "Can't say" was coded as missing data. I recoded the original 0-10 scale to a 5-point scale, grouping the responses based on frequency distribution: scores of 0, 1, and 2 were recoded as 1 (Very dissatisfied); 3 and 4 as 2 (Dissatisfied); 5 and 6 as 3 (Neutral); 7 as 4 (Satisfied); and 8, 9, and 10 as 5 (Very satisfied). The recoded variable directly formed the Life Satisfaction Index, with higher scores reflecting greater satisfaction.

c) Health and Work Capacity Index:

This index was created by combining two variables:

Q13: "How is your health in general?" (general health)

Q16: "Imagine that your work ability at its best has a value of 10 points. How many points would you give your current work ability?" (work capacity)

For general health, I reversed the original 5-point scale so that 5 represented "Very good" health and 1 represented "Very poor" health. For work capacity, I recoded the original 0-10 scale to a 5-point scale based on frequency distribution: scores of 0, 1, 2, and 3 were recoded as 1 (Not capable); 4 and 5 as 2 (Slightly capable); 6 as 3 (Moderately capable); 7 as 4 (Capable); and 8, 9, and 10 as 5 (Fully capable). The Health and Work Capacity Index was then computed as the mean of these two recoded variables.

d) Mental Well-being Index:

For the mental well-being questions (Q17_1 to Q17_5), which asked "How much of the time during the last 4 weeks have you...":

Q17_1: "Been very nervous?"

Q17_2: "Felt so down in the dumps that nothing could cheer you up?"

Q17_3: "Felt calm and peaceful?"

Q17_4: "Felt downhearted and depressed?"

Q17_5: "Been happy?"

I recoded the responses to ensure that higher scores consistently indicated better mental well-being. For negative items (Q17_1, Q17_2, Q17_4), responses of 1 (All the time) and 2 (Most of the time) were recoded as 1; 3 (A considerable part of the time) as 2; 4 (Some of the time) as 3; 5 (A little of the time) as 4; and 6 (Not at all) as 5. For positive items (Q17_3 and Q17_5), responses were reversed: 1 (All the time) and 2 (Most of the time) were recoded as 5; 3 as 4; 4 as 3; 5 as 2; and 6 as 1. The "Can't say" option (7) was recoded as system missing. The Mental Well-being Index was calculated as the mean of the five recoded variables.

e) Cognitive Functioning Index:

For the cognitive functioning questions:

Q20: "How well do you remember things nowadays?"

Q21: "How well do you learn new things nowadays?"

Q22: "How well can you concentrate on things nowadays?"

I reversed the original 5-point scale so that higher scores indicated better cognitive functioning. Responses of 1 (Very well) were recoded as 5; 2 (Well) as 4; 3 (Satisfactorily) remained unchanged; 4 (Poorly) was recoded as 2; and 5 (Very poorly) as 1. The "Can't say"

option (6) was recoded as system missing. The Cognitive Functioning Index was computed as the mean of these three recoded variables.

f) Social Capital and Trust Index:

This index combined two variables:

Q12_6: "How much do you trust that you will be treated according to the law and receive justice if needed?"

Q12_7: "How much do you feel you have opportunity to influence societal issues?"

Both variables were retained in their original 5-point scale, where higher scores already indicated better outcomes. The "Can't say" option was recoded as system missing. The Social Capital and Trust Index was computed as the mean of these two variables.

g) Meaningful Work and Material Well-being Index:

For questions regarding:

Q12_4: "How meaningful do you feel your work is?"

Q12_5: "How satisfied are you with your material standard of living?"

I maintained the original 5-point scale, where higher scores indicated better outcomes. The "Can't say" option was again recoded as system missing. The Meaningful Work and Material Well-being Index was calculated as the mean of these two variables.

Rationale for Scale Conversion

The decision to convert the 0-10 scales for life satisfaction and work capacity to 5-point scales was driven by a combination of methodological and analytical considerations. A data-driven approach, informed by the frequency distributions of responses, ensured that the recoding accurately captured the underlying data. This conversion facilitated consistency with other 5-point measures in the study, simplifying comparisons and enhancing analytical utility. While reducing the number of response options, the 5-point scale retained meaningful distinctions between different levels of satisfaction or capacity. To maintain data integrity and facilitate interpretation, appropriate variable and value labels were added, and missing values were defined as any value less than or equal to 0.

This comprehensive approach to data conversion and index creation resulted in seven sub-indexes, all on a consistent 1-5 scale, where higher values consistently indicate better outcomes or higher well-being. These standardized indexes facilitate more meaningful comparisons and analyses across different aspects of well-being in my study, while maintaining the integrity of the original data distributions.

Expanded Empowerment Index –

The final expanded empowerment Index is created by taking the mean of all the 7 sub-indices which was calculated as explained earlier.

```
COMPUTE ExpandedEmpowermentIndex = MEAN(OldEmpowerment, LifeSatisfaction, HealthWorkCapacity, MentalWellbeing, CognitiveFunctioning, SocialCapitalTrust, MeaningfulWorkMaterialWellbeing).
```

A factor analysis indicated that all seven variables loaded strongly onto a single factor (OldEmpowerment = .869, LifeSatisfaction = .797, HealthWorkCapacity = .748, MentalWellbeing = .772, CognitiveFunctioning = .690, SocialCapitalTrust = .646, MeaningfulWorkMaterialWellbeing = .772). The Cronbach's Alpha for this index was 0.872, demonstrating a high level of internal consistency (DeVellis 2012).

Explanation of statistical models

For each constructed subindex, I conducted a regression analysis to explore potential correlations between gender and empowerment. The general form of a regression model can be expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_k X_k + \varepsilon$$

Where:

- Y represents the predicted value of the dependent variable
- β_0 is the y-intercept (the value of Y when all predictors are zero)
- $\beta_1, \beta_2, \dots, \beta_k$ are the regression coefficients for each independent variable
- X_1, X_2, \dots, X_k are the independent variables (predictors)
- ε is the error term, accounting for unexplained variation in Y

This model allows for the examination of relationships between multiple predictors and the outcome variable, while considering potential confounding factors (Sauro and Lewis, 2016).

The regression model can be expressed in matrix notation as follows:

$$Y = X\beta + \varepsilon$$

In this formulation:

- Y denotes the vector of predicted values for the dependent variable
- X represents the matrix of independent variables, where each row corresponds to an observation and each column to a predictor
- β is a vector containing the regression coefficients [$\beta_0, \beta_1, \dots, \beta_k$]
- ε signifies the vector of error terms

This matrix representation encapsulates the multiple linear regression model, accommodating several predictor variables simultaneously (Sauro and Lewis, 2016).

Regression models cannot definitively prove causation, but they can suggest the likelihood that independent variables (X_1, X_2, \dots, X_k) affect the dependent variable (Y). When conducting a general linear regression analysis, the resulting P-values for each predictor variable offer insights into the potential strength and relevance of the relationships between these predictors and the outcome variable. These P-values serve as indicators of statistical significance, helping to identify which independent variables may have a meaningful association with the dependent variable under investigation. In the general linear regression model, each independent variable (X_1, X_2, \dots, X_k) has its own P-value. If the P-value for a particular predictor is below 0.05, it suggests that the predictor (In this case, Gender) significantly influences the dependent variable (Y) and (Expanded Empower Index) (De Bragança Pereira and Wechsler, 1993). This means that there is a statistically significant relationship between the predictor and the outcome, holding other variables constant.

If, however, the P-value for a predictor is greater than 0.05, this suggests that the predictor does not have a statistically significant effect on the dependent variable for the group studied. In general linear regression, this interpretation applies to each independent variable, allowing us to assess the significance of multiple predictors simultaneously, helping to understand which factors have the strongest impact on the dependent variable.

Exploring Intersectionality through Interaction Terms:

The next part of the analysis explores intersectionality. As stated in the literature, gender cannot be treated in isolation, as multiple intersecting factors—such as age, race, region, and other demographic factors—affect gender outcomes. Using pilot data, I aim to examine whether there are any intersectional effects of treatment and gender with age, education, income level, household category and degree of urbanization.

In the context of exploring intersectionality, I use interaction terms to investigate how the combined influence of two or three variables affects the dependent variable. Intersectionality examines how various social categories (e.g., gender, age, education, Income level, household category, urbanization) intersect to create different experiences and outcomes. By including interaction terms in the model, I assess whether the joint effect of two variables (e.g., gender and age) and three variable (e.g. Treatment, gender, age) has a different impact on the dependent variable (Expanded Empowerment Index) than each variable does individually.

For instance, an interaction term $X_1 \times X_2 \times X_3$ would represent the combined effect of X_1 (e.g., treatment), X_2 (e.g., gender) and X_3 (e.g., age) on Y (e.g., Expanded Empowerment Index). If the interaction term has a p-value below 0.05, it suggests that the combined effect of these variables significantly influences the outcome. This indicates that the impact of one variable on Y depends on the level of the other variable, providing insight into how intersectional identities influence outcomes.

For example, if I am examining the relationship between gender (X_2) and age (X_3) of the treatment group (X_1) on the Expanded Empowerment Index (Y), a significant interaction term

would suggest that the effect of age of the treatment group on empowerment differs for men and women. This analysis helps to understand how different social identities and categories intersect to produce unique effects, which would be overlooked if each variable were considered in isolation.

Incorporating interaction terms into the regression model enables a more nuanced examination of the relationships among predictors. This approach provides insights into how variables may influence each other's effects on the outcome, offering a deeper understanding of potential intersectional dynamics within the study population. By considering these interactions, we can uncover more complex patterns and relationships that might otherwise be overlooked in simpler models.

To examine these intersectional effects on the Expanded Empowerment Index, I employed a series of General Linear Models (GLM) using SPSS. This approach allowed us to investigate how various demographic factors interact with the treatment effect while controlling for relevant covariates. The general form of the model can be expressed as:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4(X_1X_2) + \beta_5(X_1X_3) + \beta_6(X_2X_3) + \beta_7(X_1X_2 * X_3) + \beta_8Z_1 + \beta_9Z_2 + \varepsilon$$

Where:

- Y = Expanded Empowerment Index
- X₁ = Treatment (test or control group)
- X₂ = Gender
- X₃ = Demographic factor (e.g., age group, education level, household composition, income level, or urbanization)
- Z₁, Z₂ = Covariates (e.g., age and ability to work)
- ε = Error term

I conducted five separate analyses, each focusing on a different demographic factor (X₃) while keeping gender and treatment as consistent variables across all models. For example, one analysis examined the intersection of gender, treatment, and age group, while another looked at gender, treatment, and education level.

The GLM procedure in SPSS was utilized with the following general syntax structure:

```
GLM ExpandedEmpowermentIndex BY typpi t1 X3 WITH Z1 Z2  
  
/DESIGN = typpi t1 X3 typpi*t1 typpi*X3 t1*X3 typpi*t1*X3 Z1 Z2  
  
/PRINT = PARAMETER  
  
/EMMEANS = TABLES(typpi*t1*X3) COMPARE(typpi) COMPARE(t1) COMPARE(X3)  
  
/EMMEANS = TABLES(t1*X3) COMPARE(t1) COMPARE(X3).
```

This approach allowed me to examine main effects, two-way interactions, and three-way interactions between treatment, gender, and the specific demographic factor under

consideration. I also obtained estimated marginal means and pairwise comparisons to further elucidate the nature of these intersectional effects.

By conducting these analyses, I was able to explore how the impact of the empowerment program varied across different intersections of gender and other demographic characteristics, providing a nuanced understanding of the program's effectiveness for diverse subgroups within the population.

This methodology aligns with intersectional quantitative approaches advocated by scholars such as Else-Quest and Hyde (2016) and Bauer (2014), who emphasize the importance of examining multiple, intersecting social categories in statistical analyses to reveal complex patterns of inequality and social experience.

In my analysis, I employed F-tests in addition to p-value significance to assess the overall significance of the regression models. The F-value, representing the ratio of explained to unexplained variance, was used to determine whether the models account for a statistically significant portion of the variance in the dependent variable (Cohen, 1988). A larger F-value, coupled with a p-value below the conventional threshold of 0.05, was interpreted as evidence that the model explains more variance than would be expected by chance alone.

4.4 Limitations

This research faces potential constraints that can be broadly categorized as external and internal. External limitations stem from factors beyond my control and may require intervention from larger organizations or agencies involved in UBI research to fully address. Internal limitations, conversely, are rooted in the chosen methodology and present opportunities for future studies while also serving as cautionary points for subsequent research. While the distinction between external and internal limitations is not absolute—as internal challenges often result from external circumstances—it provides a helpful framework for analysis. The following sections will outline anticipated limitations, which will be thoroughly examined and addressed in light of the study's results. This approach allows for a comprehensive review of the study's constraints, facilitating a more nuanced understanding of the research findings and their implications for future investigations in this field.

External Limitations:

The four main external constraints of this study include (a) the lack of comprehensive data, (b) the accuracy of collected metrics (Self-Reported Data), (c) contextual specificity, and (d) the time frame of the data collection.

Internal Limitations:

The internal limitations of this study are (e) composite index construction using mean which oversimplifies the complexity of empowerment (f) Scale Conversion (g) Lack of Qualitative Data and Analysis (h) limited Statistical Power for multiple categories for some intersectional analyses.

5. Results and discussion

After sourcing the Finland Pilot study outcome survey data, I converted data points into 5-point scales as described in the methodology section. I calculated individual averages for each of the seven sub-indices, then averaged these to generate the "Expanded Empowerment Index". I then ran General Linear Regression models for both groups against their sub-indices and the overall index. Below is a summary of the results.

5.1 No gender differences

Analysis of the expanded Empowerment Index reveals a statistically significant main effect for gender (t1), with a p-value of 0.002, which falls below the conventional threshold of 0.05. This result indicates a notable disparity in empowerment levels between genders when considering the overall index. The observed difference suggests that gender plays a substantial role in influencing empowerment outcomes as measured by this comprehensive index. The treatment effect (tyyppi) is also significant ($p < 0.001$), indicating that the program had an overall effect on empowerment. But the **interaction term, treatment and gender didn't show any significance**. The Interaction effect between treatment and gender (tyyppi * t1), the p-value is 0.890, which is not statistically significant ($p > 0.05$). This indicates that the effect of the UBI Program (treatment) does not significantly differ between genders.

The parameter estimates for [t1=1] (female) is 0.087, but it's not significant ($p = 0.070$). This suggests a slight tendency for females to have higher empowerment scores, but it's not statistically significant at the 0.05 level.

Variable	Old Empowerment Index (As per Prev Study) (X)	Old Empowerment Index (Public data) (Y)	Old Empowerment Index (Mean) (A)	Life Satisfaction (B)	Health Work Capacity (C)	Mental Wellbeing (D)	Cognitive Functioning (E)	Social Capital Trust (F)	Meaningful Work and Material Wellbeing Index (G)	Expanded Empowerment Index = (A-G mean)
Treatment (Tyyppi)	0	0	0	0	0.652	0	0	0	0	0
Gender (t1)	0.004	0.011	0.006	0	0.486	0.644	0.612	0.136	0.025	0.002
Treatment (tyyppi) * Gender (t1)	0.769	0.89	0.863	0.447	0.896	0.709	0.52	0.377	0.427	0.89
Age (t2)	0.002	0.023	0.015	0.876	0	0	0.07	0	0.001	0.079
Education (t4)	0.134	0.613	0.56	0.352	0.008	0.242	0	0.043	0.645	0.545
Adjusted R ²	0.256	0.256	0.245	0.258	0.903	0.244	0.249	0.134	0.241	0.5

Table 1: P-values for Main Effects and Interactions across Empowerment Indices and Sub-Indices

Note:

(X) Old Empowerment Index (As per Prev Study): Data replicated from the previous study (Kangas et al., 2023)

(Y) Old Empowerment Index (Public data): Index created using the same methodology as the previous study, summing the variables. This demonstrates that results remain consistent despite missing some responses in the public data (Adjusted R² is 0.256 for both X and Y).

(A) Old Empowerment Index (Mean): New index created for this study by taking the mean of the three variables.

Based on this analysis, the expanded empowerment index does not show a significant gender difference for those who participated in the program. While there is an overall gender difference in empowerment (main effect of gender), the lack of a significant interaction effect suggests that the program's impact on empowerment was similar for both males and females.

In other words, the program appears to have been equally effective in improving empowerment for both genders, without favouring one gender over the other. The gender difference in empowerment seems to exist independently of the program's effects.

The results of our analysis align with the research conducted by Kangas et al. (2023), which utilized an empowerment index comprising three variables: confidence in coping with difficult situations, confidence in the future, and confidence in one's economic situation. Their study found no significant interaction between gender and treatment. Our expanded index yielded similar outcomes, suggesting that Basic Income may serve as an empowerment tool for recipients in general, rather than specifically addressing gender disparities in an already established gender-equal welfare state like Finland (Kangas et al., 2023). While BI does not appear to be a panacea for enhancing gender equality in societies similar to Finland, its impact may be more pronounced in developing nations or countries with more significant gender inequalities. In the context of a highly egalitarian Nordic country, a singular modification to the benefit system seems insufficient to substantially affect gender dynamics (Kangas et al., 2023).

It's worth noting that this analysis has a high adjusted R-squared value of 0.500, indicating that the model explains a substantial portion of the variance in the expanded empowerment index—approximately 50%. In social sciences, an adjusted R-squared of 0.500 is considered strong, as human behaviour and social phenomena are inherently complex and difficult to predict perfectly (Cohen, 1988; Hair et al., 2010).

Compared to the previous study, where the old empowerment index had an adjusted R-squared of 0.256, the expanded empowerment index represents a significant improvement, explaining about twice as much variance. The increase from 0.256 to 0.500 suggests that the expanded index captures more relevant factors influencing empowerment, providing better predictive power (Field, 2013). This improvement indicates that the additional variables or changes incorporated in the expanded index contribute meaningfully to explaining variations in empowerment scores (Tabachnick & Fidell, 2013).

5.2 Complex Intersectional Effects

For the intersectional analysis, five intersections were examined along with gender: age, education, household composition, income level, and degree of urbanization. This approach aligns with Crenshaw's (1991) foundational work on intersectionality and extends it to Basic Income research. The findings are summarized in a table and explained individually, capturing main effects, interaction effects, and identifying groups with the highest and lowest empowerment scores.

Intersectional Factor	Corrected Model	Main Effect (Gender)	Main Effect (Factor)	Two-way Interaction (Gender* Factor)	Three-way Interaction (Treatment * Gender * Factor)	Highest Empowerment Group	Lowest Empowerment Group	Significant Differences
Age	F = 76.89, p < 0.001	F = 6.67, p = .010	F = 1.513, p = .196	F = 1.554, p = .184	F = 1.413, p = .227	Females 35-44 (M = 3.656)	Females 55+ (M = 3.468)	Females: 35-44 vs 55+
Education	F = 65.097, p < 0.001	F = 2.80, p = .094	F = 0.795, p = .553	F = 2.323, p = .041	F = .769, p = .572	Females with vocational education	Females with polytechnic education	Females: Vocational vs Polytechnic
Household Composition	F = 91.967, p < 0.001	F = 5.33, p = .021	F = 5.846, p < .001	F = 0.758, p = .518	F = 2.170, p = .090	Females in all-adult households (M = 3.745)	Females in one-person households (M = 3.535)	Both genders: One-person vs With children
Income	F = 76.045, p < 0.001	F = 3.78, p = .052	F = 20.22, p < .001	F = 0.736, p = .597	F = 0.307, p = .873	Males 50,001+ euros/year (M = 3.987)	Males Under 10,001 euros/year (M = 3.319)	Both genders: Higher vs Lower income
Urbanization	F = 121.24, p < 0.001	F = 1.078, p = .299	F = 0.952, p = .386	F = 1.472, p = .230	F = 0.490, p = .613	Females in semi-urban areas (M = 3.605)	Females in rural areas (M = 3.468)	No significant differences

Table 2: Summary of Key Findings from Intersectional Analyses

The intersectional analyses examined the impact of UBI on empowerment across these five dimensions. All models were statistically significant, explaining approximately 50-53% of the variance in empowerment scores. The results revealed complex patterns of intersectionality in UBI's impact on empowerment.

Age and education demonstrated gender-specific patterns. While the main effect of age was not significant, women aged 35-44 in the treatment group had the highest empowerment scores, reflecting Calasanti's (2010) insights on gendered experiences of aging. Education exhibited a significant interaction with gender, supporting Kabeer's (1999) argument about the nuanced role of education in women's empowerment. This suggests that UBI's effects may be more pronounced for educated women, highlighting education as a critical factor in facilitating empowerment.

Income had a significant effect, with higher income correlating with increased empowerment, particularly for men. This supports Sen's (1999) capability approach, emphasizing that income translates differently into empowerment for men and women. Interestingly, urbanization showed no significant effect, challenging assumptions that rural-urban differences significantly shape empowerment outcomes (Pike et al., 2006). This suggests that UBI may have similar impacts on empowerment regardless of the recipient's location.

The key focus for the intersectional analysis is the three-way interaction. Out of the five three-way interactions (treatment * gender * factor), four were not significant, suggesting that UBI's impact on empowerment is relatively consistent across most intersectional categories. However, the marginally significant interaction for household composition, with a relatively high F-value (F = 2.170, p = .090), indicates that the model explains more variance than would be expected by chance, warranting further exploration. These findings echo broader debates in the literature about UBI's potential to either reinforce or challenge traditional gender roles. As observed in studies from the UK and US, UBI's gender effects are deeply intertwined with

class, race, and family dynamics. For middle-class women, UBI could potentially reinforce traditional caregiving roles by enabling them to reduce or leave paid employment. Conversely, for low-income women, UBI offers a pathway to economic autonomy, alleviating the financial pressures that often bind them to low-wage or precarious work (Folbre, 1994).

In our study, women in all-adult households exhibited higher empowerment scores, while men scored higher in households with children. This pattern may reflect the interplay between UBI, caregiving responsibilities, and empowerment. These findings partly support Van Parijs and Vanderborght's (2017) argument that UBI could positively influence intra-household financial distribution, empowering women who typically bear the burden of unpaid care work (Livingston, 2018). Van Parijs emphasizes that UBI can promote gender justice by providing financial independence to those engaged in domestic labour.

Higher empowerment scores for men in households with children also lend partial support to McKay's (2007) view that UBI could encourage men to engage more in part-time work and domestic responsibilities. This shift could lead to a more equitable distribution of care work within households, potentially explaining the increased empowerment scores for men in these contexts. These findings align with Kangas (2023) analysis of UBI in Finland, where men, particularly, chose part-time work over full-time employment or unemployment under the UBI scheme.

However, as Lenczewska (2021) notes in her analysis of UBI and gender justice, the effects of UBI on household gender dynamics may be more complex than initially anticipated. She argues that while UBI might offer financial independence, it could also inadvertently reinforce traditional gender roles if broader societal and policy changes are not enacted.

The higher empowerment scores for women in all-adult households can be interpreted through Sumi Madhok's (2013) rethinking of agency, where UBI may afford women greater financial autonomy and decision-making power, especially when freed from caregiving expectations often associated with households that include children.

