



A Pilot Randomized Controlled Trial of Intervention for Social Work Clients with Children Facing Complex Financial Problems in Finland (FinSoc): A Study Protocol

Anniina Kaittila, Henna Isoniemi, Katri Viitasalo, Meri Moisio, Anu Raijas, Enna Toikka, Jarno Tuominen & Mia Hakovirta

To cite this article: Anniina Kaittila, Henna Isoniemi, Katri Viitasalo, Meri Moisio, Anu Raijas, Enna Toikka, Jarno Tuominen & Mia Hakovirta (15 Sep 2023): A Pilot Randomized Controlled Trial of Intervention for Social Work Clients with Children Facing Complex Financial Problems in Finland (FinSoc): A Study Protocol, Journal of Evidence-Based Social Work, DOI: [10.1080/26408066.2023.2257174](https://doi.org/10.1080/26408066.2023.2257174)

To link to this article: <https://doi.org/10.1080/26408066.2023.2257174>



© 2023 The Author(s). Published with license by Taylor & Francis Group, LLC.



Published online: 15 Sep 2023.



Submit your article to this journal [↗](#)



Article views: 132



View related articles [↗](#)



View Crossmark data [↗](#)

A Pilot Randomized Controlled Trial of Intervention for Social Work Clients with Children Facing Complex Financial Problems in Finland (FinSoc): A Study Protocol

Anniina Kaittila^a, Henna Isoniemi^a, Katri Viitasalo^b, Meri Moisio^a, Anu Raijas^d, Enna Toikka^c, Jarno Tuominen^e, and Mia Hakovirta^a

^aINVEST Flagship, University of Turku, Turku, Finland; ^bFaculty of Social Sciences, University of Helsinki, Helsinki, Finland; ^cDepartment of Social Research, University of Turku, Turku, Finland; ^dBank of Finland Museum, Bank of Finland, Helsinki, Finland; ^eDepartment of Psychology and Speech-Language Pathology, University of Turku, Turku, Finland

ABSTRACT

Purpose: Social work clients often face complex financial problems. We have developed a financial social work intervention, FinSoc, to increase financial literacy and economic self-efficacy and reduce financial anxiety among parents with financial problems in Finland. The aim of this pilot randomized controlled trial is to explore the feasibility, acceptability, and preliminary effectiveness of the intervention. This paper, a study protocol, describes the design and implementation of the trial. Study protocols are articles detailing a priori the research plan, rationale, proposed methods and plans for how a clinical trial will be conducted.

Method: This study is a pilot randomized controlled trial with a mixed methods approach applying both quantitative measures and qualitative interviews. Participating social work clients with children are randomly assigned to either the treatment or the waiting list control group at a ratio of 1:1. The treatment group receives the intervention and the control group receives services as usual. The quantitative data from social work clients are collected at three measurement points. Qualitative interviews are conducted post-intervention with both clients receiving, and professionals implementing the intervention. The feasibility is assessed through recruitment and retention rates and the interviews with social work professionals providing the intervention. Acceptability is assessed through feedback from participants on satisfaction with the intervention and usefulness of the specific intervention components. Potential effectiveness is measured by financial literacy, economic self-efficacy and financial anxiety.

Discussion: The intervention is hypothesized to increase financial literacy and economic self-efficacy and reduce financial anxiety among social work clients with children. The results of this pilot study will increase the evidence base of financial social work and offer new insights for developing interventions for clients experiencing financial difficulties.

KEYWORDS

Financial capability; financial literacy; financial social work; families; mixed methods; psychosocial intervention; pilot randomized controlled trial

CONTACT Anniina Kaittila  anniina.kaittila@utu.fi  INVEST Flagship, University of Turku, Assistentinkatu 7, Turku 20500, Finland

© 2023 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

Background

Financial problems, indebtedness, low income, and poverty place strain on the everyday life of families with children. Financial problems can also increase anxiety and depression among parents (e.g. Lin et al., 2022; Lund et al., 2010). In addition, economic hardship amplifies parental stress, which in turn can lead to an increase in the adoption of harsh parenting practices (e.g. Conger et al., 2010; Van Lancker & Vinck, 2019). Financial strain also has a negative impact on children's well-being (Lindberg et al., 2021). In addition, experiences of financial difficulties over an individual's early life course are linked to a wide range of negative outcomes, such as increased levels of poor mental health (Najman et al., 2010) and increased risk of substance abuse (Hardaway & Cornelius, 2014). Financial worries undermine the effectiveness of therapies (Thompson et al., 2018) and other support provided to individuals and families (Leijten et al., 2013) and, in the context of social work, interventions could be more effective if families' financial problems were under control.

There is a growing global recognition that social work should play a key role in improving the financial capability of their clients, and help them achieve financial well-being. Financial social work is a social work orientation related to personal finances and livelihood, aimed at strengthening the client's financial capability. It aims to develop social work to better meet the needs of financially vulnerable citizens (Sherraden & Huang, 2019). The University of Maryland School of Social Work and the Center for Financial Social Work have played a major role in launching financial social work initiative (University of Maryland School of Social Work, 2010) and defining the financial social work approach (Center for Financial Social Work, n.d.). To date, the concept of "financial social work" is widely applied in research, practice and teaching of social work.

The theoretical background rests on the concepts of capability and well-being by Amartya Sen (1992) and Martha Nussbaum (2011). The ability of humans to exploit available resources is central to capability theory. Human life is considered to consist of activities and options. On this theoretical basis, financial social work strengthens clients' financial capability by removing structural barriers, securing access to appropriate services, and by supporting, directing and increasing the knowledge and skills of individuals, families and communities (Sherraden & Huang, 2019). The aim is to enable financial inclusion and equal access to financial agency for all (Johnson & Sherraden, 2007; Sherraden, 2010). In sum, financial social work includes both psychosocial work with clients and structural work aiming to change practices and policies to better meet the needs of clients (Sherraden & Huang, 2019). Indeed, financial social work emphasizes social work's classic person-in-environment perspective (Kondrat, 2002).

Although the importance of financial social work is acknowledged by social work academics and practitioners, the interventions for financial support are limited and there is a lack of research on the effectiveness of these practices (Birkenmaier et al., 2022). Previous systematic reviews and meta-analyses on interventions promoting financial capability (Fernandes et al., 2014; Kaiser & Menkhoff, 2017, 2020; Miller et al., 2015) provide scant evidence on financial capability interventions. They emphasize the need to develop a more definitive evidence base for the financial outcomes of such interventions (Birkenmaier et al., 2022). To our knowledge, there are no evidence-based practices aimed at improving the financial capability of social work clients with children. Evidence-based research exists in the fields of financial therapy and counseling, but these practices

have been applied in different contexts than social work, for example with college students with budgeting needs (Archuleta et al., 2015; Britt et al., 2015).

This paper is a study protocol with the aim to describe the development and research design of an intervention for social work clients with children facing complex financial problems in Finland. We have developed a financial social work intervention, FinSoc, to increase financial literacy and economic self-efficacy, and to reduce financial anxiety among parents in Finland. Study protocols are articles detailing a priori the research plan, rationale, proposed methods and plans for how a clinical trial will be conducted. In the disciplines of medical and healthcare, according to ethical instructions, every clinical trial should be based on a protocol (Chan et al., 2013; Hudson et al., 2016). The protocol allows for an assessment of consistency between the final report and the original intention and thus advances the practices of conducting and reporting clinical trials (Dwan et al., 2011). Clinical trials are still rather rare in social work and thus, the tradition of protocol articles is missing. However, as Lau et al. (2018) present, also social work practices would highly benefit transparent, detailed and clearly written protocols which ensure the monitoring of the trial, enable timely and comprehensive assessment of the trial and in addition, increase the reliability of trial results.

Materials and method

Aims and objectives

The aim of this pilot randomized controlled trial (RCT) is to explore the feasibility, acceptability and preliminary effectiveness of the FinSoc intervention with a mixed method approach. Specifically, the objectives are to explore 1) whether and in what way this pilot RCT of the intervention is feasible, 2) to what extent the intervention is satisfying and useful to social work clients and professionals and 3) how the intervention is able to meet its goals.

Settings

This study takes place in eight different municipalities or municipal federations (henceforth: municipality) in Finland. The participants are clients of adult social work services or child and family social services in any of these municipalities.

The societal context and legislation that affect social work practice vary across countries. Adult social work services in Finland refer to support for adults according to the Finnish Social Welfare Act (1301/2014) and other individually relevant. The support may include guidance and counseling related to employment, housing, financial situation, functional ability and various crises. The service needs of a client are assessed by a social work professional.

Child and family social services in Finland refer to support for families with children according to the Social Welfare Act. The service needs of a family are assessed by a social work professional and they may include social assistance, family work, support for families or home-help service. In Finland child and family social services are preventive “basic services” that aim to support families at earlier stage (Finnish Social Welfare Act 1301/2014; Alatalo et al., 2019) while targeted child welfare services provide a higher level of support (Child Welfare Act 417/2007).

Inclusion and exclusion criteria, and recruitment

Participants are recruited from social work clients (of adult social work or child and family social services) in the participating municipalities. To be eligible to participate in the study, clients must have experienced at least one of the following financial difficulties in the past six months:

- Difficulty in paying bills or debts or covering housing costs on time;
- Difficulty in meeting basic needs (e.g., food, medicine, or clothing);
- Experiencing a lack of financial management knowledge or skills;
- Feelings of financial anxiety or stress.

In addition, eligible clients must have an underage child or children, in either a two-parent or a single-parent household. In a two-parent household, either one or both parents may participate in the study. In the case of shared care, the child should reside at least half of the time with the parent participating in the study.

The exclusion criteria are:

- Any acute crisis in the family (e.g., serious illness or divorce);
- Child welfare services are currently involved;
- A criminal investigation involving a member of the family;
- Parents neither speak nor write Finnish (all materials are currently only available in Finnish).

The research team organizes a meeting for social work professionals of each municipality and explains the inclusion and exclusion criteria. After that social work professionals explore whether or not their clients meet the inclusion criteria, and approach (by phone or during their next meeting) potentially eligible social work clients. Clients who express interest receive from social work professional a comprehensive overview of the study and a participant information sheet. These practices inform the client of the study in detail. Clients who are interested in taking part of the study are given a consent form to be signed if they agree to participate. The professional collects two signed copies of the consent forms before the study begins. A period of four weeks per municipality is allocated to the recruitment process.

Sample sizes

Since the aim of this study is to assess the feasibility, acceptability and potential effectiveness, for the RCT we did not undertake a formal sample size calculation. We applied the criterion of Teare et al. (2014) that an external pilot study should have at least 70 measured subjects (35 per group) when estimating the pooled standard deviation (SDp) for a continuous outcome. This is the aimed sample size of the study, but it was hindered by the Finnish national health and social care reform that started in January 2023. The responsibility for organizing social and health care services was transferred from municipalities to larger units called “wellbeing services counties” (*hyvinvointialueet*). Due to the pressure of the reform, many

municipalities were overworked and overburdened with new practices and thus, had challenges to participate in any additional activities, such as research projects.

After the five intervention sessions, approximately 8 to 12 social work clients and 5 to 10 social work professionals participating in the trial are interviewed to illustrate the acceptability of the intervention. However, interviews from social work clients and social work professionals will be continued until the data saturation, a full understanding of the clients' and professionals' perspectives, has reached. Sample sizes for qualitative interviews are usually small, and as O'Cathain et al. (2015) indicated, diversity of sampling could be seen more important at the feasibility phase than the number of interviews. Thus, interviews are conducted in different municipalities and among the social work clients and social work professionals from adult social work services and child and family social services.

Randomisation

Eight municipalities in southern and western Finland are enrolled in the study. The participants in each municipality are randomized with a 1:1 allocation ratio to either the intervention group or the waiting list control group. Random allocation is a technique that chooses individuals for treatment groups and control groups entirely by chance without regard to the will of researchers or clients preference. A 1:1 allocation means that treatment and control groups are usually balanced and group sizes are (approximately) equal. When responding to the baseline questionnaire participants are not aware of their allocation to the treatment or the control group. After all participants of a municipality have submitted the baseline questionnaire, participants are randomized to the two groups using SPSS statistical program. The social work professionals at local social services inform participants of their allocation.

The control group receives services as usual. If they choose to, the participants in the control group receive the intervention after the completion of three month follow-up assessments. The intervention is conducted by their own social work professional.