These findings contribute to the ongoing debate about UBI's potential to address gender inequalities. While they do not definitively establish UBI as a tool for achieving gender equality in welfare states like Finland, they highlight the complex, context-dependent nature of UBI's effects. The intersection of gender and household composition, in particular, requires deeper investigation to fully understand UBI's impact on empowerment across diverse demographic groups. This nuanced understanding is crucial for developing UBI policies that more effectively promote empowerment within varied household structures and gender dynamics.

Finally, these intersectional analyses underscore the complexity of empowerment as a concept and the importance of intersectional approaches in UBI research (Collins, 2015; Cho et al., 2013). While UBI generally increases empowerment across demographic groups, its effects may vary subtly across intersections of gender, age, education, household composition,

and income. This supports Robeyns' (2001) argument that UBI's effects differ across social groups, although the differences may be less pronounced than initially hypothesized.

In conclusion, the combined results of both the general and intersectional analyses reveal that while Basic Income has a significant overall impact on empowerment, its effects are nuanced and complex. The lack of significant gender-treatment interaction in the Expanded Empowerment Index suggests that UBI's effect on empowerment is similar for men and women in Finland's highly egalitarian welfare state. However, the significant findings of gender-specific patterns in age, education, and household composition indicate that UBI interacts differently with these factors, influencing empowerment outcomes across various demographic groups.

In particular, the marginal significance of household composition and the higher empowerment scores for women in all-adult households and men in households with children highlight how caregiving responsibilities and family structure play a crucial role in shaping UBI's impact. This suggests that UBI's potential to alter traditional gender roles and promote more equitable caregiving arrangements, as theorized by McKay and Van Parijs, may only be partially realized and depends on broader societal contexts.

The improved adjusted R-squared in the Expanded Empowerment Index model (0.500), compared to the previous study's index (0.256), further underscores the relevance of these additional factors in capturing a fuller picture of empowerment. The consistency of UBI's effects across most intersectional categories suggests that while UBI can broadly enhance empowerment, its ability to address deeper structural inequalities, such as gender dynamics and household compositions, remains context-dependent and requires further exploration.

Ultimately, these findings reinforce the value of intersectional analysis in understanding the social impact of UBI and suggest that policies designed to foster empowerment must consider the multifaceted interactions of gender, age, education, income, and household composition to fully realize their potential.

5.3 Reflection on Limitations

Revisiting the constraints outlined in the Methodology section, it's evident that both external and internal factors have influenced this study's outcomes. In the following section, I propose several suggestions for future researchers aiming to improve on this work. These include exploring data across multiple UBI pilots globally, using alternative methods for composite index creation to avoid oversimplification, and refining the scale conversion process to minimize distortions in interpretation. Additionally, addressing the limitations of statistical power and incorporating qualitative data would offer a more nuanced understanding of empowerment outcomes. This study further supports the broader call for improved gender-disaggregated and intersectional data collection and availability at various levels, which is essential for more comprehensive analyses of UBI programs across diverse contexts.

External:

The four major limitations of this study are: the absence of comprehensive data, the accuracy of collected metrics, contextual specificity, and the time frame.

Absence of Comprehensive Data: The most significant external limitation is the lack of data, which manifests in two keyways: (1) the study's focus being limited to Finland, and (2) the inability to include all relevant empowerment indicators in the analysis.

Firstly, gender-disaggregated data from UBI pilots were unavailable, which constrained the study to Finland and prevented comparative analysis with other UBI pilots conducted across different nations. Despite over 50 UBI pilots being run globally by various organizations, the data from these pilots are not openly accessible. Finland is an exception, where researchers can register to access data for their theses through the Aila Data Service, maintained by the Finnish Social Science Data Archive (FSD).

Despite extensive follow-up efforts, the research team conducting the pilot in Kenya reported that their final report remains unpublished, and they were unable to share the associated data. In the U.S., portals such as The Guaranteed Income Pilots Dashboard provided basic program details but did not offer gender-disaggregated data from the outcome surveys. Attempts to contact relevant individuals through emails and outreach were largely unresponsive or unfruitful. I also attempted to obtain data from pilots in Ontario, Canada, and India, but the data from these pilots was either outdated or unavailable due to policy restrictions. I was only able to access published reports for these two pilots. Extensive outreach to stakeholders involved in UBI, as well as UBI forums and groups on LinkedIn and Reddit, also revealed that gender-disaggregated data was either unavailable or insufficient for my analysis. As a result, the study primarily relied on data from Finland.

Secondly, even in the Finnish dataset, not all aspects of empowerment were covered, as the data was not primarily collected for empowerment analysis. Key factors such as race and ethnicity were missing from the data, which are critical for conducting an intersectionality analysis of the program. The study would be significantly improved if future pilots included additional demographic features and a broader range of empowerment aspects in their data collection. Additionally, this study highlights the need for UBI stakeholders to collaborate and make pilot data more openly accessible, beyond just publishing reports, to facilitate further analysis and discussion.

In addition to the lack of data, concerns also arise regarding the validity and accuracy of the Finland pilot data. Firstly, the Finland pilot data was self-reported, and response rates were relatively low, with 31% for the treatment group and 20% for the control group. Self-reported measures, such as life satisfaction, are often negatively skewed, as most people tend to report being reasonably happy with their lives (Pallant, 2020). In contrast, the general population's clinical measurements of anxiety and depression are typically favourably biased, with most respondents reporting comparatively low levels of these disorders symptoms (Pallant, 2020).

I have elaborated on the process of index creation and the limitations of the scales used in the section on internal limitations. The subjective nature of self-reporting, coupled with the general issues in calculating such indices, highlights how this study is reliant on data with low response rates and potential inaccuracies. These limitations underscore the need to interpret the findings with caution, as they may reflect biases inherent in the data collection process.

The final two external limitations of this study concern contextual specificity and the time frame. First, the study's findings are likely to be highly specific to the Finnish context, limiting their generalizability to other regions or welfare states. Finland's unique socio-economic and cultural conditions, as well as its robust welfare system, may mean that Universal Basic Income (UBI) programs in other countries with different institutional frameworks would produce varied outcomes. This specificity is compounded by the fact that the program participants were exclusively unemployed individuals, further narrowing the scope of the study's applicability. Given that the unemployed may experience empowerment differently from other groups, such as part-time workers or those marginally attached to the labour market, the findings cannot be readily generalized to the wider population (Standing, 2017).

Secondly, the study's time frame poses a significant limitation. The duration of the Finland pilot study may not be sufficient to capture the long-term impacts of UBI. Data was collected at a single time point—at the end of the pilot program—which restricts insights into how UBI affects individuals over time. Longitudinal studies, which track participants over extended periods, are more effective in observing the evolving effects of UBI, particularly in areas such as mental health, financial stability, and social capital (Widerquist, 2019). Without long-term data, it remains unclear whether the empowerment effects observed in this study would persist or change as participants adapt to the program over time. This limitation underscores the need for extended follow-up studies to better assess UBI's sustained impact on empowerment and other socio-economic factors.

Internal Limitations:

Several internal limitations were identified in this study, specifically related to the construction of the composite index, challenges in scale conversion, the absence of qualitative data, and limitations in statistical power. Each is discussed in detail below:

Composite Index Construction:

The Expanded Empowerment Index was constructed by averaging seven sub-indices, each derived from one to three questions, which were converted to a five-point scale for standardization. Although reliability and factor analyses were conducted, this approach may oversimplify the complexity of empowerment, which is inherently multi-dimensional (Kabeer, 1999). Assigning equal weight to all seven sub-indices may not reflect the varying importance that different empowerment dimensions hold for different individuals (Narayan, 2005). As Alkire and Foster (2011) have pointed out, composite indices may mask critical nuances in multidimensional concepts like empowerment. The choice to apply equal weighting, though

common, might not appropriately account for the relative significance of the individual sub-indices (Decancq & Lugo, 2013). Additionally, coding responses of “can’t say” as system-missing values can distort the overall score, as these responses are excluded from the calculation, potentially introducing bias in the final index (Allison, 2001).

Scale Conversion:

Converting different data points, such as using a 0-10 scale for life satisfaction and work capacity to a five-point scale, could distort the interpretation of results. As Dawes (2008) noted, such scale transformations may influence the distribution of responses and alter the relationships between variables. This limitation affects the validity of comparisons across the different empowerment dimensions, as the scales may not be fully comparable. The risk of introducing unintended distortions through such conversions is a challenge when working with data from different instruments.

Lack of Qualitative Data and Analysis:

The study relied solely on quantitative data, which limits the depth of understanding regarding participants' lived experiences and perspectives. Empowerment, particularly in the dimensions of social capital, trust, and meaningful work, could benefit from qualitative insights such as interviews or focus groups (Patton, 2002). Without qualitative data, critical contextual factors that shape individual empowerment experiences may be overlooked, limiting the study's interpretative depth. As Creswell and Plano Clark (2017) argue, mixed-methods approaches that integrate qualitative and quantitative data can offer a more comprehensive understanding of complex social phenomena such as empowerment. The absence of qualitative data restricts the study from exploring how UBI affected participants' personal experiences and agency, which are essential components of empowerment.

Statistical Power:

The study's statistical power may have been limited, particularly in the intersectional analyses involving multiple categories such as gender, income level, and urbanization. Intersectional analyses often face challenges due to small sample sizes in specific subgroups, making it difficult to detect significant effects (McCall, 2005). For example, the income category of €50,001 or more per year had only ten respondents, with no female participants from the treatment group. Such imbalances can affect the reliability of statistical estimates for income-based analyses (Tabachnick & Fidell, 2013). Insufficient statistical power in these cases increases the likelihood of Type II errors, where significant effects may go undetected, particularly in underrepresented subgroups (Button et al., 2013). This limitation could result in an underestimation of UBI's true impact on empowerment, especially when examining interactions between gender and other demographic variables.

Addressing these internal limitations can enhance the robustness of future research in this area. Incorporating qualitative methods, addressing issues related to index construction and

scale conversion, and improving statistical power through larger sample sizes will be crucial in providing a more comprehensive understanding of the long-term and nuanced effects of UBI on empowerment across different demographic groups.

6. Conclusion

This study employed an intersectional approach, grounded in various feminist theories of empowerment, to investigate the relationship between Basic Income and gender empowerment in Finland. By constructing an expanded empowerment index that encompasses multiple dimensions of well-being and agency, we aimed to provide a more comprehensive assessment of UBI's impact on empowerment across diverse demographic groups.

Our findings reveal that UBI's effects on empowerment are complex and nuanced. The lack of significant gender-treatment interaction in the Expanded Empowerment Index suggests that UBI's impact on empowerment is relatively uniform across genders in Finland's egalitarian welfare state. This aligns with previous research by Kangas et al., indicating that UBI may be a tool for empowerment that affects both men and women similarly in such contexts.

However, the intersectional analysis unveiled subtle variations in empowerment outcomes across different demographic intersections. Notably, the marginally significant three-way interaction between treatment, gender, and household composition ($F = 2.170$, $p = .090$) suggests that UBI's impact may vary depending on family structure. This finding partially supports theories proposed by McKay (2007) and Van Parijs (2014) regarding UBI's potential to alter traditional gender roles and promote more equitable caregiving arrangements.

The improved explanatory power of our Expanded Empowerment Index (Adjusted R-squared = 0.500) compared to the previous three-variable index (Adjusted R-squared = 0.256) underscores the value of a more comprehensive approach to measuring empowerment. This aligns with feminist critiques of overly simplistic empowerment metrics (Wilson, 2011) and supports the need for multidimensional assessments of well-being and agency (Sen, 1999; Nussbaum, 2000).

While our study does not definitively establish UBI as a tool for achieving gender equality, it highlights the importance of considering intersectional factors when designing and evaluating such policies. The findings suggest that UBI's effectiveness in promoting empowerment may depend on various contextual factors, including age, education, household composition, and income level.

These results have important implications for policy design and future research. They suggest that while UBI may have broad empowering effects, its impact is not uniform across all demographic groups. Future UBI policies should consider these nuanced effects and

potentially incorporate targeted interventions to address specific needs of different demographic groups.

Our study also underscores the need for more comprehensive and accessible data on UBI pilots globally. The limitations we encountered, particularly in accessing gender-disaggregated data from various UBI experiments, highlight the importance of improved data collection and sharing practices in this field.

In conclusion, while UBI shows promise as a tool for empowerment, its effects are complex and context dependent. Future research should focus on longitudinal studies, mixed-method approaches, and more diverse contexts to fully understand UBI's potential in promoting gender equality and empowerment across different societal settings.

7. References

- Alkire, S. and Foster, J. (2011). Counting and multidimensional poverty measurement. *Journal of Public Economics*, 95(7-8), pp.476–487.
doi:<https://doi.org/10.1016/j.jpubeco.2010.11.006>.
- Allison, P. (2002). *Missing Data*. 2455 Teller Road, Thousand Oaks California 91320 United States of America : SAGE Publications, Inc. doi:<https://doi.org/10.4135/9781412985079>.
- Batliwala, S. (1994). *The meaning of women's empowerment : new concepts from action*. Boston, Massachusetts, Harvard University, Harvard Center for Population and Development Studies.
- Batliwala, S. (2007). Taking the power out of empowerment – an experiential account. *Development in Practice*, 17(4-5), pp.557–565.
doi:<https://doi.org/10.1080/09614520701469559>.
- Bauer, G.R. (2014). Incorporating intersectionality theory into population health research methodology: Challenges and the potential to advance health equity. *Social Science & Medicine*, 110(110), pp.10–17. doi:<https://doi.org/10.1016/j.socscimed.2014.03.022>.
- Bergmann, B.R. (2008). Basic Income Grants or the Welfare State: Which Better Promotes Gender Equality? *Basic Income Studies*, 3(3). doi:<https://doi.org/10.2202/1932-0183.1128>.
- Bina Agarwal (1994). *A field of one's own : gender and land rights in South Asia*. Cambridge University Press.
- Button, K.S., Ioannidis, J.P.A., Mokrysz, C., Nosek, B.A., Flint, J., Robinson, E.S.J. and Munafò, M.R. (2013). Power failure: Why small sample size undermines the reliability of neuroscience. *Nature Reviews Neuroscience*, [online] 14(5), pp.365–376.
doi:<https://doi.org/10.1038/nrn3475>.
- Calasanti, T. (2010). Gender Relations and Applied Research on Aging. *The Gerontologist*, 50(6), pp.720–734. doi:<https://doi.org/10.1093/geront/gnq085>.

Cesarini, D., Lindqvist, E., Notowidigdo, M.J. and Östling, R. (2017). The Effect of Wealth on Individual and Household Labor Supply: Evidence from Swedish Lotteries. *American Economic Review*, 107(12), pp.3917–3946. doi:<https://doi.org/10.1257/aer.20151589>.

Cho, S., Crenshaw, K.W. and McCall, L. (2013). Toward a Field of Intersectionality Studies: Theory, Applications, and Praxis. *Signs: Journal of Women in Culture and Society*, [online] 38(4), pp.785–810. Available at: <https://www.journals.uchicago.edu/doi/abs/10.1086/669608>.

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). *Journal of the American Statistical Association*, 84(408). doi:<https://doi.org/10.2307/2290095>.

Collins, P.H. (2015). Intersectionality's Definitional Dilemmas. *Annual Review of Sociology*, 41(1), pp.1–20.

Cornwall, A. (2002). *Making spaces, changing places: situating participation in development*. [online] Available at: <https://opendocs.ids.ac.uk/articles/report/Making%E2%82%9Bpaces%3Csub%3Ec%3C/sub%3Ehanging%E2%82%9Alaces%E2%82%9Bituating%E2%82%9Aarticipation%3Csub%3Ei%3C/sub%3En%3Csub%3Ed%3C/sub%3Eevelopment/26440999>.

Cornwall, A. (2016). Women's Empowerment: What Works? *Journal of International Development*, 28(3), pp.342–359. doi:<https://doi.org/10.1002/jid.3210>.

Cornwall, A. and Edwards, J. (2014). *Feminisms, empowerment and development : changing women's lives*. London: Zed Books.

Cox, E. (2019). Feminist Perspectives on Basic Income. *Implementing a Basic Income in Australia*, pp.69–85. doi:https://doi.org/10.1007/978-3-030-14378-7_4.

Crenshaw, K.W. (1991). *Race, Gender, and Sexual Harassment*. [online] Scholarship Archive. Available at: https://scholarship.law.columbia.edu/faculty_scholarship/2929 [Accessed 29 Sep. 2024].

Creswell, J.W. and Plano Clark, V.L. (2017). *Designing and conducting mixed methods research*. Los Angeles: Sage.

- Dalla Costa, M. and James, S. (1975). *The Power of Women and the Subversion of the Community*. Falling Wall Press.
- Davala, S., Renana Jhabvala, Standing, G. and Soumya Kapoor Mehta (2015). *Basic Income*. Bloomsbury Publishing.
- Dawes, J. (2008). Do Data Characteristics Change According to the Number of Scale Points Used? An Experiment Using 5-Point, 7-Point and 10-Point Scales. *International Journal of Market Research*, 50(1), pp.61–104. doi:<https://doi.org/10.1177/147078530805000106>.
- de Bragança Pereira, C.A. and Wechsler, S. (1993). ON THE CONCEPT OF P-VALUE. *Brazilian Journal of Probability and Statistics*, [online] 7(2), pp.159–177. Available at: <https://www.jstor.org/stable/43600839> [Accessed 29 Sep. 2024].
- De Wispelaere, J. (2015). The Struggle for Strategy: On the Politics of the Basic Income Proposal. *Politics*, 36(2), pp.131–141. doi:<https://doi.org/10.1111/1467-9256.12102>.
- De Wispelaere, J. (2017). Basic income – have austerity’s chickens come home to roost? *ISRF Bulletin*, [online] (13). Available at: https://issuu.com/isrf/docs/isrf_bulletin_issue_xiii [Accessed 29 Sep. 2024].
- De Wispelaere, J. and Martinelli, L. (2017). A new universalism? Varieties of basic income and welfare state reform. ESPAnet Conference, Lisbon, September 14–16.
- Decancq, K. and Lugo, M.A. (2013). Weights in Multidimensional Indices of Wellbeing: An Overview. *Econometric Reviews*, 32(1), pp.7–34. doi:<https://doi.org/10.1080/07474938.2012.690641>.
- Devellis, R.F. (2012). *Scale development : theory and applications*. Thousand Oaks: Sage.
- Else-Quest, N.M. and Hyde, J.S. (2016). Intersectionality in Quantitative Psychological Research. *Psychology of Women Quarterly*, 40(3), pp.319–336. doi:<https://doi.org/10.1177/0361684316647953>.
- Field, A. (2013). Discovering Statistics Using IBM SPSS Statistics. *Pflege*, 27(6), pp.430–430.

- Folbre, N. (1994). *Who Pays for the Kids? Gender and the Structures of Constraint*. Routledge.
- Francese, M. and Prady, D. (2018). *Universal Basic Income: Debate and Impact Assessment*. [online] IMF. Available at: <https://www.imf.org/en/Publications/WP/Issues/2018/12/10/Universal-Basic-Income-Debate-and-Impact-Assessment-46441>.
- Gaventa, J. (2002). Empowerment: A Briefing Note. *unpublished monograph*.
- Gheaus, A. (2008). Basic Income, Gender Justice and the Costs of Gender-Symmetrical Lifestyles. *Basic Income Studies*, 3(3). doi:<https://doi.org/10.2202/1932-0183.1134>.
- GiveDirectly (2023). *Early findings from the world's largest UBI study*. [online] GiveDirectly. Available at: <https://www.givedirectly.org/2023-ubi-results/>.
- Goldblatt, B. (2020). Basic Income, Gender and Human Rights. *SSRN Electronic Journal*. doi:<https://doi.org/10.2139/ssrn.4006768>.
- Guterres, A. (2018). *Address to the General Assembly*. [online] United Nations Secretary-General. Available at: <https://www.un.org/sg/en/content/sg/speeches/2018-09-25/address-73rd-general-assembly>.
- Haagh, L. (2011). Basic income, social democracy and control over time. *Policy & Politics*, 39(1), pp.43–66. doi:<https://doi.org/10.1332/030557311x546316>.
- Haagh, L. (2019). *The Case for Universal Basic Income*. John Wiley & Sons.
- Hair, J., Black, W.C., Babin, B.J. and Anderson, R.E. (2010). *Multivariate Data Analysis: A Global Perspective*. 7th ed. Upper Saddle River: Pearson Education, Cop.
- Handa, S., Natali, L., Seidenfeld, D., Tembo, G. and Davis, B. (2018). Can unconditional cash transfers raise long-term living standards? Evidence from Zambia. *Journal of Development Economics*, 133, pp.42–65. doi:<https://doi.org/10.1016/j.jdeveco.2018.01.008>.

HIILAMO, H. and KANGAS, O. (2009). Trap for Women or Freedom to Choose? The Struggle over Cash for Child Care Schemes in Finland and Sweden. *Journal of Social Policy*, 38(3), pp.457–475. doi:<https://doi.org/10.1017/s0047279409003067>.

Hoynes, H. and Rothstein, J. (2019). Universal Basic Income in the United States and Advanced Countries. *Annual Review of Economics*, [online] 11(1), pp.929–958. doi:<https://doi.org/10.1146/annurev-economics-080218-030237>.

Jauhiainen, S., Kangas, O., Simanainen, M., Ylikännö, M., Kangas, O., Jauhiainen, S., Simanainen, M. and Ylikanno, M. (2021). *Experimenting with Unconditional Basic Income: Lessons from the Finnish BI Experiment 2017/2018*. [online] Cheltenham, UK: Edward Elgar Publishing. doi:<https://doi.org/10.4337/9781839104855>.

Jordan, B. (2008). *Welfare and well-being*. Policy Press.

Kabeer, N. (1999). Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment. *Development and Change*, 30(3), pp.435–464.

Kangas, O., Jauhiainen, S., Miska Simanainen and Ylikännö, M. (2019). The basic income experiment 2017–2018 in Finland: preliminary results. *REPORTS AND MEMORANDUMS OF THE MINISTRY OF SOCIAL AFFAIRS AND HEALTH 2019:9*. [online] Available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161361/Report_The%20Basic%20Income%20Experiment%2020172018%20in%20Finland.pdf [Accessed 29 Sep. 2024].

Kangas, O., Jauhiainen, S., Simanainen, M. and Ylikanno, M. (2021a). *Experimenting with Unconditional Basic Income Lessons from the Finnish BI Experiment 2017-2018*. Edward Elgar Publishing.

Kangas, O., Jauhiainen, S., Simanainen, M., Ylikanno, M., Kangas, O. and Simanainen, M. (2021b). *Experimenting with Unconditional Basic Income*. [online] Cheltenham, UK: Edward Elgar Publishing. doi:<https://doi.org/10.4337/9781839104855.00010>.