The process of the study is presented in [Figure 1](#).

Development of the intervention model

FinSoc is a new intervention developed by the researchers aiming to support social work clients with children facing complex financial problems. The FinSoc intervention was developed based on the principle of user-centered design (UCD). This methodology is an iterative and highly stakeholder and client engaged process for creating practices that are directly responsive to their intended users. UCD has increasingly been applied to psychosocial intervention development and implementation. Our intervention was developed based on the following principles, typical for UCD frameworks: engaging prospective users to achieve a better understanding of the needs and context, then prototyping and simplifying the existing intervention procedures by acknowledging the feedback from the users. These steps comprise an iterative cycle in which evidence-based practice design and implementation strategies are refined until optimized for a given context (Lyon & Koerner, 2016).

The process of intervention design involved 1) a review of the literature (systematic literature review and selection of theoretical framework), 2) consultations with

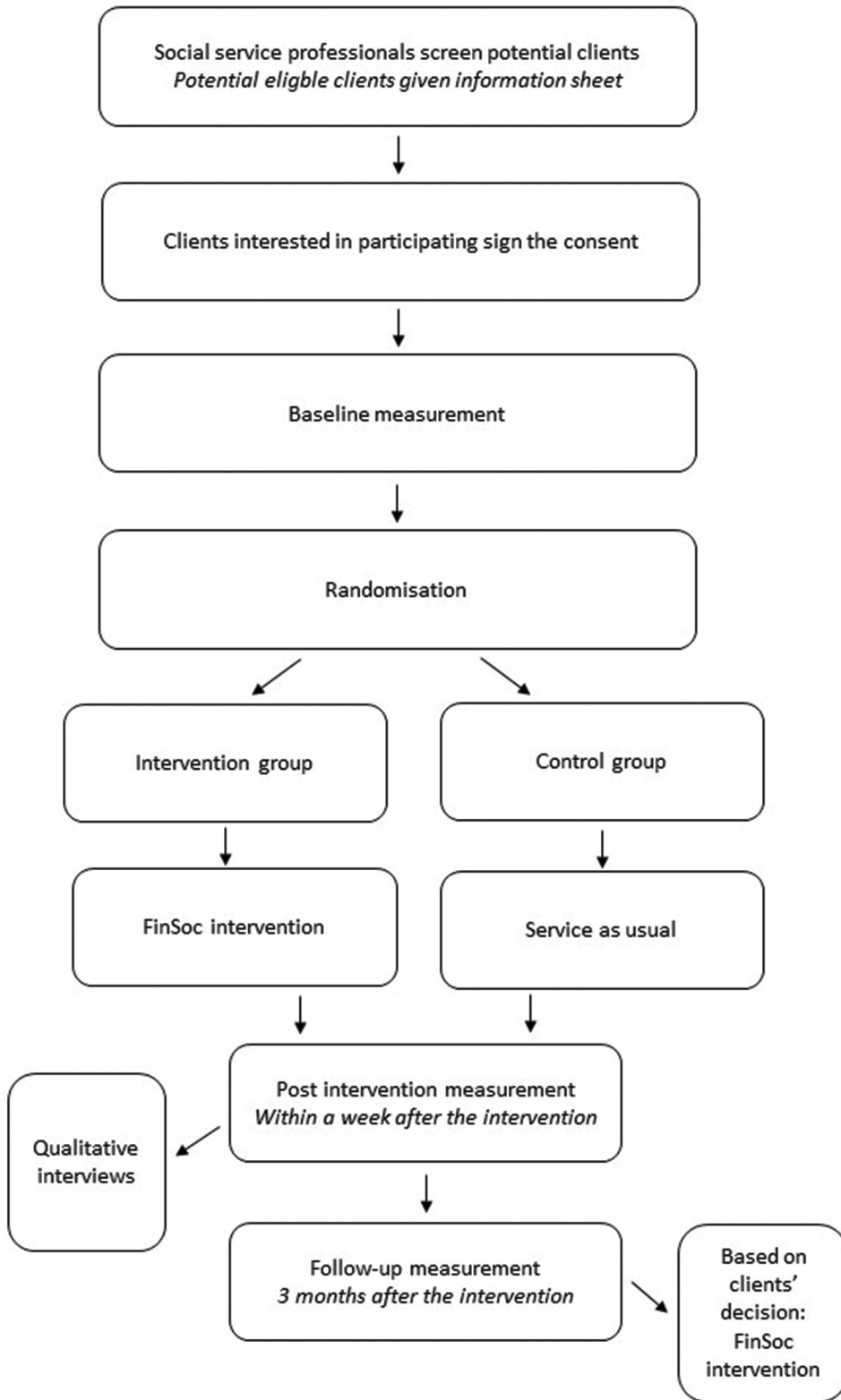


Figure 1. The process of the study.

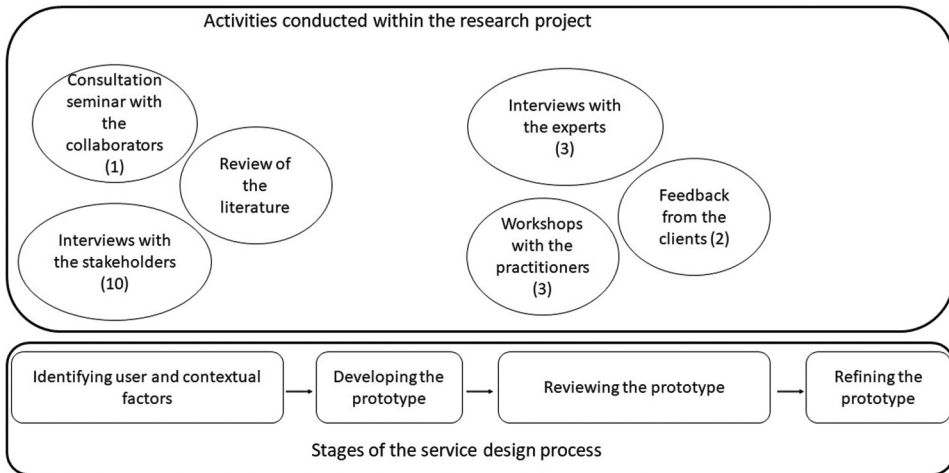


Figure 2. Development of the intervention.

collaborators, 3) interviews with stakeholders, 4) workshops with practitioners, and 5) client feedback on the content of the intervention. The process is presented in [Figure 2](#).