Kangas, O., Simanainen, M. and Honkanen, P. (2017). Basic Income in the Finnish Context. *Intereconomics*, 52(2), pp.87–91. doi:<https://doi.org/10.1007/s10272-017-0652-0>.

Kangas, O. and Ylikännö, M. (2023). Basic Income and the Status of Women in an Established GenderEqual Welfare State: Results from the Finnish Basic Income Experiment. *International Journal of Environmental Research and Public Health*, 20(3).

doi:<https://doi.org/10.3390/ijerph20031733>.

Kettunen, P. (1999). Review Essay : A Return to the Figure of the Free Nordic Peasant. *Acta Sociologica*, 42(3), pp.259–269. doi:<https://doi.org/10.1177/000169939904200306>.

Koslowski, A. and Duvander, A.-Z. (2018). Basic Income: The Potential for Gendered Empowerment? *Social Inclusion*, 6(4), p.8. doi:<https://doi.org/10.17645/si.v6i4.1487>.

Lenczewska, O. (2022). Universal Basic Income and Divergent Theories of Gender Justice. *Hypatia*, 37(4), pp.705–725. doi:<https://doi.org/10.1017/hyp.2022.57>.

Livingston, G. (2018). *Facts on unmarried parents in the U.S.* [online] Pew Research Center's Social & Demographic Trends Project. Available at: <https://www.pewresearch.org/social-trends/2018/04/25/the-changing-profile-of-unmarried-parents/>.

Lombardozi, L. (2020). Gender Inequality, Social Reproduction and the Universal Basic Income. *The Political Quarterly*, 91(2), pp.317–323. doi:<https://doi.org/10.1111/1467-923x.12844>.

McCall, L. (2005). The Complexity of Intersectionality. *Signs: Journal of Women in Culture and Society*, 30(3), pp.1771–1800.

McKay, A. (2001). Rethinking Work and Income Maintenance Policy: Promoting Gender Equality Through a Citizens' Basic Income. *Feminist Economics*, 7(1), pp.97–118.

doi:<https://doi.org/10.1080/13545700010022721>.

McKay, A. (2007). Why a citizens' basic income? A question of gender equality or gender bias. *Work, Employment and Society*, 21(2), pp.337–348.

doi:<https://doi.org/10.1177/0950017007076643>.

McLean, C. (2016). ... and justice for all?: Basic income and the principles of gender equity. *Juncture*, 22(4), pp.284–288. doi:<https://doi.org/10.1111/j.2050-5876.2016.00875.x>.

Meade, J. (1964). *Efficiency, Equality and the Ownership of Property*. London: George Allen & Unwin.

Miller, A., Yamamori, T. and Zelleke, A. (2023). The Gender Effects of a Basic Income. In: M. Torry, ed., *The Palgrave International Handbook of Basic Income*. [online] Cham: Springer International Publishing, pp.175–197. doi:https://doi.org/10.1007/9783031410017_9.

Nadasen, P. (2012). *Rethinking the Welfare Rights Movement*. Routledge.

Narayan, D. (2005). *Measuring empowerment : cross disciplinary perspectives*. [online] World Bank. Available at:
<http://documents.worldbank.org/curated/en/960161468175149824/Measuring-empowerment-cross-disciplinary-perspectives> [Accessed 29 Sep. 2024].

Nussbaum, M.C. (2000). *Women and human development : the capabilities approach*. Cambridge ; New York: Cambridge University Press.

Pallant, J. (2020). *SPSS Survival Manual: a Step by Step Guide to Data Analysis Using IBM SPSS*. 7th ed. S.L.: Open Univ Press.

Pateman, C. (2004). Democratizing Citizenship: Some Advantages of a Basic Income. *Politics & Society*, 32(1), pp.89–105. doi:<https://doi.org/10.1177/0032329203261100>.

Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. 3rd ed. [online] Thousand Oaks, Calif.: Sage Publications. Available at:
<https://aulasvirtuales.wordpress.com/wp-content/uploads/2014/02/qualitative-research-evaluation-methods-by-michael-patton.pdf>.

Phillipe Van Parijs and Yannick Vanderborght (2017). *Basic income. A radical proposal for a free society and a sane economy*. Cambridge: Harvard University Press.

Pike, A., Andrés Rodríguez-Pose, Tomaney, J. and Rodríguez-Pose, A. (2006). *Local and Regional Development*. Routledge.

Putnam, R.D. (2000). *Bowling alone: the Collapse and Revival of American Community*. New York: Simon & Schuster.

- Richardson, R. (2018). Measuring women's empowerment: A critical review of current practices and recommendations for researchers. *Social Indicators Research*, 137. doi:<https://doi.org/10.1007/s11205-017-1622-4>.
- Robeyns, I. (2001). An income of one's own: A radical vision of welfare policies in Europe and beyond. *Gender & Development*, 9(1), pp.82–89. doi:<https://doi.org/10.1080/13552070127729>.
- Robeyns, I. (2008). Introduction: Revisiting the Feminism and Basic Income Debate. *Basic Income Studies*, 3(3). doi:<https://doi.org/10.2202/1932-0183.1137>.
- Rowlands, J. (1997). *Questioning empowerment : working with women in Honduras*. Oxford England: Oxfam.
- Ryff, C.D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), pp.1069–1081. doi:<https://doi.org/10.1037/0022-3514.57.6.1069>.
- Sauro, J. and Lewis, J.D. (2016). An introduction to correlation, regression, and ANOVA. doi:<https://doi.org/10.1016/b978-0-12-802308-2.00010-2>.
- Schulz, P. (2017). Universal basic income in a feminist perspective and gender analysis. *Global Social Policy: An Interdisciplinary Journal of Public Policy and Social Development*, 17(1), pp.89–92. doi:<https://doi.org/10.1177/1468018116686503>.
- Sen, A. (1999). *Development as Freedom*. Oxford: Oxford University Press.
- Standing, G. (2017). *Basic income : and how we can make it happen*. Uk: Pelican, An Imprint Of Penguin Books.
- Sumi Madhok (2013). *Rethinking Agency*. Routledge.
- Tabachnick, B.G. and Fidell, L.S. (2013). *Using multivariate statistics*. 6th ed. Boston: Pearson Education.
- Van Parijs, P. (2000). *A Basic Income for All*. [online] Boston Review. Available at: <https://www.bostonreview.net/forum/ubi-van-parijs>.

Widerquist, K. (2019). Three Waves of Basic Income Support. *The Palgrave International Handbook of Basic Income*, pp.31–44. doi:https://doi.org/10.1007/978-3-030-23614-4_3.

Williams, L. (2021). *Universal basic income: Potential and limitations from a gender perspective*. [online] Research and Data Section, UN Women. Available at: <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2021/Policy-brief-Universal-basic-income-en.pdf> [Accessed 29 Sep. 2024].

Wilson, K. (2011). 'Race', Gender and Neoliberalism: changing visual representations in development. *Third World Quarterly*, 32(2), pp.315–331. doi:<https://doi.org/10.1080/01436597.2011.560471>.

Wispelaere, J., Halmetoja, A. and Pulkka, V. (2018). The Rise (and Fall) of the Basic Income Experiment in Finland. *CESifo Forum*, 19, pp.15–19.

Zelleke, A. (2011). Feminist political theory and the argument for an unconditional basic income. *Policy & Politics*, 39(1), pp.27–42. doi:<https://doi.org/10.1332/030557311x546299>.

8. Appendix

Appendix A – Sub Index and Expanded Index Creations

* Encoding: UTF-8.

* 1) Old Empowerment Index (q12_1, q12_2, q12_3).

```
RECODE q12_1 q12_2 q12_3 (1=1) (2=2) (3=3) (4=4) (5=5) (6=SYSMIS) INTO q12_1_5pt q12_2_5pt q12_3_5pt.  
EXECUTE.
```

* 2) Life Satisfaction (q11).

```
RECODE q11 (0, 1, 2=1) (3, 4=2) (5, 6=3) (7=4) (8, 9, 10=5) (99=SYSMIS) INTO q11_5pt.  
EXECUTE.
```

* 3) Health and Work Capacity (q13, q16).

```
RECODE q13 (1=5) (2=4) (3=3) (4=2) (5=1) (6=SYSMIS) INTO q13_5pt.  
RECODE q16 (0, 1, 2, 3=1) (4, 5=2) (6=3) (7=4) (8, 9, 10=5) (99=SYSMIS) INTO q16_5pt.  
EXECUTE.
```

* 4) Mental Well-being (q17_1 to q17_5).

```
RECODE q17_1 q17_2 q17_4 (1,2=1) (3=2) (4=3) (5=4) (6=5) (7=SYSMIS) INTO q17_1_5pt q17_2_5pt q17_4_5pt.  
RECODE q17_3 q17_5 (1,2=5) (3=4) (4=3) (5=2) (6=1) (7=SYSMIS) INTO q17_3_5pt q17_5_5pt.  
EXECUTE.
```

* 5) Cognitive Functioning (q20 to q22).

```
RECODE q20 q21 q22 (1=5) (2=4) (3=3) (4=2) (5=1) (6=SYSMIS) INTO q20_5pt q21_5pt q22_5pt.  
EXECUTE.
```

* 6) Social Capital and Trust (q12_6, q12_7).

```
RECODE q12_6 q12_7 (1=1) (2=2) (3=3) (4=4) (5=5) (6=SYSMIS) INTO q12_6_5pt q12_7_5pt.  
EXECUTE.
```

* 7) Meaningful Work and Material Well-being (q12_4, q12_5).

```
RECODE q12_4 q12_5 (1=1) (2=2) (3=3) (4=4) (5=5) (6=SYSMIS) INTO q12_4_5pt q12_5_5pt.  
EXECUTE.
```

*Index Creation

```

* 1) Old Empowerment Index.
COMPUTE OldEmpowerment = MEAN(q12_1_5pt, q12_2_5pt, q12_3_5pt).
EXECUTE.

* 2) Life Satisfaction Index.
COMPUTE LifeSatisfaction = q11_5pt.
EXECUTE.

* 3) Health and Work Capacity Index.
COMPUTE HealthWorkCapacity = MEAN(q13_5pt, q16_5pt).
EXECUTE.

* 4) Mental Well-being Index.
COMPUTE MentalWellbeing = MEAN(q17_1_5pt, q17_2_5pt, q17_3_5pt, q17_4_5pt, q17_5_5pt).
EXECUTE.

* 5) Cognitive Functioning Index.
COMPUTE CognitiveFunctioning = MEAN(q20_5pt, q21_5pt, q22_5pt).
EXECUTE.

* 6) Social Capital and Trust Index.
COMPUTE SocialCapitalTrust = MEAN(q12_7_5pt, q12_6_5pt).
EXECUTE.

* 7) Meaningful Work and Material Well-being Index.
COMPUTE MeaningfulWorkMaterialWellbeing = MEAN(q12_4_5pt, q12_5_5pt).
EXECUTE.

* Add variable labels.
VARIABLE LABELS
  OldEmpowerment 'Old Empowerment Index'
  LifeSatisfaction 'Life Satisfaction Index'
  HealthWorkCapacity 'Health and Work Capacity Index'
  MentalWellbeing 'Mental Well-being Index'
  CognitiveFunctioning 'Cognitive Functioning Index'
  SocialCapitalTrust 'Social Capital and Trust Index'
  MeaningfulWorkMaterialWellbeing 'Meaningful Work and Material Well-being Index'.

```

```

* Set missing values for all indexes.
MISSING VALUES OldEmpowerment LifeSatisfaction HealthWorkCapacity MentalWellbeing CognitiveFunctioning SocialCapitalTrust
MeaningfulWorkMaterialWellbeing (LO THRU 0).

EXECUTE.

* 1) Expanded empowerment Index.
* Create Expanded Empowerment Index.
COMPUTE ExpandedEmpowermentIndex = MEAN(OldEmpowerment, LifeSatisfaction, HealthWorkCapacity, MentalWellbeing,
                                         CognitiveFunctioning, SocialCapitalTrust, MeaningfulWorkMaterialWellbeing).

EXECUTE.

* Add variable label.
VARIABLE LABELS ExpandedEmpowermentIndex 'Expanded Empowerment Index'.

* Set missing values.
MISSING VALUES ExpandedEmpowermentIndex (LO THRU 0).

* Display descriptive statistics of the new index.
DESCRIPTIVES VARIABLES=ExpandedEmpowermentIndex
  /STATISTICS=MEAN STDDEV MIN MAX.

```

Descriptives

Notes

Output Created		07-SEP-2024 12:09:59
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597

Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=ExpandedEmpowermentIndex /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

[DataSet1]

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Expanded Empowerment Index	1597	1.17	5.00	3.4992	.79931
Valid N (listwise)	1597				

Appendix B – Reliability and Factor Analysis of all Index

Appendix C - Old Empowerment Index – Add creation

```
* 1) Old Empowerment Add Index.
COMPUTE OldEmpowermentAdd = q12_1_5pt + q12_2_5pt + q12_3_5pt.
EXECUTE.
GLM oldempowermentadd BY tyyppi t1 WITH t2 t4 q16_5pt
  /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
  /PRINT=PARAMETER.
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:10:27	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Cases Used		Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM oldempowermentadd BY tyyppi t1 WITH t2 t4 q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt /PRINT=PARAMETER.	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

Between-Subjects Factors

	Value	Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	999
	1	Test group	547
[t1] The respondent's gender	1	Female	741
	2	Male	805

Tests of Between-Subjects Effects

Dependent Variable: OldEmpowermentAdd

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3761.679 ^a	6	626.946	88.256	<.001
Intercept	3140.661	1	3140.661	442.116	<.001
tyyppi	161.371	1	161.371	22.716	<.001
t1	45.948	1	45.948	6.468	.011
tyyppi * t1	.136	1	.136	.019	.890
t2	36.790	1	36.790	5.179	.023

t4	1.821	1	1.821	.256	.613
q16_5pt	2918.020	1	2918.020	410.775	<.001
Error	10932.588	1539	7.104		
Total	170597.000	1546			
Corrected Total	14694.267	1545			

a. R Squared = .256 (Adjusted R Squared = .253)

Parameter Estimates

Dependent Variable: OldEmpowermentAdd

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	6.806	.345	19.707	<.001	6.128	7.483
[tyyppi=0]	-.660	.196	-3.359	<.001	-1.045	-.275
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.383	.229	1.674	.094	-.066	.832
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	-.039	.284	-.139	.890	-.597	.518
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	-.128	.056	-2.276	.023	-.239	-.018
t4	-.021	.042	-.506	.613	-.103	.061
q16_5pt	1.009	.050	20.268	<.001	.911	1.107

a. This parameter is set to zero because it is redundant.

Appendix D – GLM For Expanded Empowerment Index and Sub Index

```
GLM ExpandedEmpowermentIndex BY tyyppi t1 WITH t2 t4 q16_5pt
/DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
/PRINT=PARAMETER.
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:10:27	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM ExpandedEmpowermentIndex BY tyyppi t1 WITH t2 t4	

		q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt /PRINT=PARAMETER.
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.30

Between-Subjects Factors

	Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0 Control group	1023
	1 Test group	566
[t1] The respondent's gender	1 Female	761
	2 Male	828

Tests of Between-Subjects Effects

Dependent Variable: Expanded Empowerment Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	509.110 ^a	6	84.852	265.829	<.001
Intercept	320.129	1	320.129	1002.923	<.001
tyyppi	9.926	1	9.926	31.098	<.001
t1	2.945	1	2.945	9.226	.002
tyyppi * t1	.006	1	.006	.019	.890
t2	.988	1	.988	3.096	.079
t4	.117	1	.117	.367	.545
q16_5pt	419.132	1	419.132	1313.084	<.001
Error	504.969	1582	.319		

Total	20489.863	1589			
Corrected Total	1014.079	1588			

a. R Squared = .502 (Adjusted R Squared = .500)

Parameter Estimates

Dependent Variable: Expanded Empowerment Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.136	.072	29.482	<.001	1.994	2.278
[tyyppi=0]	-.170	.041	-4.151	<.001	-.250	-.090
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.087	.048	1.814	.070	-.007	.180
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	.008	.059	.138	.890	-.108	.125
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	-.021	.012	-1.760	.079	-.044	.002
t4	.005	.009	.606	.545	-.012	.022
q16_5pt	.376	.010	36.236	<.001	.356	.397

a. This parameter is set to zero because it is redundant.

```
GLM oldempowerment BY tyyppi t1 WITH t2 t4 q16_5pt
  /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
  /PRINT=PARAMETER.
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:10:27	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM oldempowerment BY tyyppi t1 WITH t2 t4 q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt /PRINT=PARAMETER.	
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.14

Between-Subjects Factors

		Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	1023
	1	Test group	566
[t1] The respondent's gender	1	Female	761
	2	Male	828

Tests of Between-Subjects Effects

Dependent Variable: Old Empowerment Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	418.251 ^a	6	69.708	87.103	<.001
Intercept	367.744	1	367.744	459.507	<.001
tyyppi	15.258	1	15.258	19.066	<.001
t1	6.069	1	6.069	7.584	.006
tyyppi * t1	.024	1	.024	.030	.863
t2	4.761	1	4.761	5.948	.015
t4	.272	1	.272	.340	.560
q16_5pt	325.296	1	325.296	406.467	<.001
Error	1266.077	1582	.800		
Total	19458.972	1589			
Corrected Total	1684.328	1588			

a. R Squared = .248 (Adjusted R Squared = .245)

Parameter Estimates

Dependent Variable: Old Empowerment Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval
-----------	---	------------	---	------	-------------------------

					Lower Bound	Upper Bound
Intercept	2.280	.115	19.879	<.001	2.055	2.505
[tyyppi=0]	-.198	.065	-3.047	.002	-.325	-.070
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.138	.076	1.830	.067	-.010	.286
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	-.016	.094	-.173	.863	-.200	.168
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	-.046	.019	-2.439	.015	-.082	-.009
t4	-.008	.014	-.583	.560	-.035	.019
q16_5pt	.332	.016	20.161	<.001	.299	.364

a. This parameter is set to zero because it is redundant.

```
GLM LifeSatisfaction BY tyyppi t1 WITH t2 t4 q16_5pt
  /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
  /PRINT=PARAMETER.
```

General Linear Model

Notes

Output Created

07-SEP-2024 12:10:28

Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM LifeSatisfaction BY tyyppi t1 WITH t2 t4 q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt /PRINT=PARAMETER.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.06

Between-Subjects Factors

		Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	1019
	1	Test group	561
[t1] The respondent's gender	1	Female	758
	2	Male	822

Tests of Between-Subjects Effects

Dependent Variable: Life Satisfaction Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	544.610 ^a	6	90.768	92.325	<.001
Intercept	466.052	1	466.052	474.045	<.001
tyyppi	11.847	1	11.847	12.050	<.001
t1	21.172	1	21.172	21.535	<.001
tyyppi * t1	.569	1	.569	.579	.447
t2	.024	1	.024	.024	.876
t4	.852	1	.852	.867	.352
q16_5pt	453.362	1	453.362	461.138	<.001
Error	1546.476	1573	.983		
Total	27813.000	1580			
Corrected Total	2091.085	1579			

a. R Squared = .260 (Adjusted R Squared = .258)

Parameter Estimates

Dependent Variable: Life Satisfaction Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.530	.128	19.810	<.001	2.279	2.780
[tyyppi=0]	-.222	.072	-3.074	.002	-.363	-.080
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.204	.084	2.426	.015	.039	.369
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	.080	.105	.761	.447	-.125	.285
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.

[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	.003	.021	.156	.876	-.037	.044
t4	-.014	.015	-.931	.352	-.044	.016
q16_5pt	.394	.018	21.474	<.001	.358	.430

a. This parameter is set to zero because it is redundant.

```
GLM HealthWorkCapacity BY tyyppi t1 WITH t2 t4 q16_5pt
  /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
  /PRINT=PARAMETER.
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:10:28	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Cases Used		Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM HealthWorkCapacity BY tyyppi t1 WITH t2 t4 q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt /PRINT=PARAMETER.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.05

Between-Subjects Factors

	Value	Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	1023
	1	Test group	566
[t1] The respondent's gender	1	Female	761
	2	Male	828

Tests of Between-Subjects Effects

Dependent Variable: Health and Work Capacity Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1814.206 ^a	6	302.368	2469.808	.000
Intercept	53.274	1	53.274	435.155	<.001
tyyppi	.025	1	.025	.204	.652
t1	.059	1	.059	.486	.486
tyyppi * t1	.002	1	.002	.017	.896
t2	1.869	1	1.869	15.266	<.001

t4	.855	1	.855	6.981	.008
q16_5pt	1575.983	1	1575.983	12872.992	.000
Error	193.677	1582	.122		
Total	23519.250	1589			
Corrected Total	2007.883	1588			

a. R Squared = .904 (Adjusted R Squared = .903)

Parameter Estimates

Dependent Variable: Health and Work Capacity Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	.854	.045	19.035	<.001	.766	.942
[tyyppi=0]	-.011	.025	-.423	.673	-.061	.039
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.010	.030	.355	.723	-.047	.068
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	.005	.037	.131	.896	-.067	.077
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	-.029	.007	-3.907	<.001	-.043	-.014
t4	.014	.005	2.642	.008	.004	.025
q16_5pt	.730	.006	113.459	.000	.717	.742

a. This parameter is set to zero because it is redundant.

GLM MentalWellbeing BY tyypit t1 WITH t2 t4 q16_5pt

```

/DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
/PRINT=PARAMETER.

```

General Linear Model

Notes

Output Created		07-SEP-2024 12:10:28
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM MentalWellbeing BY tyyppi t1 WITH t2 t4 q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt /PRINT=PARAMETER.	
Resources	Processor Time	00:00:00.03

Elapsed Time

00:00:00.24

Between-Subjects Factors

		Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	1023
	1	Test group	566
[t1] The respondent's gender	1	Female	761
	2	Male	828

Tests of Between-Subjects Effects

Dependent Variable: Mental Well-being Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	368.332 ^a	6	61.389	86.383	<.001
Intercept	396.409	1	396.409	557.805	<.001
tyyppi	7.444	1	7.444	10.475	.001
t1	.152	1	.152	.214	.644
tyyppi * t1	.099	1	.099	.139	.709
t2	18.130	1	18.130	25.512	<.001
t4	.975	1	.975	1.372	.242
q16_5pt	338.624	1	338.624	476.494	<.001
Error	1124.261	1582	.711		
Total	25692.753	1589			
Corrected Total	1492.593	1588			

a. R Squared = .247 (Adjusted R Squared = .244)

Parameter Estimates

Dependent Variable: Mental Well-being Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.402	.108	22.224	<.001	2.190	2.614
[tyyppi=0]	-.160	.061	-2.621	.009	-.280	-.040
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.004	.071	.057	.954	-.136	.144
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	.033	.089	.373	.709	-.141	.207
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	.089	.018	5.051	<.001	.054	.123
t4	-.015	.013	-1.171	.242	-.041	.010
q16_5pt	.338	.015	21.829	<.001	.308	.369

a. This parameter is set to zero because it is redundant.

```
GLM CognitiveFunctioning BY tyyppi t1 WITH t2 t4 q16_5pt
  /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
  /PRINT=PARAMETER.
```

General Linear Model

Notes

Output Created		07-SEP-2024 12:10:28
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM CognitiveFunctioning BY tyyppi t1 WITH t2 t4 q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt /PRINT=PARAMETER.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.09

Between-Subjects Factors

		Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	1023
	1	Test group	566
[t1] The respondent's gender	1	Female	761
	2	Male	828

Tests of Between-Subjects Effects

Dependent Variable: Cognitive Functioning Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	223.287 ^a	6	37.215	88.750	<.001
Intercept	475.335	1	475.335	1133.586	<.001
tyyppi	7.440	1	7.440	17.743	<.001
t1	.108	1	.108	.258	.612
tyyppi * t1	.174	1	.174	.415	.520
t2	1.381	1	1.381	3.293	.070
t4	4.785	1	4.785	11.410	<.001
q16_5pt	173.946	1	173.946	414.830	<.001
Error	663.363	1582	.419		
Total	22328.167	1589			
Corrected Total	886.651	1588			

a. R Squared = .252 (Adjusted R Squared = .249)

Parameter Estimates

Dependent Variable: Cognitive Functioning Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.606	.083	31.390	<.001	2.444	2.769
[tyyppi=0]	-.122	.047	-2.594	.010	-.214	-.030
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.039	.055	.718	.473	-.068	.147
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	-.044	.068	-.644	.520	-.177	.090

[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	.025	.014	1.815	.070	-.002	.051
t4	.034	.010	3.378	<.001	.014	.053
q16_5pt	.242	.012	20.367	<.001	.219	.266

a. This parameter is set to zero because it is redundant.

```
GLM SocialCapitalTrust BY tyyppi t1 WITH t2 t4 q16_5pt
  /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
  /PRINT=PARAMETER.
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:10:28	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM SocialCapitalTrust BY tyyppi t1 WITH t2 t4 q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt /PRINT=PARAMETER.	
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.14

Between-Subjects Factors

	Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0 Control group	1014
	1 Test group	557
[t1] The respondent's gender	1 Female	749
	2 Male	822

Tests of Between-Subjects Effects

Dependent Variable: Social Capital and Trust Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	278.006 ^a	6	46.334	41.454	<.001
Intercept	352.859	1	352.859	315.694	<.001
tyyppi	24.694	1	24.694	22.093	<.001
t1	2.482	1	2.482	2.220	.136
tyyppi * t1	.872	1	.872	.780	.377

t2	20.687	1	20.687	18.508	<.001
t4	4.598	1	4.598	4.114	.043
q16_5pt	149.584	1	149.584	133.829	<.001
Error	1748.120	1564	1.118		
Total	14753.250	1571			
Corrected Total	2026.126	1570			

a. R Squared = .137 (Adjusted R Squared = .134)

Parameter Estimates

Dependent Variable: Social Capital and Trust Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.282	.136	16.757	<.001	2.015	2.549
[tyyppi=0]	-.214	.077	-2.784	.005	-.365	-.063
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.133	.090	1.479	.139	-.043	.310
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	-.099	.112	-.883	.377	-.318	.121
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	-.096	.022	-4.302	<.001	-.139	-.052
t4	.033	.016	2.028	.043	.001	.066
q16_5pt	.226	.020	11.568	<.001	.188	.265

a. This parameter is set to zero because it is redundant.

```
GLM MeaningfulWorkMaterialWellbeing BY tyyppi t1 WITH t2 t4 q16_5pt
/DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt
/PRINT=PARAMETER.
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:10:28	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM MeaningfulWorkMaterialWellbeing BY tyyppi t1 WITH t2 t4 q16_5pt /DESIGN=tyyppi t1 tyyppi*t1 t2 t4 q16_5pt	

		/PRINT=PARAMETER.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.05

Between-Subjects Factors

	Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0 Control group	1017
	1 Test group	563
[t1] The respondent's gender	1 Female	757
	2 Male	823

Tests of Between-Subjects Effects

Dependent Variable: Meaningful Work and Material Well-being Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	543.651 ^a	6	90.609	84.357	<.001
Intercept	276.418	1	276.418	257.346	<.001
tyyppi	17.293	1	17.293	16.100	<.001
t1	5.420	1	5.420	5.046	.025
tyyppi * t1	.677	1	.677	.630	.427
t2	20.318	1	20.318	18.917	<.001
t4	.227	1	.227	.212	.645
q16_5pt	397.278	1	397.278	369.867	<.001
Error	1689.573	1573	1.074		
Total	16664.000	1580			

Corrected Total	2233.225	1579			
-----------------	----------	------	--	--	--

a. R Squared = .243 (Adjusted R Squared = .241)

Parameter Estimates

Dependent Variable: Meaningful Work and Material Well-being Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.020	.133	15.191	<.001	1.759	2.281
[tyyppi=0]	-.263	.075	-3.488	<.001	-.411	-.115
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.080	.088	.912	.362	-.092	.252
[t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	.087	.109	.794	.427	-.127	.301
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
t2	-.094	.022	-4.349	<.001	-.137	-.052
t4	-.007	.016	-.460	.645	-.039	.024
q16_5pt	.367	.019	19.232	<.001	.330	.404

a. This parameter is set to zero because it is redundant.

Appendix E – 5 Intersectional Analysis

```
GLM ExpandedEmpowermentIndex BY tyyppi t1 t2 WITH t4 q16_5pt
/DESIGN = tyyppi t1 t2 tyyppi*t1 tyyppi*t2 t1*t2 tyyppi*t1*t2 t4 q16_5pt
/PRINT = PARAMETER
/EMMEANS = TABLES(tyyppi*t1*t2) COMPARE(tyyppi) COMPARE(t1) COMPARE(t2)
/EMMEANS = TABLES(t1*t2) COMPARE(t1) COMPARE(t2).
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:14:13	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		GLM ExpandedEmpowermentIndex BY tyyppi t1 t2 WITH t4 q16_5pt /DESIGN = tyyppi t1 t2 tyyppi*t1 tyyppi*t2 t1*t2 tyyppi*t1*t2 t4 q16_5pt /PRINT = PARAMETER /EMMEANS = TABLES(tyyppi*t1*t2) COMPARE(tyyppi) COMPARE(t1) COMPARE(t2) /EMMEANS = TABLES(t1*t2) COMPARE(t1) COMPARE(t2).
Resources	Processor Time	00:00:00.13
	Elapsed Time	00:00:00.12

Between-Subjects Factors

		Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	1023
	1	Test group	566
[t1] The respondent's gender	1	Female	761
	2	Male	828
[t2] The respondent's age group (categorised by researcher)	1	under 30 years	149
	2	30 - 34 years	225
	3	35-44 years	420
	4	45-54 years	442
	5	55 years or more	353

Tests of Between-Subjects Effects

Dependent Variable: Expanded Empowerment Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	514.642 ^a	21	24.507	76.891	<.001
Intercept	585.758	1	585.758	1837.832	<.001
tyyppi	7.414	1	7.414	23.262	<.001
t1	2.128	1	2.128	6.676	.010
t2	1.928	4	.482	1.513	.196
tyyppi * t1	.023	1	.023	.071	.790
tyyppi * t2	1.081	4	.270	.848	.495
t1 * t2	1.981	4	.495	1.554	.184
tyyppi * t1 * t2	1.801	4	.450	1.413	.227
t4	.067	1	.067	.210	.647
q16_5pt	415.408	1	415.408	1303.355	<.001
Error	499.438	1567	.319		
Total	20489.863	1589			
Corrected Total	1014.079	1588			

a. R Squared = .507 (Adjusted R Squared = .501)

Parameter Estimates

Dependent Variable: Expanded Empowerment Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.073	.080	26.027	<.001	1.917	2.230
[tyyppi=0]	-.204	.087	-2.356	.019	-.374	-.034
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	-.098	.109	-.899	.369	-.313	.116

[t1=2]	0 ^a	.	.	.	.	.
[t2=1]	-.060	.128	-.466	.641	-.311	.191
[t2=2]	.085	.105	.808	.419	-.121	.290
[t2=3]	.025	.097	.260	.795	-.165	.215
[t2=4]	-.075	.094	-.799	.424	-.260	.109
[t2=5]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	.193	.131	1.469	.142	-.065	.450
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t2=1]	.099	.157	.633	.527	-.209	.408
[tyyppi=0] * [t2=2]	-.001	.132	-.007	.994	-.260	.258
[tyyppi=0] * [t2=3]	-.064	.120	-.535	.592	-.300	.171
[tyyppi=0] * [t2=4]	.157	.117	1.340	.180	-.073	.387
[tyyppi=0] * [t2=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t2=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t2=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t2=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t2=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t2=5]	0 ^a	.	.	.	.	.
[t1=1] * [t2=1]	.219	.191	1.145	.252	-.156	.594
[t1=1] * [t2=2]	.168	.161	1.045	.296	-.148	.484
[t1=1] * [t2=3]	.235	.142	1.654	.098	-.044	.514
[t1=1] * [t2=4]	.246	.142	1.733	.083	-.032	.525
[t1=1] * [t2=5]	0 ^a	.	.	.	.	.
[t1=2] * [t2=1]	0 ^a	.	.	.	.	.
[t1=2] * [t2=2]	0 ^a	.	.	.	.	.

[t1=2] * [t2=3]	0 ^a	.	.	.	.	.
[t1=2] * [t2=4]	0 ^a	.	.	.	.	.
[t1=2] * [t2=5]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1] * [t2=1]	-.161	.235	-.685	.493	-.622	.300
[tyyppi=0] * [t1=1] * [t2=2]	-.270	.204	-1.326	.185	-.669	.129
[tyyppi=0] * [t1=1] * [t2=3]	-.081	.174	-.465	.642	-.423	.261
[tyyppi=0] * [t1=1] * [t2=4]	-.364	.173	-2.108	.035	-.703	-.025
[tyyppi=0] * [t1=1] * [t2=5]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t2=1]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t2=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t2=3]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t2=4]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t2=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t2=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t2=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t2=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t2=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t2=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t2=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t2=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t2=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t2=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t2=5]	0 ^a	.	.	.	.	.
t4	.004	.009	.458	.647	-.013	.021
q16_5pt	.377	.010	36.102	<.001	.356	.397

a. This parameter is set to zero because it is redundant.

Estimated Marginal Means

1. [tyyppi] To which group (test or control group) does the respondent belong: * [t1] The respondent's gender * [t2] The respondent's age group (categorised by researcher)

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[t2] The respondent's age group (categorised by researcher)	Mean
Control group	Female	under 30 years	3.560 ^a
		30 - 34 years	3.444 ^a
		35-44 years	3.577 ^a
		45-54 years	3.426 ^a
		55 years or more	3.462 ^a
	Male	under 30 years	3.408 ^a
		30 - 34 years	3.452 ^a
		35-44 years	3.329 ^a

		45-54 years	3.450 ^a
		55 years or more	3.368 ^a
Test group	Female	under 30 years	3.633 ^a
		30 - 34 years	3.727 ^a
		35-44 years	3.734 ^a
		45-54 years	3.645 ^a
		55 years or more	3.474 ^a
	Male	under 30 years	3.512 ^a
		30 - 34 years	3.657 ^a
		35-44 years	3.597 ^a
		45-54 years	3.497 ^a
		55 years or more	3.572 ^a

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[t2] The respondent's age group (categorised by researcher)	Std. Error
Control group	Female	under 30 years	.087
		30 - 34 years	.079
		35-44 years	.050
		45-54 years	.047
		55 years or more	.051
	Male	under 30 years	.076
		30 - 34 years	.063
		35-44 years	.049
		45-54 years	.048

Test group	Female	55 years or more	.052
		under 30 years	.115
		30 - 34 years	.090
		35-44 years	.061
		45-54 years	.065
	Male	55 years or more	.084
		under 30 years	.107
		30 - 34 years	.078
		35-44 years	.067
		45-54 years	.063
		55 years or more	.070

Estimates

Dependent Variable: Expanded Empowerment Index

[typpi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[t2] The respondent's age group (categorised by researcher)	95% Confidence Interval Lower Bound
Control group	Female	under 30 years	3.389
		30 - 34 years	3.289
		35-44 years	3.480
		45-54 years	3.334
		55 years or more	3.362
	Male	under 30 years	3.258
		30 - 34 years	3.328
		35-44 years	3.233
		45-54 years	3.357
		55 years or more	3.266
Test group	Female	under 30 years	3.407
		30 - 34 years	3.551
		35-44 years	3.614
		45-54 years	3.516

		55 years or more	3.309
	Male	under 30 years	3.302
		30 - 34 years	3.504
		35-44 years	3.465
		45-54 years	3.373
		55 years or more	3.435

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[t2] The respondent's age group (categorised by researcher)	95% Confidence Interval Upper Bound
Control group	Female	under 30 years	3.731
		30 - 34 years	3.600
		35-44 years	3.675
		45-54 years	3.518
		55 years or more	3.563
	Male	under 30 years	3.558
		30 - 34 years	3.575
		35-44 years	3.425
		45-54 years	3.543
		55 years or more	3.470
Test group	Female	under 30 years	3.860
		30 - 34 years	3.902
		35-44 years	3.855
		45-54 years	3.773
		55 years or more	3.639
	Male	under 30 years	3.722
		30 - 34 years	3.809
		35-44 years	3.730
		45-54 years	3.621

55 years or more

3.709

a. Covariates appearing in the model are evaluated at the following values: [t4] The respondent's highest level of education = 2.96, q16_5pt = 3.9465.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[typpi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	(I) [t2] The respondent's age group (categorised by researcher)	(J) [t2] The respondent's age group (categorised by researcher)	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
							Lower Bound	Upper Bound
Control group	Female	under 30 years	30 - 34 years	.116	.118	.325	-.115	.347
			35-44 years	-.017	.100	.865	-.214	.180
			45-54 years	.134	.099	.176	-.060	.329
			55 years or more	.098	.101	.333	-.101	.297
		30 - 34 years	under 30 years	-.116	.118	.325	-.347	.115
			35-44 years	-.133	.093	.154	-.316	.050
			45-54 years	.018	.092	.842	-.162	.199

		55 years or more	-.018	.094	.850	-.203	.167
	35-44 years	under 30 years	.017	.100	.865	-.180	.214
		30 - 34 years	.133	.093	.154	-.050	.316
		45-54 years	.151*	.068	.027	.017	.285
		55 years or more	.115	.071	.108	-.025	.255
	45-54 years	under 30 years	-.134	.099	.176	-.329	.060
		30 - 34 years	-.018	.092	.842	-.199	.162
		35-44 years	-.151*	.068	.027	-.285	-.017
		55 years or more	-.036	.069	.601	-.172	.100
	55 years or more	under 30 years	-.098	.101	.333	-.297	.101
		30 - 34 years	.018	.094	.850	-.167	.203
		35-44 years	-.115	.071	.108	-.255	.025
		45-54 years	.036	.069	.601	-.100	.172
Male	under 30 years	30 - 34 years	-.044	.099	.657	-.237	.150
		35-44 years	.079	.090	.383	-.099	.256
		45-54 years	-.042	.090	.640	-.219	.135
		55 years or more	.040	.093	.667	-.142	.222
	30 - 34 years	under 30 years	.044	.099	.657	-.150	.237
		35-44 years	.123	.079	.123	-.033	.279
		45-54 years	.002	.079	.983	-.153	.157
		55 years or more	.084	.082	.306	-.077	.244
	35-44 years	under 30 years	-.079	.090	.383	-.256	.099
		30 - 34 years	-.123	.079	.123	-.279	.033
		45-54 years	-.121	.068	.077	-.255	.013
		55 years or more	-.039	.071	.584	-.179	.101
	45-54 years	under 30 years	.042	.090	.640	-.135	.219

			30 - 34 years	-.002	.079	.983	-.157	.153
			35-44 years	.121	.068	.077	-.013	.255
			55 years or more	.082	.070	.243	-.056	.220
		55 years or more	under 30 years	-.040	.093	.667	-.222	.142
			30 - 34 years	-.084	.082	.306	-.244	.077
			35-44 years	.039	.071	.584	-.101	.179
			45-54 years	-.082	.070	.243	-.220	.056
Test group	Female	under 30 years	30 - 34 years	-.093	.146	.522	-.379	.193
			35-44 years	-.101	.131	.440	-.357	.155
			45-54 years	-.011	.133	.932	-.272	.249
			55 years or more	.160	.143	.265	-.121	.440
		30 - 34 years	under 30 years	.093	.146	.522	-.193	.379
			35-44 years	-.008	.109	.944	-.221	.205
			45-54 years	.082	.111	.461	-.136	.300
			55 years or more	.253*	.123	.040	.011	.494
		35-44 years	under 30 years	.101	.131	.440	-.155	.357
			30 - 34 years	.008	.109	.944	-.205	.221
			45-54 years	.090	.089	.317	-.086	.265
			55 years or more	.260*	.104	.013	.056	.465
		45-54 years	under 30 years	.011	.133	.932	-.249	.272
			30 - 34 years	-.082	.111	.461	-.300	.136
			35-44 years	-.090	.089	.317	-.265	.086
			55 years or more	.171	.106	.109	-.038	.380
		55 years or more	under 30 years	-.160	.143	.265	-.440	.121
			30 - 34 years	-.253*	.123	.040	-.494	-.011
			35-44 years	-.260*	.104	.013	-.465	-.056
			45-54 years	-.171	.106	.109	-.380	.038

Male	under 30 years	30 - 34 years	-.144	.132	.275	-.403	.115
		35-44 years	-.085	.127	.503	-.333	.163
		45-54 years	.016	.124	.900	-.228	.259
		55 years or more	-.060	.128	.641	-.311	.191
	30 - 34 years	under 30 years	.144	.132	.275	-.115	.403
		35-44 years	.059	.103	.565	-.143	.261
		45-54 years	.160	.100	.111	-.037	.356
		55 years or more	.085	.105	.419	-.121	.290
	35-44 years	under 30 years	.085	.127	.503	-.163	.333
		30 - 34 years	-.059	.103	.565	-.261	.143
		45-54 years	.100	.092	.278	-.081	.282
		55 years or more	.025	.097	.795	-.165	.215
	45-54 years	under 30 years	-.016	.124	.900	-.259	.228
		30 - 34 years	-.160	.100	.111	-.356	.037
		35-44 years	-.100	.092	.278	-.282	.081
		55 years or more	-.075	.094	.424	-.260	.109
	55 years or more	under 30 years	.060	.128	.641	-.191	.311
		30 - 34 years	-.085	.105	.419	-.290	.121
		35-44 years	-.025	.097	.795	-.215	.165
		45-54 years	.075	.094	.424	-.109	.260

Based on estimated marginal means

*. The mean difference is significant at the .050 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:		[t1] The respondent's gender	Sum of Squares	df	Mean Square
Control group	Female	Contrast	1.977	4	.494
		Error	499.438	1567	.319
	Male	Contrast	1.366	4	.342
		Error	499.438	1567	.319
Test group	Female	Contrast	2.227	4	.557
		Error	499.438	1567	.319
	Male	Contrast	.968	4	.242
		Error	499.438	1567	.319

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:

[t1] The respondent's gender		F	Sig.	
Control group	Female	Contrast	1.551	.185
		Error		
	Male	Contrast	1.072	.369
		Error		
Test group	Female	Contrast	1.747	.137
		Error		
	Male	Contrast	.760	.552
		Error		

Each F tests the simple effects of [t2] The respondent's age group (categorised by researcher) within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

2. [t1] The respondent's gender * [t2] The respondent's age group (categorised by researcher)

Estimates

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	[t2] The respondent's age group (categorised by researcher)	Mean	Std. Error	95% Confidence Interval Lower Bound
Female	under 30 years	3.597 ^a	.072	3.455
	30 - 34 years	3.586 ^a	.060	3.468
	35-44 years	3.656 ^a	.040	3.578
	45-54 years	3.535 ^a	.040	3.456
	55 years or more	3.468 ^a	.049	3.371
Male	under 30 years	3.460 ^a	.066	3.331
	30 - 34 years	3.554 ^a	.050	3.456
	35-44 years	3.463 ^a	.042	3.381
	45-54 years	3.473 ^a	.040	3.396
	55 years or more	3.470 ^a	.044	3.384

Estimates

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	[t2] The respondent's age group (categorised by researcher)	95% Confidence Interval
		Upper Bound
Female	under 30 years	3.739
	30 - 34 years	3.703
	35-44 years	3.734
	45-54 years	3.614
	55 years or more	3.565
Male	under 30 years	3.589
	30 - 34 years	3.653
	35-44 years	3.545
	45-54 years	3.551
	55 years or more	3.556

a. Covariates appearing in the model are evaluated at the following values: [t4]
The respondent's highest level of education = 2.96, q16_5pt = 3.9465.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [t2] The respondent's age group (categorised by researcher)	(J) [t2] The respondent's age group (categorised by researcher)	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b
						Lower Bound
Female	under 30 years	30 - 34 years	.011	.094	.904	-.173
		35-44 years	-.059	.083	.475	-.221
		45-54 years	.061	.083	.460	-.102
		55 years or more	.129	.088	.143	-.044

	30 - 34 years	under 30 years	-.011	.094	.904	-.195	
		35-44 years	-.070	.072	.327	-.211	
		45-54 years	.050	.072	.487	-.091	
		55 years or more	.117	.078	.130	-.035	
	35-44 years	under 30 years	.059	.083	.475	-.103	
		30 - 34 years	.070	.072	.327	-.070	
		45-54 years	.120*	.056	.033	.010	
		55 years or more	.188*	.063	.003	.064	
	45-54 years	under 30 years	-.061	.083	.460	-.224	
		30 - 34 years	-.050	.072	.487	-.192	
		35-44 years	-.120*	.056	.033	-.231	
		55 years or more	.067	.064	.289	-.057	
	55 years or more	under 30 years	-.129	.088	.143	-.301	
		30 - 34 years	-.117	.078	.130	-.270	
		35-44 years	-.188*	.063	.003	-.312	
		45-54 years	-.067	.064	.289	-.192	
	Male	under 30 years	30 - 34 years	-.094	.082	.254	-.256
			35-44 years	-.003	.078	.970	-.156
			45-54 years	-.013	.077	.863	-.164
			55 years or more	-.010	.079	.901	-.166
30 - 34 years		under 30 years	.094	.082	.254	-.068	
		35-44 years	.091	.065	.162	-.037	
		45-54 years	.081	.064	.206	-.045	
		55 years or more	.084	.067	.208	-.047	
35-44 years		under 30 years	.003	.078	.970	-.150	
		30 - 34 years	-.091	.065	.162	-.219	
		45-54 years	-.010	.057	.857	-.123	
		55 years or more	-.007	.060	.909	-.125	
45-54 years		under 30 years	.013	.077	.863	-.137	
		30 - 34 years	-.081	.064	.206	-.206	
		35-44 years	.010	.057	.857	-.102	

	55 years or more	.003	.059	.954	-.112
55 years or more	under 30 years	.010	.079	.901	-.146
	30 - 34 years	-.084	.067	.208	-.215
	35-44 years	.007	.060	.909	-.111
	45-54 years	-.003	.059	.954	-.119

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [t2] The respondent's age group (categorised by researcher)	(J) [t2] The respondent's age group (categorised by researcher)	95% Confidence Interval for Difference
			Upper Bound
Female	under 30 years	30 - 34 years	.195
		35-44 years	.103
		45-54 years	.224
		55 years or more	.301
	30 - 34 years	under 30 years	.173
		35-44 years	.070
		45-54 years	.192
		55 years or more	.270
	35-44 years	under 30 years	.221
		30 - 34 years	.211
		45-54 years	.231
		55 years or more	.312
	45-54 years	under 30 years	.102
		30 - 34 years	.091
		35-44 years	-.010
		55 years or more	.192
	55 years or more	under 30 years	.044
		30 - 34 years	.035
		35-44 years	-.064

		45-54 years	.057
Male	under 30 years	30 - 34 years	.068
		35-44 years	.150
		45-54 years	.137
		55 years or more	.146
	30 - 34 years	under 30 years	.256
		35-44 years	.219
		45-54 years	.206
		55 years or more	.215
	35-44 years	under 30 years	.156
		30 - 34 years	.037
		45-54 years	.102
		55 years or more	.111
	45-54 years	under 30 years	.164
		30 - 34 years	.045
		35-44 years	.123
		55 years or more	.119
55 years or more	under 30 years	.166	
	30 - 34 years	.047	
	35-44 years	.125	
	45-54 years	.112	

Based on estimated marginal means

*. The mean difference is significant at the .050 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender		Sum of Squares	df	Mean Square	F	Sig.
Female	Contrast	3.149	4	.787	2.470	.043
	Error	499.438	1567	.319		
Male	Contrast	.802	4	.200	.629	.642
	Error	499.438	1567	.319		

Each F tests the simple effects of [t2] The respondent's age group (categorised by researcher) within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