The development of the FinSoc intervention was guided by research concerning financial social work. A systematic review of interventions and methods to promote financial capability in social work was conducted. The results indicated that there are only a few studies focusing on promotion of financial capability in social work among families with children (Viitasalo et al., 2023). The results of the review are to be described in an article to be published. In addition, a transformational practice framework (Scanlon & Sanders, 2017) was chosen as a broader theoretical model for the intervention to promote financial capability and asset building. Moreover, based on earlier research, three clinically relevant approaches were chosen to guide the method of working with clients. These are financial capability approach, solution-focused practice and motivational interview.

Collaborators in the research project are the Bank of Finland, the Itla Children's Foundation, Guarantee Foundation, VASSO (Centre of Excellence on Social Welfare), the Martha Organization and the participating municipalities. A coordination group was formed from the organizations collaborating with the research project. Collaborators' expertise was utilized to understand the needs of prospective participants and to gain feedback on the content of the intervention design. Information on specific themes (research, innovations, clinical work concerning the research project) was gathered from collaborators in a seminar.

Ten key stakeholders were interviewed with questions about social work clients' financial needs and the content of the financial social work intervention. These stakeholders worked with clients on financial issues, and they had background in social work, psychology or experience in financial social work. Based on the feedback of stakeholders, collaborators and literature review, a prototype intervention was developed. We organized three workshops where we presented the intervention prototype to clinical social work practitioners and financial counseling experts. After every meeting the prototype was reevaluated and refined based on the feedback. In addition, the prototype was presented to two social work clients whose feedback was taken into account in formulating the final version of the intervention

After the intervention model was finalized, the research team developed a training and a manual for professionals and a workbook for clients.

Intervention description

The intervention consists of five sequential sessions. The sessions form a collaborative counseling process that motivates the client to change how they handle their finances. The content (Figure 3) of the sessions is as follows:

- (1) The first session focuses on the family's current financial situation and how they wish for it to change. The session starts with a free-form discussion, followed by three predetermined themes: financial management of everyday expenses, feelings related to money, and the role of money in the family. The session concludes with a discussion of the family's perceived strengths and challenges. In addition, a financial goal is set for the family.
- (2) In the second session, the family's current financial situation is clarified, beginning by calculating the client's net income, then listing the fixed expenses. Based on this, a budget is created for the family.
- (3) In the third session, the family's social relationships and their influence on financial well-being are examined. This is done using ecomap, a tool for visualizing the relevant relationships in the life of the person or family. This intervention uses a modified version of ecomap focused on financial issues.
- (4) The fourth session concerns the client's relationship with money. The topic is approached through three sub-themes: family life, feelings, and attitudes. These themes are discussed using cards developed by the research team. The cards include statements and incomplete sentences regarding financial matters, and the client is encouraged to share their thoughts about each card. Based on the discussion, the most important insights and possible wishes for change are explored.
- (5) The fifth session concludes the intervention process. The financial goal set in the beginning of the intervention is reviewed and a new, updated goal is set. The client is advised where to get help in the future, should the need arise.

Social work professionals are instructed to utilize motivational interviewing (MI) (Miller & Rollnick, 2013) as a guiding principle for encountering the client. Issues presented by clients should be approached from solution-focused perspectives (De Jong & Berg, 2007/2016). Hence, focusing on the clients' past mistakes is not an objective. Building good, appreciative communication between the social work professional and the client is essential. Clients are encouraged to express their feelings and to narrate their personal experiences.

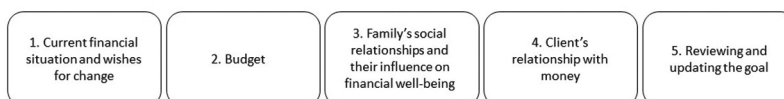


Figure 3. Content of the intervention.

A professional from a municipality (social worker, social counselor, or financial counselor) delivers the intervention. In most cases the client has a relationship with this professional, but in some cases, the client is a new one. A research social worker (a certified social worker who is a member of the research team) also attends some of the intervention sessions, subject to the client's permission. The research social worker's main objective is to offer support and feedback to the professionals delivering the intervention. Support is offered both during and outside the sessions, and feedback is provided after each session attended. The research social worker can participate in the discussions during the intervention sessions, but the client's own social worker has the main responsibility for carrying out the intervention. The aim is that a research social worker attends 2–3 sessions per client in total. In addition, the aim is that research social workers always attend the first session, so the client gets to know them.

All of the sessions are delivered in person at a location chosen by the client: either at the client's home or the social welfare office. The option for home visits is offered to reduce the time burden the intervention has on clients. The duration of the first session is 90 minutes, and the rest are each 60 minutes. If both parents are attending the session, it is advised that the 60 minutes is expanded to 90 minutes. The aim is to have the sessions every other week. The whole intervention should be completed in 2 to 4 months.

The clients receive a workbook that contains an overview of the intervention. The workbook includes a financial glossary, general financial information, and instructions for finding reliable financial information. The social work professionals receive a manual on how to deliver the intervention. Both the workbook and the manual have been produced by the research team.

Intervention training

The research team trains the participating social work professionals on how to deliver the intervention. The duration of the training is eight hours in total, delivered in two four-hour sessions. The training includes the following components: (i) overview of the field of financial social work and rationale for discussing financial matters with families, (ii) overview of the study protocol, (iii) comprehensive presentation of the intervention model and the tools developed (including demonstrations), (iv) introduction to MI strategies (presented by an expert outside the research team), (v) tasks encouraging professionals to reflect on their own financial attitudes, (vi) presentation of the manual and workbook and (vii) brief input from an expert by experience on how to encounter clients with financial troubles. Delivering the intervention model (including MI strategies) is practiced using role play exercises.

To be able to deliver the intervention and instruct clients properly, participating social work professionals need to have sufficient financial knowledge. To ensure this, an information package is sent to all participating social work professionals prior to the training. The package covers general financial information, e.g. the basics of collection procedures and an overview of the service system. If a professional feels that their personal knowledge about these issues is insufficient, they are encouraged to study the information package.