```
GLM ExpandedEmpowermentIndex BY tyyppi t1 t4 WITH t2 q16_5pt
  /DESIGN = tyyppi t1 t4 tyyppi*t1 tyyppi*t4 t1*t4 tyyppi*t1*t4 t2 q16_5pt
  /PRINT = PARAMETER
  /EMMEANS = TABLES(tyyppi*t1*t4) COMPARE(tyyppi) COMPARE(t1) COMPARE(t4)
  /EMMEANS = TABLES(t1*t4) COMPARE(t1) COMPARE(t4).
```

General Linear Model

Notes

Output Created

07-SEP-2024 12:14:13

Comments		
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	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		<pre> GLM ExpandedEmpowermentIndex BY tyypit1 t4 WITH t2 q16_5pt /DESIGN = tyypit1 t4 tyypit1 tyypit4 t1*t4 tyypit1*t4 t2 q16_5pt /PRINT = PARAMETER /EMMEANS = TABLES(tyypit1*t4) COMPARE(tyypit1) COMPARE(t1) COMPARE(t4) /EMMEANS = TABLES(t1*t4) COMPARE(t1) COMPARE(t4). </pre>
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Between-Subjects Factors

Value Label	N
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[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	1023
	1	Test group	566
[t1] The respondent's gender	1	Female	761
	2	Male	828
[t4] The respondent's highest level of education	1	Primary or lower secondary education	278
	2	Upper secondary education (vocational)	640
	3	Upper secondary education (general)	124
	4	College level vocational education	165
	5	Polytechnic/university of applied sciences education	171
	6	University or other higher education	211

Tests of Between-Subjects Effects

Dependent Variable: Expanded Empowerment Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	517.277 ^a	25	20.691	65.097	<.001
Intercept	315.912	1	315.912	993.897	<.001
tyyppi	7.957	1	7.957	25.034	<.001
t1	.890	1	.890	2.800	.094
t4	1.263	5	.253	.795	.553

tyyppi * t1	.040	1	.040	.125	.723
tyyppi * t4	1.240	5	.248	.780	.564
t1 * t4	3.692	5	.738	2.323	.041
tyyppi * t1 * t4	1.221	5	.244	.769	.572
t2	.629	1	.629	1.980	.160
q16_5pt	410.128	1	410.128	1290.312	<.001
Error	496.802	1563	.318		
Total	20489.863	1589			
Corrected Total	1014.079	1588			

a. R Squared = .510 (Adjusted R Squared = .502)

Parameter Estimates

Dependent Variable: Expanded Empowerment Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.232	.115	19.356	<.001	2.006	2.458
[tyyppi=0]	-.282	.118	-2.387	.017	-.514	-.050
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.018	.123	.145	.885	-.223	.259
[t1=2]	0 ^a	.	.	.	.	.
[t4=1]	-.069	.119	-.579	.562	-.301	.164
[t4=2]	-.112	.106	-1.064	.288	-.319	.095
[t4=3]	-.130	.157	-.827	.408	-.437	.178
[t4=4]	-.228	.138	-1.657	.098	-.498	.042
[t4=5]	.088	.148	.598	.550	-.202	.379
[t4=6]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	.150	.159	.944	.345	-.162	.462

[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t4=1]	.019	.149	.129	.898	-.273	.311
[tyyppi=0] * [t4=2]	.136	.134	1.015	.310	-.127	.399
[tyyppi=0] * [t4=3]	.182	.190	.957	.338	-.191	.556
[tyyppi=0] * [t4=4]	.362	.177	2.038	.042	.014	.710
[tyyppi=0] * [t4=5]	.020	.184	.108	.914	-.342	.382
[tyyppi=0] * [t4=6]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t4=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t4=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t4=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t4=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t4=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t4=6]	0 ^a	.	.	.	.	.
[t1=1] * [t4=1]	-.011	.174	-.061	.951	-.353	.331
[t1=1] * [t4=2]	.132	.143	.920	.358	-.149	.412
[t1=1] * [t4=3]	.170	.226	.752	.452	-.273	.612
[t1=1] * [t4=4]	.242	.195	1.242	.215	-.140	.625
[t1=1] * [t4=5]	-.214	.192	-1.115	.265	-.592	.163
[t1=1] * [t4=6]	0 ^a	.	.	.	.	.
[t1=2] * [t4=1]	0 ^a	.	.	.	.	.
[t1=2] * [t4=2]	0 ^a	.	.	.	.	.
[t1=2] * [t4=3]	0 ^a	.	.	.	.	.
[t1=2] * [t4=4]	0 ^a	.	.	.	.	.
[t1=2] * [t4=5]	0 ^a	.	.	.	.	.

[t1=2] * [t4=6]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1] * [t4=1]	-.102	.219	-.466	.642	-.530	.327
[tyyppi=0] * [t1=1] * [t4=2]	-.112	.184	-.610	.542	-.474	.249
[tyyppi=0] * [t1=1] * [t4=3]	-.319	.275	-1.160	.246	-.859	.221
[tyyppi=0] * [t1=1] * [t4=4]	-.420	.246	-1.706	.088	-.902	.063
[tyyppi=0] * [t1=1] * [t4=5]	-.096	.243	-.396	.692	-.572	.380
[tyyppi=0] * [t1=1] * [t4=6]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t4=1]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t4=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t4=3]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t4=4]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t4=5]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t4=6]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t4=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t4=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t4=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t4=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t4=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t4=6]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t4=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t4=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t4=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t4=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t4=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t4=6]	0 ^a	.	.	.	.	.

t2	-.017	.012	-1.407	.160	-.041	.007
q16_5pt	.375	.010	35.921	<.001	.354	.395

a. This parameter is set to zero because it is redundant.

Estimated Marginal Means

1. [tyyppi] To which group (test or control group) does the respondent belong: * [t1] The respondent's gender * [t4] The respondent's highest level of education

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[t4] The respondent's highest level of education	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Control group	Female	Primary or lower secondary education	3.376 ^a	.066	3.247	3.506
		Upper secondary education (vocational)	3.581 ^a	.041	3.500	3.663
		Upper secondary education (general)	3.441 ^a	.091	3.262	3.621
		College level vocational education	3.495 ^a	.070	3.356	3.633

Test group	Male	Polytechnic/university of applied sciences education	3.336 ^a	.071	3.197	3.476
		University or other higher education	3.538 ^a	.070	3.402	3.675
		Primary or lower secondary education	3.321 ^a	.053	3.216	3.426
		Upper secondary education (vocational)	3.394 ^a	.038	3.319	3.469
		Upper secondary education (general)	3.423 ^a	.080	3.266	3.580
		College level vocational education	3.504 ^a	.085	3.337	3.671
		Polytechnic/university of applied sciences education	3.479 ^a	.083	3.317	3.641
		University or other higher education	3.371 ^a	.074	3.226	3.515
	Female	Primary or lower secondary education	3.591 ^a	.100	3.395	3.787
		Upper secondary education (vocational)	3.690 ^a	.054	3.584	3.796
		Upper secondary education (general)	3.711 ^a	.141	3.434	3.987
		College level vocational education	3.685 ^a	.113	3.463	3.906
		Polytechnic/university of applied sciences education	3.545 ^a	.093	3.363	3.727
		University or other higher education	3.671 ^a	.081	3.512	3.829
Male	Primary or lower secondary education	3.584 ^a	.074	3.440	3.728	
	Upper secondary education (vocational)	3.540 ^a	.050	3.442	3.639	

	Upper secondary education (general)	3.523 ^a	.126	3.276	3.771
	College level vocational education	3.425 ^a	.102	3.225	3.624
	Polytechnic/university of applied sciences education	3.741 ^a	.115	3.515	3.968
	University or other higher education	3.653 ^a	.093	3.471	3.835

a. Covariates appearing in the model are evaluated at the following values: [t2] The respondent's age group (categorised by researcher) = 3.39, q16_5pt = 3.9465.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[typpi] To which group (test or control group) does the respondent belong:

[t1] The respondent's gender	(I) [t4] The respondent's highest level of education	(J) [t4] The respondent's highest level of education	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
						Lower Bound	Upper Bound
Control group Female	Primary or lower secondary education	Upper secondary education (vocational)	-.205*	.078	.008	-.357	-.053
		Upper secondary education (general)	-.065	.113	.565	-.286	.156
		College level vocational education	-.118	.096	.220	-.307	.071
		Polytechnic/university of applied	.040	.097	.680	-.151	.231

	sciences education					
	University or other higher education	-.162	.096	.093	-.351	.027
Upper secondary education (vocational)	Primary or lower secondary education	.205*	.078	.008	.053	.357
	Upper secondary education (general)	.140	.100	.163	-.057	.337
	College level vocational education	.087	.082	.289	-.074	.247
	Polytechnic/university of applied sciences education	.245*	.082	.003	.083	.407
	University or other higher education	.043	.081	.597	-.116	.202
Upper secondary education (general)	Primary or lower secondary education	.065	.113	.565	-.156	.286
	Upper secondary education (vocational)	-.140	.100	.163	-.337	.057
	College level vocational education	-.053	.115	.645	-.280	.173
	Polytechnic/university of applied sciences education	.105	.116	.364	-.122	.333

	University or other higher education		-.097	.115	.399	-.323	.129
College level vocational education	Primary or lower secondary education		.118	.096	.220	-.071	.307
	Upper secondary education (vocational)		-.087	.082	.289	-.247	.074
	Upper secondary education (general)		.053	.115	.645	-.173	.280
	Polytechnic/university of applied sciences education		.158	.100	.114	-.038	.355
	University or other higher education		-.044	.099	.659	-.238	.151
Polytechnic/university of applied sciences education	Primary or lower secondary education		-.040	.097	.680	-.231	.151
	Upper secondary education (vocational)		-.245*	.082	.003	-.407	-.083
	Upper secondary education (general)		-.105	.116	.364	-.333	.122
	College level vocational education		-.158	.100	.114	-.355	.038

		University or other higher education	-.202*	.099	.042	-.397	-.007
	University or other higher education	Primary or lower secondary education	.162	.096	.093	-.027	.351
		Upper secondary education (vocational)	-.043	.081	.597	-.202	.116
		Upper secondary education (general)	.097	.115	.399	-.129	.323
		College level vocational education	.044	.099	.659	-.151	.238
		Polytechnic/university of applied sciences education	.202*	.099	.042	.007	.397
Male		Primary or lower secondary education	Upper secondary education (vocational)	-.073	.066	.265	-.202	.056
	Upper secondary education (general)		-.102	.097	.290	-.292	.087
	College level vocational education		-.183	.100	.068	-.380	.014
	Polytechnic/university of applied sciences education		-.158	.099	.111	-.352	.036

	University or other higher education	-.050	.091	.588	-.229	.130
Upper secondary education (vocational)	Primary or lower secondary education	.073	.066	.265	-.056	.202
	Upper secondary education (general)	-.029	.089	.744	-.203	.145
	College level vocational education	-.110	.093	.239	-.293	.073
	Polytechnic/university of applied sciences education	-.085	.091	.353	-.264	.094
	University or other higher education	.024	.083	.776	-.139	.187
Upper secondary education (general)	Primary or lower secondary education	.102	.097	.290	-.087	.292
	Upper secondary education (vocational)	.029	.089	.744	-.145	.203
	College level vocational education	-.081	.117	.489	-.310	.149
	Polytechnic/university of applied sciences education	-.056	.115	.627	-.281	.169

	University or other higher education	.053	.109	.628	-.160	.266
College level vocational education	Primary or lower secondary education	.183	.100	.068	-.014	.380
	Upper secondary education (vocational)	.110	.093	.239	-.073	.293
	Upper secondary education (general)	.081	.117	.489	-.149	.310
	Polytechnic/university of applied sciences education	.025	.119	.833	-.208	.258
	University or other higher education	.134	.113	.236	-.087	.354
Polytechnic/university of applied sciences education	Primary or lower secondary education	.158	.099	.111	-.036	.352
	Upper secondary education (vocational)	.085	.091	.353	-.094	.264
	Upper secondary education (general)	.056	.115	.627	-.169	.281
	College level vocational education	-.025	.119	.833	-.258	.208

			University or other higher education	.108	.110	.327	-.108	.325
		University or other higher education	Primary or lower secondary education	.050	.091	.588	-.130	.229
			Upper secondary education (vocational)	-.024	.083	.776	-.187	.139
			Upper secondary education (general)	-.053	.109	.628	-.266	.160
			College level vocational education	-.134	.113	.236	-.354	.087
			Polytechnic/university of applied sciences education	-.108	.110	.327	-.325	.108
Test group	Female	Primary or lower secondary education	Upper secondary education (vocational)	-.099	.114	.385	-.321	.124
			Upper secondary education (general)	-.119	.173	.490	-.458	.219
			College level vocational education	-.094	.151	.535	-.389	.202
			Polytechnic/university of applied sciences education	.047	.136	.732	-.221	.314

	University or other higher education	-.079	.129	.537	-.332	.173
Upper secondary education (vocational)	Primary or lower secondary education	.099	.114	.385	-.124	.321
	Upper secondary education (general)	-.021	.151	.892	-.317	.276
	College level vocational education	.005	.125	.967	-.240	.251
	Polytechnic/university of applied sciences education	.145	.107	.175	-.065	.356
	University or other higher education	.019	.097	.842	-.171	.210
Upper secondary education (general)	Primary or lower secondary education	.119	.173	.490	-.219	.458
	Upper secondary education (vocational)	.021	.151	.892	-.276	.317
	College level vocational education	.026	.181	.887	-.328	.380
	Polytechnic/university of applied sciences education	.166	.169	.326	-.165	.497

	University or other higher education	.040	.162	.806	-.279	.359
College level vocational education	Primary or lower secondary education	.094	.151	.535	-.202	.389
	Upper secondary education (vocational)	-.005	.125	.967	-.251	.240
	Upper secondary education (general)	-.026	.181	.887	-.380	.328
	Polytechnic/university of applied sciences education	.140	.146	.337	-.146	.427
	University or other higher education	.014	.139	.919	-.258	.286
Polytechnic/university of applied sciences education	Primary or lower secondary education	-.047	.136	.732	-.314	.221
	Upper secondary education (vocational)	-.145	.107	.175	-.356	.065
	Upper secondary education (general)	-.166	.169	.326	-.497	.165
	College level vocational education	-.140	.146	.337	-.427	.146

		University or other higher education	-.126	.123	.305	-.367	.115
	University or other higher education	Primary or lower secondary education	.079	.129	.537	-.173	.332
		Upper secondary education (vocational)	-.019	.097	.842	-.210	.171
		Upper secondary education (general)	-.040	.162	.806	-.359	.279
		College level vocational education	-.014	.139	.919	-.286	.258
		Polytechnic/university of applied sciences education	.126	.123	.305	-.115	.367
Male		Primary or lower secondary education	Upper secondary education (vocational)	.044	.089	.625	-.131	.219
	Upper secondary education (general)		.061	.146	.676	-.225	.347
	College level vocational education		.159	.125	.203	-.086	.405
	Polytechnic/university of applied sciences education		-.157	.137	.252	-.426	.112

	University or other higher education	-.069	.119	.562	-.301	.164
Upper secondary education (vocational)	Primary or lower secondary education	-.044	.089	.625	-.219	.131
	Upper secondary education (general)	.017	.136	.898	-.249	.284
	College level vocational education	.116	.114	.308	-.107	.339
	Polytechnic/university of applied sciences education	-.201	.126	.110	-.447	.046
	University or other higher education	-.112	.106	.288	-.319	.095
Upper secondary education (general)	Primary or lower secondary education	-.061	.146	.676	-.347	.225
	Upper secondary education (vocational)	-.017	.136	.898	-.284	.249
	College level vocational education	.098	.162	.544	-.220	.417
	Polytechnic/university of applied sciences education	-.218	.171	.202	-.553	.117

	University or other higher education	-.130	.157	.408	-.437	.178
College level vocational education	Primary or lower secondary education	-.159	.125	.203	-.405	.086
	Upper secondary education (vocational)	-.116	.114	.308	-.339	.107
	Upper secondary education (general)	-.098	.162	.544	-.417	.220
	Polytechnic/university of applied sciences education	-.317*	.154	.040	-.619	-.014
	University or other higher education	-.228	.138	.098	-.498	.042
Polytechnic/university of applied sciences education	Primary or lower secondary education	.157	.137	.252	-.112	.426
	Upper secondary education (vocational)	.201	.126	.110	-.046	.447
	Upper secondary education (general)	.218	.171	.202	-.117	.553
	College level vocational education	.317*	.154	.040	.014	.619

	University or other higher education	.088	.148	.550	-.202	.379
University or other higher education	Primary or lower secondary education	.069	.119	.562	-.164	.301
	Upper secondary education (vocational)	.112	.106	.288	-.095	.319
	Upper secondary education (general)	.130	.157	.408	-.178	.437
	College level vocational education	.228	.138	.098	-.042	.498
	Polytechnic/university of applied sciences education	-.088	.148	.550	-.379	.202

Based on estimated marginal means

*. The mean difference is significant at the .050 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:

	[t1] The respondent's gender		Sum of Squares	df	Mean Square
Control group	Female	Contrast	4.243	5	.849
		Error	496.802	1563	.318
	Male	Contrast	1.527	5	.305

		Error	496.802	1563	.318
Test group	Female	Contrast	.798	5	.160
		Error	496.802	1563	.318
	Male	Contrast	1.760	5	.352
		Error	496.802	1563	.318

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:

		[t1] The respondent's gender	F	Sig.
Control group	Female	Contrast	2.670	.021
		Error		
	Male	Contrast	.961	.440
		Error		
Test group	Female	Contrast	.502	.775
		Error		
	Male	Contrast	1.107	.354
		Error		

Each F tests the simple effects of [t4] The respondent's highest level of education within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

2. [t1] The respondent's gender * [t4] The respondent's highest level of education

Estimates

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	[t4] The respondent's highest level of education	Mean	Std. Error	95% Confidence Interval Lower Bound
Female	Primary or lower secondary education	3.484 ^a	.060	3.366
	Upper secondary education (vocational)	3.636 ^a	.034	3.569
	Upper secondary education (general)	3.576 ^a	.084	3.411
	College level vocational education	3.590 ^a	.067	3.459
	Polytechnic/university of applied sciences education	3.440 ^a	.058	3.326
	University or other higher education	3.605 ^a	.053	3.500
Male	Primary or lower secondary education	3.453 ^a	.046	3.363
	Upper secondary education (vocational)	3.467 ^a	.032	3.405
	Upper secondary education (general)	3.473 ^a	.075	3.327
	College level vocational education	3.464 ^a	.066	3.334
	Polytechnic/university of applied sciences education	3.610 ^a	.071	3.470

University or other higher education	3.512 ^a	.059	3.395
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Estimates

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	[t4] The respondent's highest level of education	95% Confidence Interval
		Upper Bound
Female	Primary or lower secondary education	3.602
	Upper secondary education (vocational)	3.702
	Upper secondary education (general)	3.741
	College level vocational education	3.721
	Polytechnic/university of applied sciences education	3.555
	University or other higher education	3.709
Male	Primary or lower secondary education	3.542
	Upper secondary education (vocational)	3.529
	Upper secondary education (general)	3.620
	College level vocational education	3.595
	Polytechnic/university of applied sciences education	3.750
	University or other higher education	3.628

a. Covariates appearing in the model are evaluated at the following values: [t2]
The respondent's age group (categorised by researcher) = 3.39, q16_5pt = 3.9465.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [t4] The respondent's highest level of education	(J) [t4] The respondent's highest level of education	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
						Lower Bound	Upper Bound
Female	Primary or lower secondary education	Upper secondary education (vocational)	-.152*	.069	.028	-.287	-.017
		Upper secondary education (general)	-.092	.103	.372	-.295	.110
		College level vocational education	-.106	.090	.238	-.282	.070
		Polytechnic/university of applied sciences education	.043	.084	.606	-.122	.208
		University or other higher education	-.121	.081	.136	-.279	.038
		Upper secondary education (vocational)	.152*	.069	.028	.017	.287
	Upper secondary education (general)	Upper secondary education (general)	.060	.091	.510	-.118	.238

	College level vocational education	.046	.075	.540	-.101	.193
	Polytechnic/university of applied sciences education	.195*	.068	.004	.063	.328
	University or other higher education	.031	.063	.623	-.093	.156
Upper secondary education (general)	Primary or lower secondary education	.092	.103	.372	-.110	.295
	Upper secondary education (vocational)	-.060	.091	.510	-.238	.118
	College level vocational education	-.014	.107	.898	-.224	.197
	Polytechnic/university of applied sciences education	.136	.102	.186	-.065	.336
	University or other higher education	-.029	.100	.775	-.224	.167
College level vocational education	Primary or lower secondary education	.106	.090	.238	-.070	.282
	Upper secondary education (vocational)	-.046	.075	.540	-.193	.101
	Upper secondary education (general)	.014	.107	.898	-.197	.224
	Polytechnic/university of applied sciences education	.149	.089	.093	-.025	.323
	University or other higher education	-.015	.085	.862	-.182	.153

	Polytechnic/university of applied sciences education	Primary or lower secondary education	-.043	.084	.606	-.208	.122
		Upper secondary education (vocational)	-.195*	.068	.004	-.328	-.063
		Upper secondary education (general)	-.136	.102	.186	-.336	.065
		College level vocational education	-.149	.089	.093	-.323	.025
		University or other higher education	-.164*	.079	.038	-.319	-.009
	University or other higher education	Primary or lower secondary education	.121	.081	.136	-.038	.279
		Upper secondary education (vocational)	-.031	.063	.623	-.156	.093
		Upper secondary education (general)	.029	.100	.775	-.167	.224
		College level vocational education	.015	.085	.862	-.153	.182
		Polytechnic/university of applied sciences education	.164*	.079	.038	.009	.319
Male	Primary or lower secondary education	Upper secondary education (vocational)	-.015	.056	.790	-.124	.094
		Upper secondary education (general)	-.021	.088	.814	-.193	.151
		College level vocational education	-.012	.080	.883	-.169	.146

	Polytechnic/university of applied sciences education	-.158	.085	.065	-.325	.010
	University or other higher education	-.059	.075	.432	-.207	.088
Upper secondary education (vocational)	Primary or lower secondary education	.015	.056	.790	-.094	.124
	Upper secondary education (general)	-.006	.081	.943	-.165	.153
	College level vocational education	.003	.074	.968	-.142	.148
	Polytechnic/university of applied sciences education	-.143	.078	.067	-.295	.010
	University or other higher education	-.044	.067	.511	-.176	.088
Upper secondary education (general)	Primary or lower secondary education	.021	.088	.814	-.151	.193
	Upper secondary education (vocational)	.006	.081	.943	-.153	.165
	College level vocational education	.009	.100	.930	-.188	.205
	Polytechnic/university of applied sciences education	-.137	.103	.184	-.339	.065
	University or other higher education	-.039	.095	.687	-.226	.149
College level vocational education	Primary or lower secondary education	.012	.080	.883	-.146	.169

	Upper secondary education (vocational)	-.003	.074	.968	-.148	.142
	Upper secondary education (general)	-.009	.100	.930	-.205	.188
	Polytechnic/university of applied sciences education	-.146	.098	.137	-.338	.046
	University or other higher education	-.047	.089	.595	-.222	.127
Polytechnic/university of applied sciences education	Primary or lower secondary education	.158	.085	.065	-.010	.325
	Upper secondary education (vocational)	.143	.078	.067	-.010	.295
	Upper secondary education (general)	.137	.103	.184	-.065	.339
	College level vocational education	.146	.098	.137	-.046	.338
	University or other higher education	.098	.093	.288	-.083	.280
University or other higher education	Primary or lower secondary education	.059	.075	.432	-.088	.207
	Upper secondary education (vocational)	.044	.067	.511	-.088	.176
	Upper secondary education (general)	.039	.095	.687	-.149	.226
	College level vocational education	.047	.089	.595	-.127	.222

	Polytechnic/university of applied sciences education	-0.098	.093	.288	-.280	.083
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Based on estimated marginal means

*. The mean difference is significant at the .050 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender		Sum of Squares	df	Mean Square	F	Sig.
Female	Contrast	3.559	5	.712	2.240	.048
	Error	496.802	1563	.318		
Male	Contrast	1.319	5	.264	.830	.528
	Error	496.802	1563	.318		

Each F tests the simple effects of [t4] The respondent's highest level of education within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

* Select only the test group.

*SELECT IF (tyyppi = 1).

```
GLM ExpandedEmpowermentIndex BY tyyppi t1 t6 WITH t2 q16_5pt
  /DESIGN = tyyppi t1 t6 tyyppi*t1 tyyppi*t6 t1*t6 tyyppi*t1*t6 t2 q16_5pt
  /PRINT = PARAMETER
  /EMMEANS = TABLES(tyyppi*t1*t6) COMPARE(tyyppi) COMPARE(t1) COMPARE(t6)
  /EMMEANS = TABLES(t1*t6) COMPARE(t1) COMPARE(t6).
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:14:13	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM ExpandedEmpowermentIndex BY tyypit1 t6 WITH t2 q16_5pt /DESIGN = tyypit1 t6 tyypit1 tyypit6 t1*t6 tyypit1*t6 t2 q16_5pt /PRINT = PARAMETER /EMMEANS = TABLES(tyypit1*t6) COMPARE(tyypit1) COMPARE(t1) COMPARE(t6) /EMMEANS = TABLES(t1*t6)	

		COMPARE(t1) COMPARE(t6).
Resources	Processor Time	00:00:00.11
	Elapsed Time	00:00:00.19

Between-Subjects Factors

		Value Label	N
[tyyppi] To which group (test or control group) does the respondent belong:	0	Control group	1023
	1	Test group	566
[t1] The respondent's gender	1	Female	761
	2	Male	828
[t6] The respondent's household composition	1	One-person household	696
	2	Married/cohabiting couple with no children	294
	3	(Other) all-adult household (all aged over 18)	114
	4	Household with children	483
	5	Doesn't want to say	2

Tests of Between-Subjects Effects

Dependent Variable: Expanded Empowerment Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	520.466 ^a	18	28.915	91.967	<.001
Intercept	204.436	1	204.436	650.235	<.001

tyyppi	9.343	1	9.343	29.717	<.001
t1	1.677	1	1.677	5.334	.021
t6	7.352	4	1.838	5.846	<.001
tyyppi * t1	.090	1	.090	.285	.594
tyyppi * t6	1.077	3	.359	1.142	.331
t1 * t6	.715	3	.238	.758	.518
tyyppi * t1 * t6	2.047	3	.682	2.170	.090
t2	.377	1	.377	1.199	.274
q16_5pt	416.736	1	416.736	1325.483	<.001
Error	493.613	1570	.314		
Total	20489.863	1589			
Corrected Total	1014.079	1588			

a. R Squared = .513 (Adjusted R Squared = .508)

Parameter Estimates

Dependent Variable: Expanded Empowerment Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.005	.413	4.851	<.001	1.194	2.816
[tyyppi=0]	-.300	.088	-3.425	<.001	-.472	-.128
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	-.044	.084	-.517	.605	-.209	.122
[t1=2]	0 ^a	.	.	.	.	.
[t6=1]	.060	.409	.146	.884	-.743	.862
[t6=2]	.193	.413	.467	.640	-.618	1.004
[t6=3]	.024	.423	.057	.955	-.806	.854
[t6=4]	.315	.401	.787	.432	-.471	1.102

[t6=5]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	.215	.109	1.970	.049	.001	.429
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t6=1]	.186	.104	1.784	.075	-.018	.390
[tyyppi=0] * [t6=2]	.160	.129	1.237	.216	-.094	.414
[tyyppi=0] * [t6=3]	.129	.174	.737	.461	-.213	.471
[tyyppi=0] * [t6=4]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t6=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t6=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t6=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t6=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t6=4]	0 ^a	.	.	.	.	.
[t1=1] * [t6=1]	.094	.114	.825	.409	-.130	.318
[t1=1] * [t6=2]	.159	.142	1.117	.264	-.120	.438
[t1=1] * [t6=3]	.340	.188	1.811	.070	-.028	.709
[t1=1] * [t6=4]	0 ^a	.	.	.	.	.
[t1=2] * [t6=1]	0 ^a	.	.	.	.	.
[t1=2] * [t6=2]	0 ^a	.	.	.	.	.
[t1=2] * [t6=3]	0 ^a	.	.	.	.	.
[t1=2] * [t6=4]	0 ^a	.	.	.	.	.
[t1=2] * [t6=5]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1] * [t6=1]	-.208	.144	-1.445	.149	-.491	.074
[tyyppi=0] * [t1=1] * [t6=2]	-.414	.178	-2.327	.020	-.763	-.065
[tyyppi=0] * [t1=1] * [t6=3]	-.394	.241	-1.634	.102	-.867	.079

[tyyppi=0] * [t1=1] * [t6=4]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t6=1]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t6=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t6=3]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t6=4]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t6=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t6=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t6=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t6=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t6=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t6=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t6=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t6=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t6=4]	0 ^a	.	.	.	.	.
t2	-.013	.012	-1.095	.274	-.037	.010
q16_5pt	.371	.010	36.407	<.001	.351	.391

a. This parameter is set to zero because it is redundant.

Estimated Marginal Means

1. [tyyppi] To which group (test or control group) does the respondent belong: * [t1] The respondent's gender * [t6] The respondent's household

composition

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:

[t1] The respondent's gender	[t6] The respondent's household composition	Mean	Std. Error	
Control group	Female	One-person household	3.427 ^a	.044
		Married/cohabiting couple with no children	3.395 ^a	.056
		(Other) all-adult household (all aged over 18)	3.394 ^a	.097
		Household with children	3.612 ^a	.041
		Doesn't want to say	. ^{a,b}	.
	Male	One-person household	3.370 ^a	.032
		Married/cohabiting couple with no children	3.478 ^a	.058
		(Other) all-adult household (all aged over 18)	3.277 ^a	.095
		Household with children	3.440 ^a	.056
		Doesn't want to say	3.125 ^a	.397
Test group	Female	One-person household	3.535 ^a	.062
		Married/cohabiting couple with no children	3.734 ^a	.087
		(Other) all-adult household (all aged over 18)	3.745 ^a	.120
		Household with children	3.697 ^a	.051

	Doesn't want to say	a,b	.
Male	One-person household	3.485 ^a	.046
	Married/cohabiting couple with no children	3.618 ^a	.076
	(Other) all-adult household (all aged over 18)	3.449 ^a	.117
	Household with children	3.740 ^a	.067
	Doesn't want to say	a,b	.

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:		[t1] The respondent's gender	[t6] The respondent's household composition	95% Confidence Interval Lower Bound
Control group	Female	One-person household	3.340	
		Married/cohabiting couple with no children	3.286	
		(Other) all-adult household (all aged over 18)	3.205	
		Household with children	3.532	
		Doesn't want to say	.	
	Male	One-person household	3.307	
		Married/cohabiting couple with no children	3.365	
		(Other) all-adult household (all aged over 18)	3.091	
		Household with children	3.330	
		Doesn't want to say	2.346	
Test group	Female	One-person household	3.414	
		Married/cohabiting couple with no children	3.564	

	(Other) all-adult household (all aged over 18)	3.510
	Household with children	3.596
	Doesn't want to say	.
Male	One-person household	3.394
	Married/cohabiting couple with no children	3.469
	(Other) all-adult household (all aged over 18)	3.219
	Household with children	3.609
	Doesn't want to say	.

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:		[t6] The respondent's household composition	95% Confidence Interval Upper Bound
Control group	Female	One-person household	3.514
		Married/cohabiting couple with no children	3.504
		(Other) all-adult household (all aged over 18)	3.584
		Household with children	3.691
		Doesn't want to say	.
	Male	One-person household	3.434
		Married/cohabiting couple with no children	3.592
		(Other) all-adult household (all aged over 18)	3.464
		Household with children	3.551
		Doesn't want to say	3.903
Test group	Female	One-person household	3.656

	Married/cohabiting couple with no children	3.903
	(Other) all-adult household (all aged over 18)	3.981
	Household with children	3.797
	Doesn't want to say	.
Male	One-person household	3.575
	Married/cohabiting couple with no children	3.767
	(Other) all-adult household (all aged over 18)	3.678
	Household with children	3.872
	Doesn't want to say	.

a. Covariates appearing in the model are evaluated at the following values: [t2] The respondent's age group (categorised by researcher) = 3.39, q16_5pt = 3.9465.

b. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[typpi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	(I) [t6] The respondent's household composition	(J) [t6] The respondent's household composition	Mean Difference (I-J)	Std. Error	Sig. ^d	95% Confidence Interval for Difference ^d	
							Lower Bound	Upper Bound
Control group	Female	One-person household	Married/cohabiting couple with no children	.033	.071	.646	-.107	.172
			(Other) all-adult household (all aged over 18)	.033	.106	.757	-.175	.241
			Household with children	-.184*	.061	.002	-.303	-.066
			Doesn't want to say	.b	.	.	.	.
		Married/cohabiting couple with no children	One-person household	-.033	.071	.646	-.172	.107
			(Other) all-adult household (all aged over 18)	.000	.111	.998	-.217	.218
			Household with children	-.217*	.069	.002	-.353	-.081
			Doesn't want to say	.b	.	.	.	.
		(Other) all-adult household (all aged over 18)	One-person household	-.033	.106	.757	-.241	.175
			Married/cohabiting couple with no children	.000	.111	.998	-.218	.217
			Household with children	-.217*	.105	.039	-.423	-.011
			Doesn't want to say	.b	.	.	.	.

		Doesn't want to say	. ^b	.	.	.	.
	Household with children	One-person household	.184*	.061	.002	.066	.303
		Married/cohabiting couple with no children	.217*	.069	.002	.081	.353
		(Other) all-adult household (all aged over 18)	.217*	.105	.039	.011	.423
		Doesn't want to say	. ^b	.	.	.	.
	Doesn't want to say	One-person household	. ^c	.	.	.	.
		Married/cohabiting couple with no children	. ^c	.	.	.	.
		(Other) all-adult household (all aged over 18)	. ^c	.	.	.	.
		Household with children	. ^c	.	.	.	.
Male	One-person household	Married/cohabiting couple with no children	-.108	.066	.104	-.238	.022
		(Other) all-adult household (all aged over 18)	.093	.100	.355	-.104	.290
		Household with children	-.070	.065	.281	-.198	.058
		Doesn't want to say	.245	.398	.538	-.536	1.026
		One-person household	.108	.066	.104	-.022	.238

Married/cohabiting couple with no children	(Other) all-adult household (all aged over 18)	.201	.111	.071	-.018	.419
	Household with children	.038	.081	.640	-.121	.196
	Doesn't want to say	.353	.401	.379	-.434	1.140
(Other) all-adult household (all aged over 18)	One-person household	-.093	.100	.355	-.290	.104
	Married/cohabiting couple with no children	-.201	.111	.071	-.419	.018
	Household with children	-.163	.111	.140	-.380	.054
	Doesn't want to say	.152	.408	.709	-.648	.953
Household with children	One-person household	.070	.065	.281	-.058	.198
	Married/cohabiting couple with no children	-.038	.081	.640	-.196	.121
	(Other) all-adult household (all aged over 18)	.163	.111	.140	-.054	.380
	Doesn't want to say	.315	.401	.432	-.471	1.102
Doesn't want to say	One-person household	-.245	.398	.538	-1.026	.536
	Married/cohabiting couple with no children	-.353	.401	.379	-1.140	.434
	(Other) all-adult household (all aged over 18)	-.152	.408	.709	-.953	.648

			Household with children	-.315	.401	.432	-1.102	.471
Test group	Female	One-person household	Married/cohabiting couple with no children	-.198	.106	.062	-.407	.010
			(Other) all-adult household (all aged over 18)	-.210	.135	.119	-.475	.054
			Household with children	-.162*	.080	.044	-.319	-.005
			Doesn't want to say	. ^b	.	.	.	.
		Married/cohabiting couple with no children	One-person household	.198	.106	.062	-.010	.407
			(Other) all-adult household (all aged over 18)	-.012	.148	.937	-.302	.278
			Household with children	.037	.101	.715	-.161	.234
			Doesn't want to say	. ^b	.	.	.	.
		(Other) all-adult household (all aged over 18)	One-person household	.210	.135	.119	-.054	.475
			Married/cohabiting couple with no children	.012	.148	.937	-.278	.302
			Household with children	.049	.131	.710	-.208	.305
			Doesn't want to say	. ^b	.	.	.	.
		Household with children	One-person household	.162*	.080	.044	.005	.319
			Married/cohabiting couple with no children	-.037	.101	.715	-.234	.161

		(Other) all-adult household (all aged over 18)	-.049	.131	.710	-.305	.208
		Doesn't want to say	. ^b	.	.	.	.
	Doesn't want to say	One-person household	. ^c	.	.	.	.
		Married/cohabiting couple with no children	. ^c	.	.	.	.
		(Other) all-adult household (all aged over 18)	. ^c	.	.	.	.
		Household with children	. ^c	.	.	.	.
Male	One-person household	Married/cohabiting couple with no children	-.133	.089	.132	-.307	.040
		(Other) all-adult household (all aged over 18)	.036	.126	.776	-.211	.282
		Household with children	-.256*	.081	.002	-.416	-.096
		Doesn't want to say	. ^b	.	.	.	.
	Married/cohabiting couple with no children	One-person household	.133	.089	.132	-.040	.307
		(Other) all-adult household (all aged over 18)	.169	.139	.225	-.104	.443
		Household with children	-.122	.101	.227	-.321	.076
		Doesn't want to say	. ^b	.	.	.	.

(Other) all-adult household (all aged over 18)	One-person household	-.036	.126	.776	-.282	.211
	Married/cohabiting couple with no children	-.169	.139	.225	-.443	.104
	Household with children	-.292*	.135	.031	-.556	-.027
	Doesn't want to say	. ^b	.	.	.	.
Household with children	One-person household	.256*	.081	.002	.096	.416
	Married/cohabiting couple with no children	.122	.101	.227	-.076	.321
	(Other) all-adult household (all aged over 18)	.292*	.135	.031	.027	.556
	Doesn't want to say	. ^b	.	.	.	.
Doesn't want to say	One-person household	. ^c	.	.	.	.
	Married/cohabiting couple with no children	. ^c	.	.	.	.
	(Other) all-adult household (all aged over 18)	. ^c	.	.	.	.
	Household with children	. ^c	.	.	.	.

Based on estimated marginal means

*. The mean difference is significant at the .050 level.

b. The level combination of factors in (J) is not observed.

c. The level combination of factors in (I) is not observed.

d. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:

	[t1] The respondent's gender		Sum of Squares	df	Mean Square
Control group	Female	Contrast	4.552	3	1.517
		Error	493.613	1570	.314
	Male	Contrast	1.658	4	.415
		Error	493.613	1570	.314
Test group	Female	Contrast	1.842	3	.614
		Error	493.613	1570	.314
	Male	Contrast	3.564	3	1.188
		Error	493.613	1570	.314

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:

	[t1] The respondent's gender		F	Sig.
Control group	Female	Contrast	4.826	.002
		Error		
	Male	Contrast	1.318	.261
		Error		
Test group	Female	Contrast	1.953	.119
		Error		
	Male	Contrast	3.779	.010
		Error		

Error		
-------	--	--

Each F tests the simple effects of [t6] The respondent's household composition within each level combination of the other effects shown. These tests are based on the estimable linearly independent pairwise comparisons among the estimated marginal means.

2. [t1] The respondent's gender * [t6] The respondent's household composition

Estimates

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	[t6] The respondent's household composition	Mean	Std. Error	95% Confidence Interval Lower Bound
Female	One-person household	3.481 ^a	.038	3.407
	Married/cohabiting couple with no children	3.564 ^a	.051	3.463
	(Other) all-adult household (all aged over 18)	3.570 ^a	.077	3.418
	Household with children	3.654 ^a	.033	3.590
	Doesn't want to say	. ^{a,b}	.	.
Male	One-person household	3.427 ^a	.028	3.372
	Married/cohabiting couple with no children	3.548 ^a	.048	3.455

(Other) all-adult household (all aged over 18)	3.363 ^a	.075	3.215
Household with children	3.590 ^a	.044	3.504
Doesn't want to say	3.125 ^{a,c}	.397	2.346

Estimates

Dependent Variable: Expanded Empowerment Index

		95% Confidence Interval
[t1] The respondent's gender	[t6] The respondent's household composition	Upper Bound
Female	One-person household	3.556
	Married/cohabiting couple with no children	3.665
	(Other) all-adult household (all aged over 18)	3.721
	Household with children	3.719
	Doesn't want to say	.
Male	One-person household	3.483
	Married/cohabiting couple with no children	3.641
	(Other) all-adult household (all aged over 18)	3.511
	Household with children	3.677
	Doesn't want to say	3.903

a. Covariates appearing in the model are evaluated at the following values: [t2]
 The respondent's age group (categorised by researcher) = 3.39, q16_5pt = 3.9465.

b. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

c. Based on modified population marginal mean.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [t6] The respondent's household composition	(J) [t6] The respondent's household composition	Mean Difference (I-J)	Std. Error	Sig. ^f	95% Confidence Interval for Difference ^f	
						Lower Bound	Upper Bound
Female	One-person household	Married/cohabiting couple with no children	-.083	.064	.194	-.208	.042
		(Other) all-adult household (all aged over 18)	-.089	.086	.302	-.257	.080
		Household with children	-.173*	.051	<.001	-.272	-.074
		Doesn't want to say	. ^b	.	.	.	.
	Married/cohabiting couple with no children	One-person household	.083	.064	.194	-.042	.208
		(Other) all-adult household (all aged over 18)	-.006	.092	.950	-.187	.176
		Household with children	-.090	.061	.142	-.210	.030
		Doesn't want to say	. ^b	.	.	.	.

	(Other) all-adult household (all aged over 18)	One-person household	.089	.086	.302	-.080	.257	
		Married/cohabiting couple with no children	.006	.092	.950	-.176	.187	
		Household with children	-.084	.084	.318	-.250	.081	
		Doesn't want to say	. ^b	.	.	.	.
	Household with children	One-person household	.173*	.051	<.001	.074	.272	
		Married/cohabiting couple with no children	.090	.061	.142	-.030	.210	
		(Other) all-adult household (all aged over 18)	.084	.084	.318	-.081	.250	
		Doesn't want to say	. ^b	.	.	.	.
	Doesn't want to say	One-person household	. ^c	.	.	.	.
		Married/cohabiting couple with no children	. ^c	.	.	.	.
		(Other) all-adult household (all aged over 18)	. ^c	.	.	.	.
		Household with children	. ^c	.	.	.	.
	Male	One-person household	Married/cohabiting couple with no children	-.121*	.055	.029	-.229	-.012
			(Other) all-adult household (all aged over 18)	.064	.080	.424	-.093	.222

	Household with children	-.163*	.052	.002	-.266	-.060
	Doesn't want to say	.302 ^d	.398	.447	-.478	1.083
Married/cohabiting couple with no children	One-person household	.121*	.055	.029	.012	.229
	(Other) all-adult household (all aged over 18)	.185*	.089	.038	.010	.360
	Household with children	-.042	.065	.514	-.169	.085
	Doesn't want to say	.423 ^d	.400	.290	-.361	1.207
	(Other) all-adult household (all aged over 18)	One-person household	-.064	.080	.424	-.222	.093
	Married/cohabiting couple with no children	-.185*	.089	.038	-.360	-.010
	Household with children	-.227*	.087	.009	-.398	-.056
	Doesn't want to say	.238 ^d	.404	.555	-.554	1.031
Household with children	One-person household	.163*	.052	.002	.060	.266
	Married/cohabiting couple with no children	.042	.065	.514	-.085	.169
	(Other) all-adult household (all aged over 18)	.227*	.087	.009	.056	.398
	Doesn't want to say	.465 ^d	.399	.244	-.318	1.249
	Doesn't want to say	One-person household	-.302 ^e	.398	.447	-1.083	.478
	Married/cohabiting couple with no children	-.423 ^e	.400	.290	-1.207	.361

	(Other) all-adult household (all aged over 18)	-.238 ^e	.404	.555	-1.031	.554
	Household with children	-.465 ^e	.399	.244	-1.249	.318

Based on estimated marginal means

*. The mean difference is significant at the .050 level.

b. The level combination of factors in (J) is not observed.

c. The level combination of factors in (I) is not observed.

d. An estimate of the modified population marginal mean (J).

e. An estimate of the modified population marginal mean (I).

f. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender		Sum of Squares	df	Mean Square	F	Sig.
Female	Contrast	3.694	3	1.231	3.916	.008
	Error	493.613	1570	.314		
Male	Contrast	4.721	4	1.180	3.754	.005
	Error	493.613	1570	.314		

Each F tests the simple effects of [t6] The respondent's household composition within each level combination of the other effects shown. These tests are based on the estimable linearly independent pairwise comparisons among the estimated marginal means.

```
GLM ExpandedEmpowermentIndex BY tyypfi t1 t10 WITH t2 q16_5pt
  /DESIGN = tyypfi t1 t10 tyypfi*t1 tyypfi*t10 t1*t10 tyypfi*t1*t10 t2 q16_5pt
  /PRINT = PARAMETER
```

```

/EMMEANS = TABLES(tyyp*ti*t10) COMPARE(tyyp) COMPARE(t1) COMPARE(t10)
/EMMEANS = TABLES(t1*t10) COMPARE(t1) COMPARE(t10).