Fidelity

Fidelity refers to the extent in which the intervention is conducted as intended by its developers (Bellg et al., 2004; Carroll et al., 2007; Naleppa & Cagle, 2010). In our study, several steps have been taken to strengthen the fidelity of the intervention. All the social work professionals implementing the intervention receive the same training. The training is held on multiple occasions, but its contents and the trainers are identical on each occasion. The social work professionals receive a manual which instructs and reminds them on how to deliver the intervention. The manual includes a checklist for each of the intervention sessions which helps the professionals ensure that all relevant content has been covered. The checklists are not collected and analyzed due the additional burden on the social work professionals. Neither are the meetings be recorded. The lack of these data is a limitation for the study.

Research social workers provide guidance and support to the social work professionals delivering the intervention. Training, manuals and guidance provided for the professionals are all considered as important ways to enhance fidelity (Naleppa & Cagle, 2010). Aspects regarding fidelity are discussed during qualitative interviews with social work professionals and clients after the intervention is completed. For example, the clients are asked to explain the key elements of the intervention and the professionals are asked whether they feel they were able to deliver the intervention as intended.

Data collection

A mixed method approach is applied. With combining quantitative and qualitative data, learnings from pilot feasibility studies to prepare rigorous intervention trials may be optimized (Aschbrenner et al., 2022). Both quantitative and qualitative measures were pilot-tested with the members of the research team. Data collection strategies responding to each research question are presented in Table 1.

Qualitative data: interviews with social work clients

After social work clients have completed the five intervention sessions, a target sample (8 to 12 clients) are asked if they consent to an individual interview to discuss their experiences with the intervention. Each interview is conducted by a researcher in person in a location

Table 1. Research questions and data collection strategies.

Questions	Data collection
Feasibility <ul style="list-style-type: none"> • Is this pilot RCT of the intervention feasible, and in what way? 	<ul style="list-style-type: none"> • Recruitment and retention rates • Interviews with professionals
Acceptability <ul style="list-style-type: none"> • To what extent is the intervention satisfying and useful to social work clients and professionals? 	<ul style="list-style-type: none"> • Qualitative interviews with clients • Qualitative interviews with professionals
Potential effectiveness <ul style="list-style-type: none"> • How does the intervention meet its goals? 	<ul style="list-style-type: none"> • Pre-, post- and follow-up measures of <ul style="list-style-type: none"> • financial literacy • economic self-efficacy • financial anxiety

convenient to the client. Face-to-face interviews are preferred but telephone interviews could be arranged if a client chooses it. Interviews with clients focus on experiences of intervention delivery from recruitment to completion. The aim is to identify components of the intervention that were perceived as helpful or unhelpful to participants and their overall experience of participating in the intervention.

Qualitative data: interviews with social work professionals

Although the major study outcomes are aimed at social work clients, some qualitative data is collected from interviews with a target sample of (5 to 10) social work professionals delivering the intervention. These interviews explore social work professionals' impressions of the usefulness of the training, its positive and negative aspects, and areas for development. In addition, interviews include questions on their experiences of delivering the intervention; its usability, strengths and weaknesses; and possible ways to improve the intervention.

With the social work professionals' and clients' permission, the interviews are recorded and transcribed. Otherwise, notes taken during the interview are written up in detail right after the interview.

Quantitative data

The quantitative data from social work clients is collected at three measurement points: first, at the baseline of the intervention, second, within a week after the intervention, and third, at follow-up three months after the intervention.

First, at baseline, all eligible social work clients who consented to participate in the study undergo a structured telephone interview (see section on outcome measures). The researcher enters the collected data into a REDCap database. Alternatively, clients are sent a text message with a link to complete the online REDCap form, should they choose to do so. After completion of the baseline measurement, social work clients in every municipality are randomized to intervention and control groups.

The second and third measurements are similar to the first, although some questions are different. All three measurements are conducted with all social work clients at the intervention and control sites. At the end of each telephone interview participants are provided with a 10 euro voucher to thank them for their contribution to the research.

Outcomes

Study outcomes relate to the feasibility, acceptability and preliminary effectiveness of the FinSoc intervention and its components. [Table 2](#) outlines the timeline of enrollment, intervention, and data collection.

Feasibility and acceptability

This pilot RCT evaluates the feasibility of the FinSoc intervention. Feasibility is assessed through recruitment and retention rates assessed from baseline through to follow-up. Research social workers collect field notes concerning implementation of the intervention

Table 2. Schedule of enrollment, intervention, and data collection.

	Enrolment	Baseline	Intervention	Close-out		
TIMEPOINT	$-t_1$	t_0		Post t_1	Interviews	Follow-up t_2
ENROLMENT:						
Eligibility screen	x					
Informed consent	x					
Allocation		x				
INTERVENTIONS:						
Intervention group: FinSoc (solid line), services as usual (dotted line)	←-----↔-----→					
Control group: services as usual (dotted line)	←-----→					
ASSESSMENTS:						
<i>Background variables</i>		x				
<i>Feasibility</i>						
Recruitment rate	x	x				
Retention rate		x	x	x		x
<i>Acceptability</i>				x	x	x
<i>Preliminary effects</i>						
Financial Literacy Questionnaire		x		x		x
Scale of Economic Self-Efficacy		x		x		x
Financial Anxiety Scale		x		x		x

(these do not contain observations concerning clients). In addition, feasibility is assessed by the interviews of social work professionals. Acceptability is assessed through participant (social work clients and professionals) feedback on satisfaction with the intervention and the usefulness of its components.

Potential effectiveness: primary outcome

An adapted version of the Financial Literacy Questionnaire (OECD INEF, 2018) is the primary outcome measure, measured at baseline, during the first week after the last session of the intervention, and at follow-up three months after the last session of the intervention. The original questionnaire covers a mix of financial attitudes and knowledge as well as

behavior relating to short- and long-term financial planning and awareness and choice of financial products. In this study, only questions concerning financial behavior are used. Therefore, financial literacy is measured using four items (with a five-point scale ranging from “completely agree” to “completely disagree”) in response to the following statements: “Before I buy something, I carefully consider whether I can afford it”, “I pay my bills on time”, “I keep a close personal watch on my financial affairs”, and “I set long term financial goals and strive to achieve them”. An additional question, “In the past 12 months, have you been [personally] saving money in any of the following ways, whether or not you still have the money?” (includes a list of options) is used. Furthermore, two Finnish extensions (see Kalmi & Ruuskanen, 2016) to the original OECD questionnaire are used: “Do you plan ahead your own or your household incomes and expenses by making a household budget or a budget of your own?” (includes a list of options) and “How would you evaluate your ability to make good financial decisions for your household?” (five-point categorical scale ranging from “totally insufficient” to “totally sufficient”).