```

General Linear Model

Notes

Output Created		07-SEP-2024 12:14:14
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	GLM ExpandedEmpowermentIndex BY tyyp*ti t1 t10 WITH t2 q16_5pt /DESIGN = tyyp*ti t1 t10 tyyp*ti tyyp*t10 t1*t10 tyyp*ti*t10 t2 q16_5pt /PRINT = PARAMETER	

		/EMMEANS = TABLES(tyypit1*t10) COMPARE(tyypit1) COMPARE(t1) COMPARE(t10) /EMMEANS = TABLES(t1*t10) COMPARE(t1) COMPARE(t10).
Resources	Processor Time	00:00:00.11
	Elapsed Time	00:00:00.18

Between-Subjects Factors

		Value Label	N
[tyypit1] To which group (test or control group) does the respondent belong:	0	Control group	1023
	1	Test group	566
[t1] The respondent's gender	1	Female	761
	2	Male	828
[t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher)	1	Under 10,001 euros/year	618
	2	10,001 - 15,000 euros/year	377
	3	15,001 - 30,000 euros/year	362
	4	30,001 - 50,000 euros/year	86
	5	50,001 euros/year or more	10
	9	Can't say/Does not want to answer	136

Tests of Between-Subjects Effects

Dependent Variable: Expanded Empowerment Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	546.099 ^a	24	22.754	76.045	<.001
Intercept	287.567	1	287.567	961.056	<.001
tyyppi	2.362	1	2.362	7.892	.005
t1	1.131	1	1.131	3.781	.052
t10	30.253	5	6.051	20.221	<.001
tyyppi * t1	.011	1	.011	.036	.850
tyyppi * t10	1.128	5	.226	.754	.583
t1 * t10	1.101	5	.220	.736	.597
tyyppi * t1 * t10	.368	4	.092	.307	.873
t2	.547	1	.547	1.827	.177
q16_5pt	326.733	1	326.733	1091.948	<.001
Error	467.980	1564	.299		
Total	20489.863	1589			
Corrected Total	1014.079	1588			

a. R Squared = .539 (Adjusted R Squared = .531)

Parameter Estimates

Dependent Variable: Expanded Empowerment Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.278	.127	17.976	<.001	2.030	2.527
[tyyppi=0]	-.230	.145	-1.589	.112	-.515	.054
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.230	.147	1.567	.117	-.058	.518

[t1=2]	0 ^a	.	.	.	.	.
[t10=1]	-.175	.123	-1.426	.154	-.416	.066
[t10=2]	-.059	.130	-.450	.653	-.314	.197
[t10=3]	.166	.131	1.274	.203	-.090	.423
[t10=4]	.347	.156	2.216	.027	.040	.654
[t10=5]	.551	.403	1.367	.172	-.239	1.341
[t10=9]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	-.082	.192	-.428	.668	-.460	.295
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t10=1]	.057	.158	.359	.719	-.253	.367
[tyyppi=0] * [t10=2]	.143	.167	.856	.392	-.185	.471
[tyyppi=0] * [t10=3]	.066	.168	.390	.696	-.264	.395
[tyyppi=0] * [t10=4]	.108	.217	.494	.621	-.319	.534
[tyyppi=0] * [t10=5]	-.059	.462	-.129	.898	-.966	.847
[tyyppi=0] * [t10=9]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t10=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t10=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t10=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t10=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t10=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t10=9]	0 ^a	.	.	.	.	.
[t1=1] * [t10=1]	-.114	.167	-.682	.495	-.441	.213
[t1=1] * [t10=2]	-.125	.176	-.713	.476	-.471	.220
[t1=1] * [t10=3]	-.273	.173	-1.573	.116	-.612	.067
[t1=1] * [t10=4]	-.145	.229	-.637	.524	-.594	.303
[t1=1] * [t10=5]	.453	.598	.758	.449	-.720	1.627

[t1=1] * [t10=9]	0 ^a	.	.	.	.	.
[t1=2] * [t10=1]	0 ^a	.	.	.	.	.
[t1=2] * [t10=2]	0 ^a	.	.	.	.	.
[t1=2] * [t10=3]	0 ^a	.	.	.	.	.
[t1=2] * [t10=4]	0 ^a	.	.	.	.	.
[t1=2] * [t10=5]	0 ^a	.	.	.	.	.
[t1=2] * [t10=9]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1] * [t10=1]	.053	.215	.245	.806	-.369	.474
[tyyppi=0] * [t1=1] * [t10=2]	.072	.226	.318	.750	-.372	.516
[tyyppi=0] * [t1=1] * [t10=3]	.194	.226	.857	.391	-.249	.636
[tyyppi=0] * [t1=1] * [t10=4]	.025	.307	.082	.935	-.578	.628
[tyyppi=0] * [t1=1] * [t10=5]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1] * [t10=9]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t10=1]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t10=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t10=3]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t10=4]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t10=5]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [t10=9]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t10=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t10=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t10=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t10=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [t10=9]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t10=1]	0 ^a	.	.	.	.	.

[tyyppi=1] * [t1=2] * [t10=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t10=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t10=4]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t10=5]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [t10=9]	0 ^a	.	.	.	.	.
t2	-.015	.011	-1.352	.177	-.038	.007
q16_5pt	.343	.010	33.045	<.001	.323	.364

a. This parameter is set to zero because it is redundant.

Estimated Marginal Means

1. [tyyppi] To which group (test or control group) does the respondent belong: * [t1] The respondent's gender * [t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher)

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[t10] What is your personal average total annual income before tax (= gross income)? (euros/year)	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound

		(categorised by researcher)					
Control group	Female	Under 10,001 euros/year	3.319 ^a	.040	3.241	3.397	
		10,001 - 15,000 euros/year	3.529 ^a	.050	3.432	3.627	
		15,001 - 30,000 euros/year	3.651 ^a	.053	3.547	3.755	
		30,001 - 50,000 euros/year	3.832 ^a	.112	3.612	4.052	
		50,001 euros/year or more	4.443 ^a	.547	3.370	5.516	
		Can't say/Does not want to answer	3.498 ^a	.083	3.336	3.660	
		Male	Under 10,001 euros/year	3.232 ^a	.037	3.160	3.304
		10,001 - 15,000 euros/year	3.435 ^a	.048	3.340	3.530	
		15,001 - 30,000 euros/year	3.582 ^a	.052	3.481	3.684	
		30,001 - 50,000 euros/year	3.805 ^a	.120	3.570	4.040	
		50,001 euros/year or more	3.842 ^a	.207	3.435	4.248	
		Can't say/Does not want to answer	3.350 ^a	.093	3.169	3.532	
	Test group	Female	Under 10,001 euros/year	3.522 ^a	.061	3.403	3.641
			10,001 - 15,000 euros/year	3.627 ^a	.070	3.491	3.763
15,001 - 30,000 euros/year			3.705 ^a	.063	3.581	3.829	
30,001 - 50,000 euros/year			4.012 ^a	.137	3.743	4.281	

	50,001 euros/year or more	a,b	.	.	.
	Can't say/Does not want to answer	3.811 ^a	.095	3.624	3.998
Male	Under 10,001 euros/year	3.406 ^a	.051	3.305	3.506
	10,001 - 15,000 euros/year	3.522 ^a	.067	3.390	3.654
	15,001 - 30,000 euros/year	3.747 ^a	.068	3.614	3.880
	30,001 - 50,000 euros/year	3.928 ^a	.110	3.713	4.143
	50,001 euros/year or more	4.132 ^a	.387	3.372	4.891
	Can't say/Does not want to answer	3.581 ^a	.112	3.362	3.800

a. Covariates appearing in the model are evaluated at the following values: [t2] The respondent's age group (categorised by researcher) = 3.39, q16_5pt = 3.9465.

b. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	(I) [t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher)	(J) [t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher)	Mean Difference (I-J)	Std. Error	Sig. ^d	95% Confidence Interval for Difference ^d	
							Lower Bound	Upper Bound

Control group	Female	Under 10,001 euros/year	10,001 - 15,000 euros/year	-.211*	.064	<.001	-.335	-.086
			15,001 - 30,000 euros/year	-.333*	.067	<.001	-.464	-.201
			30,001 - 50,000 euros/year	-.514*	.119	<.001	-.748	-.279
			50,001 euros/year or more	-1.124*	.548	.041	-2.200	-.048
			Can't say/Does not want to answer	-.180*	.091	.049	-.359	-.001
		10,001 - 15,000 euros/year	Under 10,001 euros/year	.211*	.064	<.001	.086	.335
			15,001 - 30,000 euros/year	-.122	.073	.095	-.265	.021
			30,001 - 50,000 euros/year	-.303*	.123	.014	-.544	-.062
			50,001 euros/year or more	-.913	.549	.097	-1.991	.164
			Can't say/Does not want to answer	.031	.096	.747	-.158	.220
		15,001 - 30,000 euros/year	Under 10,001 euros/year	.333*	.067	<.001	.201	.464
			10,001 - 15,000 euros/year	.122	.073	.095	-.021	.265
			30,001 - 50,000 euros/year	-.181	.124	.143	-.423	.061
			50,001 euros/year or more	-.792	.550	.150	-1.870	.287

	Can't say/Does not want to answer	.153	.099	.121	-.040	.346
30,001 - 50,000 euros/year	Under 10,001 euros/year	.514*	.119	<.001	.279	.748
	10,001 - 15,000 euros/year	.303*	.123	.014	.062	.544
	15,001 - 30,000 euros/year	.181	.124	.143	-.061	.423
	50,001 euros/year or more	-.611	.559	.275	-1.706	.485
	Can't say/Does not want to answer	.334*	.140	.017	.060	.608
50,001 euros/year or more	Under 10,001 euros/year	1.124*	.548	.041	.048	2.200
	10,001 - 15,000 euros/year	.913	.549	.097	-.164	1.991
	15,001 - 30,000 euros/year	.792	.550	.150	-.287	1.870
	30,001 - 50,000 euros/year	.611	.559	.275	-.485	1.706
	Can't say/Does not want to answer	.945	.553	.088	-.141	2.030
Can't say/Does not want to answer	Under 10,001 euros/year	.180*	.091	.049	.001	.359
	10,001 - 15,000 euros/year	-.031	.096	.747	-.220	.158
	15,001 - 30,000 euros/year	-.153	.099	.121	-.346	.040
	30,001 - 50,000 euros/year	-.334*	.140	.017	-.608	-.060

		50,001 euros/year or more	-.945	.553	.088	-2.030	.141
Male	Under 10,001 euros/year	10,001 - 15,000 euros/year	-.203*	.061	<.001	-.322	-.084
		15,001 - 30,000 euros/year	-.351*	.064	<.001	-.476	-.225
		30,001 - 50,000 euros/year	-.573*	.126	<.001	-.820	-.326
		50,001 euros/year or more	-.610*	.211	.004	-1.023	-.196
		Can't say/Does not want to answer	-.119	.100	.234	-.314	.077
		10,001 - 15,000 euros/year	Under 10,001 euros/year	.203*	.061	<.001	.084	.322
		15,001 - 30,000 euros/year	-.147*	.071	.038	-.287	-.008
		30,001 - 50,000 euros/year	-.370*	.129	.004	-.624	-.116
		50,001 euros/year or more	-.407	.213	.056	-.825	.011
		Can't say/Does not want to answer	.085	.104	.418	-.120	.289
		15,001 - 30,000 euros/year	Under 10,001 euros/year	.351*	.064	<.001	.225	.476
		10,001 - 15,000 euros/year	.147*	.071	.038	.008	.287
		30,001 - 50,000 euros/year	-.222	.130	.088	-.477	.033

	50,001 euros/year or more		-.259	.214	.225	-.678	.160
	Can't say/Does not want to answer		.232*	.106	.029	.024	.440
30,001 - 50,000 euros/year	Under 10,001 euros/year		.573*	.126	<.001	.326	.820
	10,001 - 15,000 euros/year		.370*	.129	.004	.116	.624
	15,001 - 30,000 euros/year		.222	.130	.088	-.033	.477
	50,001 euros/year or more		-.037	.239	.878	-.506	.432
	Can't say/Does not want to answer		.454*	.151	.003	.158	.751
50,001 euros/year or more	Under 10,001 euros/year		.610*	.211	.004	.196	1.023
	10,001 - 15,000 euros/year		.407	.213	.056	-.011	.825
	15,001 - 30,000 euros/year		.259	.214	.225	-.160	.678
	30,001 - 50,000 euros/year		.037	.239	.878	-.432	.506
	Can't say/Does not want to answer		.491*	.227	.030	.046	.936
Can't say/Does not want to answer	Under 10,001 euros/year		.119	.100	.234	-.077	.314
	10,001 - 15,000 euros/year		-.085	.104	.418	-.289	.120
	15,001 - 30,000 euros/year		-.232*	.106	.029	-.440	-.024

			30,001 - 50,000 euros/year	-.454*	.151	.003	-.751	-.158
			50,001 euros/year or more	-.491*	.227	.030	-.936	-.046
Test group	Female	Under 10,001 euros/year	10,001 - 15,000 euros/year	-.105	.092	.255	-.286	.076
			15,001 - 30,000 euros/year	-.183*	.088	.038	-.355	-.010
			30,001 - 50,000 euros/year	-.490*	.150	.001	-.785	-.196
			50,001 euros/year or more	. ^b	.	.	.	.
			Can't say/Does not want to answer	-.289*	.113	.011	-.511	-.067
		10,001 - 15,000 euros/year	Under 10,001 euros/year	.105	.092	.255	-.076	.286
			15,001 - 30,000 euros/year	-.078	.094	.407	-.262	.106
			30,001 - 50,000 euros/year	-.385*	.154	.012	-.687	-.084
			50,001 euros/year or more	. ^b	.	.	.	.
			Can't say/Does not want to answer	-.184	.118	.119	-.415	.047
		15,001 - 30,000 euros/year	Under 10,001 euros/year	.183*	.088	.038	.010	.355
			10,001 - 15,000 euros/year	.078	.094	.407	-.106	.262
			30,001 - 50,000 euros/year	-.308*	.150	.041	-.603	-.012

	50,001 euros/year or more	. ^b	.	.	.	.
	Can't say/Does not want to answer	-.106	.114	.352	-.330	.118
30,001 - 50,000 euros/year	Under 10,001 euros/year	.490*	.150	.001	.196	.785
	10,001 - 15,000 euros/year	.385*	.154	.012	.084	.687
	15,001 - 30,000 euros/year	.308*	.150	.041	.012	.603
	50,001 euros/year or more	. ^b	.	.	.	.
	Can't say/Does not want to answer	.201	.167	.228	-.126	.528
50,001 euros/year or more	Under 10,001 euros/year	. ^c	.	.	.	.
	10,001 - 15,000 euros/year	. ^c	.	.	.	.
	15,001 - 30,000 euros/year	. ^c	.	.	.	.
	30,001 - 50,000 euros/year	. ^c	.	.	.	.
	Can't say/Does not want to answer	. ^c	.	.	.	.
Can't say/Does not want to answer	Under 10,001 euros/year	.289*	.113	.011	.067	.511
	10,001 - 15,000 euros/year	.184	.118	.119	-.047	.415
	15,001 - 30,000 euros/year	.106	.114	.352	-.118	.330

		30,001 - 50,000 euros/year	-.201	.167	.228	-.528	.126	
		50,001 euros/year or more	. ^b	.	.	.	.
Male	Under 10,001 euros/year	10,001 - 15,000 euros/year	-.117	.085	.169	-.283	.050	
		15,001 - 30,000 euros/year	-.342*	.085	<.001	-.509	-.174	
		30,001 - 50,000 euros/year	-.522*	.121	<.001	-.760	-.284	
		50,001 euros/year or more	-.726	.391	.063	-1.492	.040	
		Can't say/Does not want to answer	-.175	.123	.154	-.416	.066	
		10,001 - 15,000 euros/year	Under 10,001 euros/year	.117	.085	.169	-.050	.283
		15,001 - 30,000 euros/year	15,001 - 30,000 euros/year	-.225*	.095	.018	-.412	-.038
		30,001 - 50,000 euros/year	-.405*	.129	.002	-.658	-.153	
		50,001 euros/year or more	-.609	.393	.121	-1.380	.161	
		Can't say/Does not want to answer	-.059	.130	.653	-.314	.197	
	15,001 - 30,000 euros/year	Under 10,001 euros/year	.342*	.085	<.001	.174	.509	
		10,001 - 15,000 euros/year	.225*	.095	.018	.038	.412	
		30,001 - 50,000 euros/year	-.180	.128	.160	-.432	.072	

	50,001 euros/year or more		-.384	.393	.328	-1.155	.386
	Can't say/Does not want to answer		.166	.131	.203	-.090	.423
30,001 - 50,000 euros/year	Under 10,001 euros/year		.522*	.121	<.001	.284	.760
	10,001 - 15,000 euros/year		.405*	.129	.002	.153	.658
	15,001 - 30,000 euros/year		.180	.128	.160	-.072	.432
	50,001 euros/year or more		-.204	.402	.612	-.992	.585
	Can't say/Does not want to answer		.347*	.156	.027	.040	.654
50,001 euros/year or more	Under 10,001 euros/year		.726	.391	.063	-.040	1.492
	10,001 - 15,000 euros/year		.609	.393	.121	-.161	1.380
	15,001 - 30,000 euros/year		.384	.393	.328	-.386	1.155
	30,001 - 50,000 euros/year		.204	.402	.612	-.585	.992
	Can't say/Does not want to answer		.551	.403	.172	-.239	1.341
Can't say/Does not want to answer	Under 10,001 euros/year		.175	.123	.154	-.066	.416
	10,001 - 15,000 euros/year		.059	.130	.653	-.197	.314
	15,001 - 30,000 euros/year		-.166	.131	.203	-.423	.090

	30,001 - 50,000 euros/year	-.347*	.156	.027	-.654	-.040
	50,001 euros/year or more	-.551	.403	.172	-1.341	.239

Based on estimated marginal means

*. The mean difference is significant at the .050 level.

b. The level combination of factors in (J) is not observed.

c. The level combination of factors in (I) is not observed.

d. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the

respondent belong:

	[t1] The respondent's gender		Sum of Squares	df	Mean Square
Control group	Female	Contrast	11.928	5	2.386
		Error	467.980	1564	.299
	Male	Contrast	14.595	5	2.919
		Error	467.980	1564	.299
Test group	Female	Contrast	4.453	4	1.113
		Error	467.980	1564	.299
	Male	Contrast	8.973	5	1.795
		Error	467.980	1564	.299

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender		F	Sig.
Control group	Female	Contrast	7.973	<.001
		Error		
	Male	Contrast	9.756	<.001
		Error		
Test group	Female	Contrast	3.721	.005
		Error		
	Male	Contrast	5.998	<.001
		Error		

Each F tests the simple effects of [t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher) within each level combination of the other effects shown. These tests are based on the estimable linearly independent pairwise comparisons among the estimated marginal means.