It should be noted that thorough psychometric assessment which would include, for example test-retest reliability, of the OECD/INFE scale in general and this specific configuration in particular has not been carried out. However, Gignac and Ooi (2022) reviewed the test score reliability of an earlier 2011 version of the OECD/INFE scale which has served as the template for the updated 2018 scale used here, with a Cronbach’s alpha between .52 and .62 dependent on the sample. Additionally, item-specific data on cross-country comparisons item-by-item has been carried out by De Clercq (2019) While this is psychometrically below an adequate level for reliability, we have decided to use the four questions from here as they track the specific behaviors we consider to be of key interest.

Potential effectiveness: secondary outcomes

Secondary outcome variables are economic self-efficacy measured by the Scale of Economic Self-Efficacy (Hoge et al., 2020), and financial anxiety measured by the Financial Anxiety Scale (FAS) (Shapiro & Burchell, 2012). The internal consistency of the Scale of Economic Self-Efficacy suggests strong reliability (Cronbach’s alpha = .88) as well as high concurrent validity (Hoge et al., 2020). Similarly, the FAS has strong reliability (Cronbach’s alpha of .83) and a high concurrent validity. A modified version of the original FAS measurement is used where two of the original items are excluded as inapplicable to this study. The excluded items are “I am worried about the debt I will have when I complete my university education” and “I do not think I am doing as well as I could academically because I worry about money.” The language of the secondary outcome measures is originally English. Measures were translated into Finnish by researchers using standard translation and back translation methodology. Secondary outcome variables are measured at baseline, the first week after the last session of the intervention, and at follow-up three months after the last session of the intervention.

Data management

All data – quantitative and qualitative – are stored in accordance with the research ethics board procedures and requirements for storage and security of data. Electronic files are

stored on the secure server of University of Turku, Finland, and files with participant identifying information are password protected. Only the researchers of this study have access to the data. All data is stored for a period of 10 years.

Planned analyses

The feasibility of the study is measured with observed behavioral measures. Recruitment rates and the proportion of those eligible who agreed to enroll are monitored. The number of participants who complete and drop out of the study are observed and reported. This information will support the effect size calculations for the forthcoming RCT of the FinSoc intervention. Another measure of feasibility is the interviews with participating social work professionals. The interview data is used to identify the structural prerequisites for implementation, such as time resources and needs for support with organizing and implementing the intervention.

The acceptability of the intervention is explored by quantitative measures for social work clients and qualitative interviews with both clients and professionals conducting the intervention. Two questions are asked to measure acceptability: 1) How useful did you experience the intervention to be? (with a five-point scale ranging from “not helpful at all” to “very helpful”), and 2) Have you worked on the issues that you find important? (with a five-point scale ranging from “no, I have not worked on the issues at all” to “yes, I have worked on the issues a lot”).

Qualitative interviews provide insight into social work clients’ and professionals’ experiences of the study and the intervention. The interviews provide further information about the acceptability of the intervention and support the design of the future RCT. The interviews are subjected to content analysis utilizing the NVivo 20 software. In the first phase, the aim of the analysis is to identify the key factors that impacted the implementation. In the second phase, the aim is to identify components of the intervention that participants perceived as helpful or unhelpful and their overall experience of using the intervention.

Analysis concerning potential effectiveness is descriptive and exploratory, since the intent is to prepare a larger RCT of FinSoc in the future. The plan includes descriptive analyses to estimate the potential impact on the three study outcomes: financial literacy, economic self-efficacy and financial anxiety. Baseline characteristics are presented using descriptive statistical methods. Continuous variables are summarized using means and standard deviations, except in the case of skewed continuous variable distributions, when median and inter-quartile range are used. Frequencies and percentages are used to summarize statistical data. Quantitative data is analyzed using STATA 17.

Ethics

Ethical approval was obtained from the Ethics Committee for Human Sciences at the University of Turku, Finland, Humanities and Social Sciences Division. Approvals were also obtained from all the municipalities taking part in this study. All data – both quantitative and qualitative – is collected with informed consent. Some of the questions concern sensitive issues that some may find uncomfortable. The research team do their best to minimize any risks. In addition, it is emphasized to all participants that they can withdraw from the study at any time without giving a reason.

Limitations

There are some limitations of this pilot study. First, the pilot study is conducted only in eight municipalities in southern and western parts of Finland. Findings do not, thus, take into account regional socio-economic disparities in Finland and may not be generalized. Second, participants who do not speak or write Finnish proficiently are excluded. Families with parents who do not speak a major national language of Finland (Finnish) may be at the most risk of financial difficulties and typically have inadequate skills to ask for and find help in the Finnish social security system. Given these considerations, future work informed by this pilot study will be inclusive of families from all over Finland including those with parents who are not proficient in Finnish.

Risks and benefits for participants

The intervention is not expected to cause any serious harm. Possible risks might be physical (somatic) or nonphysical (distress or feeling lack of integrity) reactions. Careless data management could lead to the possibility that outsiders would obtain knowledge of who the participants are and their personal experiences concerning financial difficulties. A careful data management of individuals working in the research project will prevent this risk. This is a study of social work clients who often have had difficult experiences in life. Thus, a data leak would be particularly damaging.

Participants can gain benefits through joining the pilot study, such as an increase in knowledge and skills. The collaborative counseling process with professionals can ease the clients' experience of financial difficulties. The intervention itself does not raise incomes but can enhance economic self-efficacy and motivate participants to handle finances in a new manner.

Discussion

Social work clients often face complex financial problems. Although social work professionals can address clients' financial problems through a variety of practice strategies, little is known about how these strategies impact on clients' financial difficulties (see also Sherraden & Huang, 2019). The proposed feasibility study is a pilot RCT of a novel approach to increase financial literacy and economic self-efficacy and to reduce financial anxiety faced by Finnish families. The study is the first necessary step in understanding the potential utility of an evidence-based intervention for Finnish social work clients with children facing complex financial problems. Findings of this pilot RCT will indicate whether a larger full-scale RCT is needed to investigate the efficacy of the intervention. If the initial results demonstrate that this pilot RCT is feasible, the intervention is acceptable, and it has an impact on the financial capability, economic self-efficacy and financial anxiety of Finnish parents, it will provide evidence that a full-scale effectiveness trial is warranted.

Trial registration

This trial was registered with the ISRCTN registry on 28 November 2022 with the registration number ISRCTN38586825.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The work was supported by the Ministry of Social Affairs and Health (Finland).

Data availability statement

The data for this article consists of bibliographic references, which are included in the References section.

All data – quantitative and qualitative – that will be collected in this pilot project will be stored in accordance with the research ethics board procedures and requirements for storage and security of data. Electronic files will be stored on the secure server of University of Turku, Finland, and files with participant identifying information will be password protected. Only the researchers of this study have access to the data. The data is sensitive and participants did not give written consent for their data to be shared publicly. Therefore, the data collected in this pilot project is not available to individuals outside the research project. All data will be stored for a period of 10 years.

References

- Alatalo, M., Miettunen, N., Liukko, E., Kettunen, N., & Normia-Ahlsten, L. (2019). *Porrasteisuus lapsiperheiden sosiaalipalveluissa: Näkökulmia sosiaalihoitolain toimeenpanosta ja palveluiden järjestämisestä*. (Report No. 39). Terveyden ja hyvinvoinnin laitos. <https://urn.fi/URN:ISBN:978-952-302-797-8>
- Archuleta, K. L., Burr, E. A., Carlson, M. B., Ingram, J., Kruger, L. I., Grable, J. E., & Ford, M. R. (2015). Solution-focused financial therapy: A brief report of a pilot study. *Journal of Financial Therapy*, 6(1), 1–16. <https://doi.org/10.4148/1944-9771.1081>
- Aschbrenner, K. A., Kruse, G., Gallo, J. J., & Plano-Clark, V. L. (2022). Applying mixed methods to pilot feasibility studies to inform intervention trials. *Pilot and Feasibility Studies*, 8(1), 217. <https://doi.org/10.1186/s40814-022-01178-x>
- Bell, A. J., Resnick, B., Minicucci, D. S., Ogedegbe, G., Ernst, D., Borrelli, B., Hecht, J., Ory, M., Orwig, D., & Czajkowski, S. (2004). Enhancing treatment fidelity in health behavior change studies: Best practices and recommendations from the NIH behavior change consortium. *Health Psychology*, 23(5), 443–451. <https://doi.org/10.1037/0278-6133.23.5.443>
- Birkenmaier, J., Maynard, B., & Kim, Y. (2022). Interventions designed to improve financial capability: A systematic review. *Research on Social Work Practice*, 32(6), 651–677. Advance online publication. <https://doi.org/10.1177/10497315221080127>
- Britt, S. L., Archuleta, K. L., & Klontz, B. T. (2015). Theories, models, and integration in financial therapy. In B. T. Klontz, S. L. Britt, & K. L. Archuleta (Eds.), *Financial therapy: Theory, research, and practice* (pp. 15–22). Springer International Publishing.
- Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation Science*, 2(1). <https://doi.org/10.1186/1748-5908-2-40>
- Center for Financial Social WorkCenter for Financial Social Work. (n.d). <https://financialsocialwork.com/>
- Chan, A. W., Tetzlaff, J. M., Altman, D. G., Dickersin, K., & Moher, D. (2013). SPIRIT 2013: New guidance for content of clinical trial protocols. *The Lancet*, 381(9861), 91–92. [https://doi.org/10.1016/S0140-6736\(12\)62160-6](https://doi.org/10.1016/S0140-6736(12)62160-6)

- Conger, R. D., Conger, K. J., & Martin, M. J. (2010). Socioeconomic status, family processes, and individual development. *Journal of Marriage and the Family*, 72(3), 685–704. <https://doi.org/10.1111/j.1741-3737.2010.00725.x>
- De Clercq, B. (2019). A comparative analysis of the OECD/INFE financial knowledge assessment using the Rasch model. *Empirical Research in Vocational Education and Training*, 11(1), 1–29. <https://doi.org/10.1186/s40461-019-0083-1>
- De Jong, P., & Berg, I. K. (2007). *Interviewing for solutions* (3rd ed ed.). Brooks Cole.
- Dwan, K., Altman, D. G., Cresswell, L., Blundell, M., Gamble, C. L., & Williamson, P. R. (2011). Comparison of protocols and registry entries to published reports for randomised controlled trials. *Cochrane Database of Systematic Reviews*, 2011(1). MR000031. <https://doi.org/10.1002/14651858.MR000031.pub2>.
- Fernandes, D., Lynch, J. G., Jr., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861–1883. <https://doi.org/10.1287/mnsc.2013.1849>
- Finnish social welfare act 1301/2014. <https://www.finlex.fi/fi/laki/ajantasa/2014/20141301>.
- Gignac, G. E., & Ooi, E. (2022). Measurement error in research on financial literacy: How much error is there and how does it influence effect size estimates? *Journal of Consumer Affairs*, 56(2), 938–956. <https://doi.org/10.1111/joca.12417>
- Hardaway, C. R., & Cornelius, M. D. (2014). Economic hardship and adolescent problem drinking: Family processes as mediating influences. *Journal of Youth and Adolescence*, 43(7), 1191–1202. <https://doi.org/10.1007/s10964-013-0063-x>
- Hoge, G. L., Stylianou, A. M., Hetling, A., & Postmus, J. L. (2020). Developing and validating the scale of economic self-efficacy. *Journal of Interpersonal Violence*, 35(15–16), 3011–3033. <https://doi.org/10.1177/0886260517706761>
- Hudson, K. L., Lauer, M. S., & Collins, F. S. (2016). Toward a New Era of Trust and transparency in clinical trials. *JAMA*, 316(13), 1353–1354. <https://doi.org/10.1001/jama.2016.14668>
- Johnson, E., & Sherraden, M. S. (2007). From financial literacy to financial capability among youth. *Journal of Sociology and Social Welfare*, 34(3), 119–145. <https://doi.org/10.15453/0191-5096.3276>
- Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *The World Bank Economic Review*, 31(3), 611–630. <https://doi.org/10.1093/wber/lhx018>
- Kalmi, P., & Ruuskanen, O.-P. (2016). Suomalaiset pärjäävät taloudellisessa tietämyksessä ja käyttäytymisessä hyvin suhteessa muihin maihin. *Kansantaloudellinen aikakauskirja*, 112, 6–18.
- Kondrat, M. E. (2002). Actor-Centered social work: Re-visioning “person-in-environment” through a critical theory lens. *Social Work*, 47(4), 435–448. <https://doi.org/10.1093/sw/47.4.435>
- Lau, B. H., Chow, A. Y. M., Wong, D. F. K., Chan, J. S. M., Chan, C. H. Y., Ho, R. T. H., So, T. H., Lam, T. C., Lee, V. H., Lee, A. W. M., Chow, S. F., & Chan, C. L. W. (2018). Study protocol of a randomized controlled trial comparing integrative body-mind-spirit intervention and cognitive behavioral therapy in fostering quality of life of patients with lung cancer and their family caregivers. *Journal of Evidence-Informed Social Work*, 15(3), 258–276. <https://doi.org/10.1080/23761407.2018.1435325>
- Leijten, P., Raaijmakers, M. A., de Castro, B. O., & Matthys, W. (2013). Does socioeconomic status matter? A meta-analysis on parent training effectiveness for disruptive child behavior. *Journal of Clinical Child and Adolescent Psychology*, 42(3), 384–392. <https://doi.org/10.1080/15374416.2013.769169>
- Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., Ganem, R., Kieffer, C., Lusardi, A., & Walsh, G. (2022). *Financial capability in the United States: Highlights from the FINRA Foundation National financial capability Study (5th ed.)*. FINRA Investor Education Foundation. www.FINRAFoundation.org/NFCSReport2021
- Lindberg, M., Nygård, M., Nyqvist, F., & Hakovirta, M. (2021). Financial stress and subjective wellbeing among children-evidence from Finland. *Child Indicators Research*, 14(2), 799–819. <https://doi.org/10.1007/s12187-020-09779-9>