2. [t1] The respondent's gender * [t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher)

Estimates

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	[t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher)	Mean	Std. Error	95% Confidence Interval
				Lower Bound
Female	Under 10,001 euros/year	3.420 ^a	.036	3.349
	10,001 - 15,000 euros/year	3.578 ^a	.043	3.494
	15,001 - 30,000 euros/year	3.678 ^a	.042	3.596
	30,001 - 50,000 euros/year	3.922 ^a	.089	3.748
	50,001 euros/year or more	4.443 ^{a,b}	.547	3.370
	Can't say/Does not want to answer	3.655 ^a	.063	3.531
Male	Under 10,001 euros/year	3.319 ^a	.032	3.257
	10,001 - 15,000 euros/year	3.479 ^a	.041	3.397
	15,001 - 30,000 euros/year	3.665 ^a	.043	3.581
	30,001 - 50,000 euros/year	3.866 ^a	.081	3.706
	50,001 euros/year or more	3.987 ^a	.220	3.556
	Can't say/Does not want to answer	3.466 ^a	.073	3.323

Estimates

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	[t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher)	95% Confidence Interval
		Upper Bound
Female	Under 10,001 euros/year	3.492
	10,001 - 15,000 euros/year	3.662

	15,001 - 30,000 euros/year	3.760
	30,001 - 50,000 euros/year	4.096
	50,001 euros/year or more	5.516
	Can't say/Does not want to answer	3.778
Male	Under 10,001 euros/year	3.381
	10,001 - 15,000 euros/year	3.560
	15,001 - 30,000 euros/year	3.749
	30,001 - 50,000 euros/year	4.026
	50,001 euros/year or more	4.417
	Can't say/Does not want to answer	3.608

a. Covariates appearing in the model are evaluated at the following values: [t2]
The respondent's age group (categorised by researcher) = 3.39, q16_5pt = 3.9465.

b. Based on modified population marginal mean.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [t10] What is your personal average total annual income before tax (= gross income)? (euros/year)	(J) [t10] What is your personal average total annual income before tax (= gross income)? (euros/year)	Mean Difference (I-J)	Std. Error	Sig. ^d	95% Confidence Interval for Difference ^d	
						Lower Bound	Upper Bound

	(categorised by researcher)	(categorised by researcher)					
Female	Under 10,001 euros/year	10,001 - 15,000 euros/year	-.158*	.056	.005	-.268	-.048
		15,001 - 30,000 euros/year	-.258*	.056	<.001	-.367	-.148
		30,001 - 50,000 euros/year	-.502*	.097	<.001	-.691	-.313
		50,001 euros/year or more	-1.022 ^b	.548	.062	-2.098	.053
		Can't say/Does not want to answer	-.234*	.073	.001	-.377	-.092
	10,001 - 15,000 euros/year	Under 10,001 euros/year	.158*	.056	.005	.048	.268
		15,001 - 30,000 euros/year	-.100	.060	.094	-.217	.017
		30,001 - 50,000 euros/year	-.344*	.099	<.001	-.538	-.151
		50,001 euros/year or more	-.865 ^b	.549	.115	-1.941	.212
		Can't say/Does not want to answer	-.077	.076	.315	-.226	.073
	15,001 - 30,000 euros/year	Under 10,001 euros/year	.258*	.056	<.001	.148	.367
		10,001 - 15,000 euros/year	.100	.060	.094	-.017	.217
		30,001 - 50,000 euros/year	-.244*	.097	.012	-.435	-.053
		50,001 euros/year or more	-.765 ^b	.549	.164	-1.841	.312
		Can't say/Does not want to answer	.023	.076	.757	-.125	.172
	30,001 - 50,000 euros/year	Under 10,001 euros/year	.502*	.097	<.001	.313	.691

		10,001 - 15,000 euros/year	.344*	.099	<.001	.151	.538
		15,001 - 30,000 euros/year	.244*	.097	.012	.053	.435
		50,001 euros/year or more	-.521 ^b	.554	.348	-1.608	.567
		Can't say/Does not want to answer	.268*	.109	.014	.054	.481
	50,001 euros/year or more	Under 10,001 euros/year	1.022 ^c	.548	.062	-.053	2.098
		10,001 - 15,000 euros/year	.865 ^c	.549	.115	-.212	1.941
		15,001 - 30,000 euros/year	.765 ^c	.549	.164	-.312	1.841
		30,001 - 50,000 euros/year	.521 ^c	.554	.348	-.567	1.608
		Can't say/Does not want to answer	.788 ^c	.551	.153	-.292	1.868
	Can't say/Does not want to answer	Under 10,001 euros/year	.234*	.073	.001	.092	.377
		10,001 - 15,000 euros/year	.077	.076	.315	-.073	.226
		15,001 - 30,000 euros/year	-.023	.076	.757	-.172	.125
		30,001 - 50,000 euros/year	-.268*	.109	.014	-.481	-.054
		50,001 euros/year or more	-.788 ^b	.551	.153	-1.868	.292
Male	Under 10,001 euros/year	10,001 - 15,000 euros/year	-.160*	.052	.002	-.262	-.057
		15,001 - 30,000 euros/year	-.346*	.054	<.001	-.452	-.240
		30,001 - 50,000 euros/year	-.548*	.088	<.001	-.720	-.375

	50,001 euros/year or more	-.668*	.222	.003	-1.103	-.232
	Can't say/Does not want to answer	-.147	.079	.064	-.302	.008
10,001 - 15,000 euros/year	Under 10,001 euros/year	.160*	.052	.002	.057	.262
	15,001 - 30,000 euros/year	-.186*	.060	.002	-.303	-.069
	30,001 - 50,000 euros/year	-.388*	.091	<.001	-.567	-.208
	50,001 euros/year or more	-.508*	.223	.023	-.946	-.070
	Can't say/Does not want to answer	.013	.084	.877	-.151	.177
15,001 - 30,000 euros/year	Under 10,001 euros/year	.346*	.054	<.001	.240	.452
	10,001 - 15,000 euros/year	.186*	.060	.002	.069	.303
	30,001 - 50,000 euros/year	-.201*	.091	.028	-.381	-.022
	50,001 euros/year or more	-.322	.223	.150	-.760	.116
	Can't say/Does not want to answer	.199*	.084	.018	.034	.364
30,001 - 50,000 euros/year	Under 10,001 euros/year	.548*	.088	<.001	.375	.720
	10,001 - 15,000 euros/year	.388*	.091	<.001	.208	.567
	15,001 - 30,000 euros/year	.201*	.091	.028	.022	.381
	50,001 euros/year or more	-.120	.234	.607	-.579	.338
	Can't say/Does not want to answer	.401*	.109	<.001	.187	.614

50,001 euros/year or more	Under 10,001 euros/year	.668*	.222	.003	.232	1.103
	10,001 - 15,000 euros/year	.508*	.223	.023	.070	.946
	15,001 - 30,000 euros/year	.322	.223	.150	-.116	.760
	30,001 - 50,000 euros/year	.120	.234	.607	-.338	.579
	Can't say/Does not want to answer	.521*	.231	.024	.067	.974
Can't say/Does not want to answer	Under 10,001 euros/year	.147	.079	.064	-.008	.302
	10,001 - 15,000 euros/year	-.013	.084	.877	-.177	.151
	15,001 - 30,000 euros/year	-.199*	.084	.018	-.364	-.034
	30,001 - 50,000 euros/year	-.401*	.109	<.001	-.614	-.187
	50,001 euros/year or more	-.521*	.231	.024	-.974	-.067

Based on estimated marginal means

*. The mean difference is significant at the .050 level.

b. An estimate of the modified population marginal mean (J).

c. An estimate of the modified population marginal mean (I).

d. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	Sum of Squares	df	Mean Square	F	Sig.	
Female	Contrast	12.658	5	2.532	8.461	<.001

	Error	467.980	1564	.299		
Male	Contrast	20.796	5	4.159	13.900	<.001
	Error	467.980	1564	.299		

Each F tests the simple effects of [t10] What is your personal average total annual income before tax (= gross income)? (euros/year) (categorised by researcher) within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

```
GLM ExpandedEmpowermentIndex BY tyypyi t1 kuntar WITH t2 q16_5pt
/DESIGN = tyypyi t1 kuntar tyypyi*t1 tyypyi*kuntar t1*kuntar tyypyi*t1*kuntar t2 q16_5pt
/PRINT = PARAMETER
/EMMEANS = TABLES(tyypyi*t1*kuntar) COMPARE(tyypyi) COMPARE(t1) COMPARE(kuntar)
/EMMEANS = TABLES(t1*kuntar) COMPARE(t1) COMPARE(kuntar).
```

General Linear Model

Notes

Output Created	07-SEP-2024 12:14:14	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1597

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		<pre>GLM ExpandedEmpowermentIndex BY tyypit1 kuntar WITH t2 q16_5pt /DESIGN = tyypit1 kuntar tyypit1 tyypit1*kuntar t1*kuntar tyypit1*t1*kuntar t2 q16_5pt /PRINT = PARAMETER /EMMEANS = TABLES(tyypit1*kuntar) COMPARE(tyypit1) COMPARE(t1) COMPARE(kuntar) /EMMEANS = TABLES(t1*kuntar) COMPARE(t1) COMPARE(kuntar).</pre>
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.07

Between-Subjects Factors

		Value Label	N
[tyypit1] To which group (test or control group) does the respondent belong:	0	Control group	1006
	1	Test group	559
[t1] The respondent's gender	1	Female	756

	2	Male	809
[kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	1	Urban municipality	1166
	2	Semi-urban municipality	227
	3	Rural municipality	172

Tests of Between-Subjects Effects

Dependent Variable: Expanded Empowerment Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	501.922 ^a	13	38.609	121.246	<.001
Intercept	307.921	1	307.921	966.969	<.001
tyyppi	4.419	1	4.419	13.876	<.001
t1	.343	1	.343	1.078	.299
kuntar	.606	2	.303	.952	.386
tyyppi * t1	.070	1	.070	.221	.639
tyyppi * kuntar	.056	2	.028	.088	.916
t1 * kuntar	.937	2	.469	1.472	.230
tyyppi * t1 * kuntar	.312	2	.156	.490	.613
t2	.811	1	.811	2.546	.111
q16_5pt	436.241	1	436.241	1369.935	<.001
Error	493.899	1551	.318		
Total	20222.510	1565			
Corrected Total	995.821	1564			

a. R Squared = .504 (Adjusted R Squared = .500)

Parameter Estimates

Dependent Variable: Expanded Empowerment Index

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.114	.127	16.644	<.001	1.865	2.363
[tyyppi=0]	-.049	.128	-.379	.704	-.300	.203
[tyyppi=1]	0 ^a	.	.	.	.	.
[t1=1]	.035	.151	.234	.815	-.261	.332
[t1=2]	0 ^a	.	.	.	.	.
[kuntar=1]	.023	.112	.206	.837	-.197	.243
[kuntar=2]	.094	.135	.699	.485	-.170	.358
[kuntar=3]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1]	-.165	.184	-.895	.371	-.525	.196
[tyyppi=0] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [kuntar=1]	-.137	.137	-1.005	.315	-.406	.131
[tyyppi=0] * [kuntar=2]	-.132	.168	-.789	.431	-.461	.197
[tyyppi=0] * [kuntar=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [kuntar=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [kuntar=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [kuntar=3]	0 ^a	.	.	.	.	.
[t1=1] * [kuntar=1]	.067	.161	.416	.677	-.248	.382
[t1=1] * [kuntar=2]	.019	.202	.093	.926	-.377	.414
[t1=1] * [kuntar=3]	0 ^a	.	.	.	.	.
[t1=2] * [kuntar=1]	0 ^a	.	.	.	.	.
[t1=2] * [kuntar=2]	0 ^a	.	.	.	.	.

[t1=2] * [kuntar=3]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=1] * [kuntar=1]	.194	.196	.988	.323	-.191	.579
[tyyppi=0] * [t1=1] * [kuntar=2]	.181	.245	.737	.461	-.300	.661
[tyyppi=0] * [t1=1] * [kuntar=3]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [kuntar=1]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [kuntar=2]	0 ^a	.	.	.	.	.
[tyyppi=0] * [t1=2] * [kuntar=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [kuntar=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [kuntar=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=1] * [kuntar=3]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [kuntar=1]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [kuntar=2]	0 ^a	.	.	.	.	.
[tyyppi=1] * [t1=2] * [kuntar=3]	0 ^a	.	.	.	.	.
t2	-.019	.012	-1.596	.111	-.043	.004
q16_5pt	.377	.010	37.013	<.001	.357	.397

a. This parameter is set to zero because it is redundant.

Estimated Marginal Means

1. [tyyppi] To which group (test or control group) does the respondent belong: * [t1] The respondent's gender * [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Mean
Control group	Female	Urban municipality	3.508 ^a
		Semi-urban municipality	3.523 ^a
		Rural municipality	3.362 ^a
	Male	Urban municipality	3.376 ^a
		Semi-urban municipality	3.453 ^a
		Rural municipality	3.491 ^a
Test group	Female	Urban municipality	3.665 ^a
		Semi-urban municipality	3.688 ^a
		Rural municipality	3.575 ^a
	Male	Urban municipality	3.563 ^a
		Semi-urban municipality	3.634 ^a
		Rural municipality	3.539 ^a

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Std. Error
Control group	Female	Urban municipality	.030

		Semi-urban municipality	.062
		Rural municipality	.075
	Male	Urban municipality	.029
		Semi-urban municipality	.068
		Rural municipality	.074
Test group	Female	Urban municipality	.039
		Semi-urban municipality	.103
		Rural municipality	.109
	Male	Urban municipality	.038
		Semi-urban municipality	.084
		Rural municipality	.105

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	95% Confidence Interval Lower Bound
Control group	Female	Urban municipality	3.449
		Semi-urban municipality	3.401
		Rural municipality	3.214
	Male	Urban municipality	3.320
		Semi-urban municipality	3.319
		Rural municipality	3.347
Test group	Female	Urban municipality	3.588
		Semi-urban municipality	3.485
		Rural municipality	3.362
	Male	Urban municipality	3.487
		Semi-urban municipality	3.468
		Rural municipality	3.333

Estimates

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	[kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	95% Confidence Interval Upper Bound
Control group	Female	Urban municipality	3.567
		Semi-urban municipality	3.645
		Rural municipality	3.509
	Male	Urban municipality	3.433
		Semi-urban municipality	3.586
		Rural municipality	3.635
Test group	Female	Urban municipality	3.741
		Semi-urban municipality	3.890
		Rural municipality	3.788
	Male	Urban municipality	3.638
		Semi-urban municipality	3.799
		Rural municipality	3.746

a. Covariates appearing in the model are evaluated at the following values: [t2] The respondent's age group (categorised by researcher) = 3.40, q16_5pt = 3.9489.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:		[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)
Control group	Female	Urban municipality	Semi-urban municipality	Rural municipality
			Semi-urban municipality	Urban municipality
			Rural municipality	Urban municipality
		Male	Urban municipality	Semi-urban municipality
			Semi-urban municipality	Urban municipality
			Rural municipality	Urban municipality
	Test group	Female	Urban municipality	Semi-urban municipality
			Semi-urban municipality	Urban municipality
			Rural municipality	Urban municipality
		Male	Urban municipality	Semi-urban municipality
			Semi-urban municipality	Urban municipality
			Rural municipality	Urban municipality

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Mean Difference (I-J)
Control group	Female	Urban municipality	Semi-urban municipality	-.015
			Rural municipality	.146
		Semi-urban municipality	Urban municipality	.015
			Rural municipality	.161
		Rural municipality	Urban municipality	-.146
			Semi-urban municipality	-.161
	Male	Urban municipality	Semi-urban municipality	-.076
			Rural municipality	-.114
		Semi-urban municipality	Urban municipality	.076
			Rural municipality	-.038
		Rural municipality	Urban municipality	.114
			Semi-urban municipality	.038
Test group	Female	Urban municipality	Semi-urban municipality	-.023
			Rural municipality	.090
		Semi-urban municipality	Urban municipality	.023
			Rural municipality	.113
		Rural municipality	Urban municipality	-.090
			Semi-urban municipality	-.113
	Male	Urban municipality	Semi-urban municipality	-.071
			Rural municipality	.023
		Semi-urban municipality	Urban municipality	.071
			Rural municipality	.094
		Rural municipality	Urban municipality	-.023
			Semi-urban municipality	-.094

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Std. Error
Control group	Female	Urban municipality	Semi-urban municipality	.069
			Rural municipality	.081
		Semi-urban municipality	Urban municipality	.069
			Rural municipality	.097
		Rural municipality	Urban municipality	.081
			Semi-urban municipality	.097
	Male	Urban municipality	Semi-urban municipality	.074
			Rural municipality	.079
		Semi-urban municipality	Urban municipality	.074
			Rural municipality	.100
		Rural municipality	Urban municipality	.079
			Semi-urban municipality	.100
Test group	Female	Urban municipality	Semi-urban municipality	.110
			Rural municipality	.115
		Semi-urban municipality	Urban municipality	.110
			Rural municipality	.150
		Rural municipality	Urban municipality	.115
			Semi-urban municipality	.150
	Male	Urban municipality	Semi-urban municipality	.092
			Rural municipality	.112
		Semi-urban municipality	Urban municipality	.092
			Rural municipality	.135
		Rural municipality	Urban municipality	.112
			Semi-urban municipality	.135

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:	[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Sig. ^a
Control group	Female	Urban municipality	Semi-urban municipality	.829
			Rural municipality	.070
		Semi-urban municipality	Urban municipality	.829
			Rural municipality	.097
		Rural municipality	Urban municipality	.070
			Semi-urban municipality	.097
	Male	Urban municipality	Semi-urban municipality	.301
			Rural municipality	.148
		Semi-urban municipality	Urban municipality	.301
			Rural municipality	.703
		Rural municipality	Urban municipality	.148
			Semi-urban municipality	.703
Test group	Female	Urban municipality	Semi-urban municipality	.835
			Rural municipality	.436
		Semi-urban municipality	Urban municipality	.835
			Rural municipality	.451
		Rural municipality	Urban municipality	.436
			Semi-urban municipality	.451
	Male	Urban municipality	Semi-urban municipality	.443
			Rural municipality	.837
		Semi-urban municipality	Urban municipality	.443
			Rural municipality	.485
		Rural municipality	Urban municipality	.837
			Semi-urban municipality	.485

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:		(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	95% Confidence Interval for Difference ^a Lower Bound
Control group	Female	Urban municipality	Semi-urban municipality	-.150
			Rural municipality	-.012
		Semi-urban municipality	Urban municipality	-.120
			Rural municipality	-.029
		Rural municipality	Urban municipality	-.305
			Semi-urban municipality	-.352
	Male	Urban municipality	Semi-urban municipality	-.221
			Rural municipality	-.269
		Semi-urban municipality	Urban municipality	-.068
			Rural municipality	-.234
		Rural municipality	Urban municipality	-.040
			Semi-urban municipality	-.158
Test group	Female	Urban municipality	Semi-urban municipality	-.239
			Rural municipality	-.137
		Semi-urban municipality	Urban municipality	-.193
			Rural municipality	-.181
		Rural municipality	Urban municipality	-.316
			Semi-urban municipality	-.407
	Male	Urban municipality	Semi-urban municipality	-.252
			Rural municipality	-.197
		Semi-urban municipality	Urban municipality	-.110
			Rural municipality	-.170
		Rural municipality	Urban municipality	-.243
			Semi-urban municipality	-.358

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:		[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	95% Confidence Interval for Difference Upper Bound
Control group	Female	Urban municipality	Semi-urban municipality		.120
			Rural municipality		.305
		Semi-urban municipality	Urban municipality		.150
		Rural municipality		.352	
		Rural municipality	Urban municipality		.012
			Semi-urban municipality		.029
	Male	Urban municipality	Semi-urban municipality		.068
			Rural municipality		.040
		Semi-urban municipality	Urban municipality		.221
		Rural municipality		.158	
		Rural municipality	Urban municipality		.269
			Semi-urban municipality		.234
Test group	Female	Urban municipality	Semi-urban municipality		.193
			Rural municipality		.316
		Semi-urban municipality	Urban municipality		.239
		Rural municipality		.407	
		Rural municipality	Urban municipality		.137
			Semi-urban municipality		.181
	Male	Urban municipality	Semi-urban municipality		.110
			Rural municipality		.243
		Semi-urban municipality	Urban municipality		.252
		Rural municipality		.358	
		Rural municipality	Urban municipality		.197
			Semi-urban municipality		.170

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:

	[t1] The respondent's gender		Sum of Squares	df	Mean Square
Control group	Female	Contrast	1.134	2	.567
		Error	493.899	1551	.318
	Male	Contrast	.891	2	.446
		Error	493.899	1551	.318
Test group	Female	Contrast	.222	2	.111
		Error	493.899	1551	.318
	Male	Contrast	.220	2	.110
		Error	493.899	1551	.318

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[tyyppi] To which group (test or control group) does the respondent belong:

	[t1] The respondent's gender		F	Sig.
Control group	Female	Contrast	1.781	.169
		Error		
	Male	Contrast	1.400	.247
		Error		
Test group	Female	Contrast	.349	.705
		Error		
	Male	Contrast	.346	.708
		Error		

Each F tests the simple effects of [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register) within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

2. [t1] The respondent's gender * [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)

Estimates

Dependent Variable: Expanded Empowerment Index

		Mean	Std. Error	95% Confidence Interval
[t1] The respondent's gender				Lower Bound
Female	Urban municipality	3.586 ^a	.025	3.538
	Semi-urban municipality	3.605 ^a	.060	3.487
	Rural municipality	3.468 ^a	.066	3.339
Male	Urban municipality	3.469 ^a	.024	3.423
	Semi-urban municipality	3.543 ^a	.054	3.437
	Rural municipality	3.515 ^a	.064	3.389

Estimates

Dependent Variable: Expanded Empowerment Index

		Mean	Std. Error	95% Confidence Interval
[t1] The respondent's gender				Lower Bound
[kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Urban municipality			
	Semi-urban municipality			
	Rural municipality			

	residence, statistical grouping of municipalities (from register)	Upper Bound
Female	Urban municipality	3.635
	Semi-urban municipality	3.723
	Rural municipality	3.598
Male	Urban municipality	3.516
	Semi-urban municipality	3.649
	Rural municipality	3.641

a. Covariates appearing in the model are evaluated at the following values: [t2]
The respondent's age group (categorised by researcher) = 3.40, q16_5pt =
3.9489.

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Mean Difference (I-J)
Female	Urban municipality	Semi-urban municipality	-.019
		Rural municipality	.118
	Semi-urban municipality	Urban municipality	.019
		Rural municipality	.137
	Rural municipality	Urban municipality	-.118
		Semi-urban municipality	-.137
Male	Urban municipality	Semi-urban municipality	-.074
		Rural municipality	-.046
	Semi-urban municipality	Urban municipality	.074

	Rural municipality	.028
Rural municipality	Urban municipality	.046
	Semi-urban municipality	-.028

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Std. Error
Female	Urban municipality	Semi-urban municipality	.065
		Rural municipality	.071
	Semi-urban municipality	Urban municipality	.065
		Rural municipality	.089
	Rural municipality	Urban municipality	.071
		Semi-urban municipality	.089
Male	Urban municipality	Semi-urban municipality	.059
		Rural municipality	.069
	Semi-urban municipality	Urban municipality	.059
		Rural municipality	.084
	Rural municipality	Urban municipality	.069
		Semi-urban municipality	.084

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	Sig. ^a

Female	Urban municipality	Semi-urban municipality	.771
		Rural municipality	.094
	Semi-urban municipality	Urban municipality	.771
		Rural municipality	.125
	Rural municipality	Urban municipality	.094
		Semi-urban municipality	.125
Male	Urban municipality	Semi-urban municipality	.213
		Rural municipality	.506
	Semi-urban municipality	Urban municipality	.213
		Rural municipality	.739
	Rural municipality	Urban municipality	.506
		Semi-urban municipality	.739

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	95% Confidence Interval for Difference ^a
			Lower Bound
Female	Urban municipality	Semi-urban municipality	-.147
		Rural municipality	-.020
	Semi-urban municipality	Urban municipality	-.109
		Rural municipality	-.038
	Rural municipality	Urban municipality	-.257
		Semi-urban municipality	-.312
Male	Urban municipality	Semi-urban municipality	-.190
		Rural municipality	-.180
	Semi-urban municipality	Urban municipality	-.042
		Rural municipality	-.137
	Rural municipality	Urban municipality	-.089
		Semi-urban municipality	-.193

Pairwise Comparisons

Dependent Variable: Expanded Empowerment Index

	(I) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	(J) [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register)	95% Confidence Interval for Difference
[t1] The respondent's gender			Upper Bound
Female	Urban municipality	Semi-urban municipality	.109
		Rural municipality	.257
	Semi-urban municipality	Urban municipality	.147
		Rural municipality	.312
	Rural municipality	Urban municipality	.020
		Semi-urban municipality	.038
Male	Urban municipality	Semi-urban municipality	.042
		Rural municipality	.089
	Semi-urban municipality	Urban municipality	.190
		Rural municipality	.193
	Rural municipality	Urban municipality	.180
		Semi-urban municipality	.137

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Expanded Empowerment Index

[t1] The respondent's gender		Sum of Squares	df	Mean Square	F	Sig.
Female	Contrast	.980	2	.490	1.539	.215
	Error	493.899	1551	.318		
Male	Contrast	.571	2	.285	.896	.408
	Error	493.899	1551	.318		

Each F tests the simple effects of [kuntar] Degree of urbanisation of respondent's municipality of residence, statistical grouping of municipalities (from register) within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.