- Lund, C., Breen, A., Flisher, A. J., Kakuma, R., Corrigall, J., Joska, J. A., Swartz, L., & Patel, V. (2010). Poverty and common mental disorders in low and middle income countries: A systematic review. *Social Science & Medicine*, 71(3), 517–528. <https://doi.org/10.1016/j.socscimed.2010.04.027>
- Lyon, A. R., & Koerner, K. (2016). User-centered design for psychosocial intervention development and implementation. *Clinical Psychology: A Publication of the Division of Clinical Psychology of the American Psychological Association*, 23(2), 180–200. <https://doi.org/10.1111/cpsp.12154>
- Miller, M., Reichelstein, J., Salas, C., & Zia, B. (2015). Can you help someone become financially capable? A meta-analysis of the literature. *The World Bank Research Observer*, 30(2), 220–246. <https://doi.org/10.1093/wbro/lkv009>
- Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed ed.). The Guildford Press.
- Najman, J. M., Hayatbakhsh, M. R., Clavarino, A., Bor, W., O’Callaghan, M. J., & Williams, G. M. (2010). Family poverty over the early life course and recurrent adolescent and young adult anxiety and depression: A longitudinal study. *American Journal of Public Health*, 100(9), 1719–1723. <https://doi.org/10.2105/AJPH.2009.180943>
- Naleppa, M., & Cagle, J. (2010). Treatment fidelity in social work intervention research: A review of published studies. *Research on Social Work Practice*, 20(6), 674–681. <https://doi.org/10.1177/1049731509352088>
- Nussbaum, M. C. (2011). *Creating capabilities. The human development approach*. Harvard University Press.
- O’Cathain, A., Hoddinott, P., Lewin, S., Thomas, K. J., Young, B., Adamson, J., Jansen, Y., Mills, N., Moore, G., & Donovan, J. L. (2015). Maximising the impact of qualitative research in feasibility studies for randomised controlled trials: Guidance for researchers. *Pilot and Feasibility Studies*, 1(1), 1–13. <https://doi.org/10.1186/s40814-015-0026-y>
- OECD INEF. (2018). *Organisation for Economic Co-Operation and Development. OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion*. Available from: <https://www.oecd.org/financial/education/2018-INFE-FinLit-Measurement-Toolkit.pdf>.
- Scanlon, E., & Sanders, C. K. (2017). Financial capability and asset building: A transformational practice framework. *Advances in Social Work*, 18(2), 543–562. <https://doi.org/10.18060/21245>
- Sen, A. (1992). *Inequality reexamined*. Harvard University Press.
- Shapiro, G. K., & Burchell, B. J. (2012). Measuring financial anxiety. *Journal of Neuroscience, Psychology, and Economics*, 5(2), 92–103. <https://doi.org/10.1037/a0027647>
- Sherraden, M. S. (2010). *Financial capability: What is it, and how can it be created?* (CSD Working Paper No. 10-17.) <https://doi.org/10.7936/K7SX6CQX>
- Sherraden, M. S., & Huang, J. (2019). Financial social work. In C. Franklin (Ed.), *Encyclopedia of Social Work*. <https://doi.org/10.1093/acrefore/9780199975839.013.923>
- Teare, M. D., Dimairo, M., Shephard, N., Hayman, A., Whitehead, A., & Walters, S. J. (2014). Sample size requirements to estimate key design parameters from external pilot randomised controlled trials: A simulation study. *Trials*, 15(1), 1–13. <https://doi.org/10.1186/1745-6215-15-264>
- Thompson, M. N., Goldberg, S. B., & Nielsen, S. L. (2018). Patient financial distress and treatment outcomes in naturalistic psychotherapy. *Journal of Counseling Psychology*, 65(4), 523–530. <https://doi.org/10.1037/cou0000264>
- University of Maryland School of Social Work. (2010). University of Maryland school of social work financial social work initiative. <http://www.ssw.umaryland.edu/fsw/>
- Van Lancker, W., & Vinck, J. (2019). The consequences of growing up poor. In B. Greve (Ed.), *Routledge International Handbook of Poverty* (pp. 96–106). Routledge.
- Viitasalo, K., Kaitsaari, T., Kaittila, A., Moisio, M., & Hakovirta, M. (2023). Promoting financial capability within the field of social work practice among families with children: A systematic review. *European Journal of Social Work*, 1–14.