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Refugees Well School (Finland): effectiveness of psychosocial school interventions for refugee and immigrant children

Submission date
03/06/2020

Recruitment status
No longer recruiting

Registration date
10/06/2020

Overall study status
Completed

Last Edited
05/09/2022

Condition category
Mental and Behavioural Disorders

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
There is an increased number of refugees due to ongoing wars and military conflicts in Middle East and Central Asia, and political and economic crises in North Africa. Refugee children and adolescents are highly vulnerable in their sensitive developmental stage. Biological, cognitive, and socio-emotional developmental changes in adolescence are intensive, and stress and trauma may therefore form a severe risk for their mental health and adaptive behavior. In adolescence, forming social relationships, group membership, and a sense of belonging are pivotal. Therefore, schools are natural environments for providing support for adolescent refugees and immigrants. It is important to integrate immigrant and refugee children into the school system to support their mental health. Yet, most interventions are focused and there is lack of multi-layered, holistic public health interventions. This study tests the effectiveness of a triad intervention: universal (INSETT), preventive (PIER) and targeted (TRT).

Who can participate?
The adolescents with immigrant and refugee background and native Finns are enrolled from 16 Finnish schools with preparatory classes for newcomer immigrants. They are 13-15-year old boys and girls. Further, all parents of participating adolescents are recruited, and teachers of all these 16 schools.

What does the study involve?
The INSETT program is offered to consenting teachers who are attending a target secondary school randomized into the INSETT+TRT intervention group.
The TRT program will be offered to consenting adolescents who score high on a post-traumatic stress survey and who are attending the INSETT+TRT intervention. Their parents/guardians may also participate if they consent to do so.
Consenting adolescents who do not meet the inclusion criteria to receive TRT but are attending a target school where teachers are receiving INSETT may still participate in data collection for the study.

The PIER program will be offered to consenting teachers who are attending a target secondary school randomized into the PIER intervention group. Consenting adolescents and their parents participate in data collection for the study.

What are the possible benefits and risks of participating?
By participating the INSETT teachers may attain increased multicultural skills, sense of self-efficacy and competence regarding refugee and migration-related issues, inter-ethnic peer relationships and teacher-parent collaboration. Given the focus of the interventions on improving social support networks, we also expect that school environment may increase in social support and cohesion which in turn can benefit all adolescents and their teachers.
Students participating TRT and their parents/guardians learn practical techniques e.g., to create a safe space, control intrusive memories, and to have control over the overwhelming emotions caused by traumatic memories:
PIER students attain enhanced peer interactions between 'host' society and migrant and refugee adolescents in schools and increased feelings of school belonging.
Answering personal questions can make some participants uncomfortable. All participation is voluntary and can be stopped at any time. A safety protocol to prevent self-harm among adolescent participants has been developed.
The guidelines include clear instructions on who to call and what to do based on when the danger is identified. In all cases, participants who are at-risk are connected to local psychiatric services.

Where is the study run from?
Tampere University, Psychology unit, Tampere, Finland

When is the study starting and how long is it expected to run for?
2018 to March 2022

Who is funding the study?
European Union Horizon 2020

Who is the main contact?
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Type(s)
Public

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Additional identifiers

Protocol serial number
Grant agreement No 754849

Study information

Scientific Title
Effectiveness of psychosocial school interventions for refugee and immigrant children: a cluster randomized controlled trial

Acronym
RWS-FI

Study objectives
The first aim of research project is to test whether two school-based psychosocial intervention arms, (a) the combined In-Service Teacher Training (INSETT) and Teaching Recovery Techniques (TRT) and/or (b) the Peer Integration and Enhancement Resource (PIER), are effective in improving the mental health among refugee, migrant, and Finnish native adolescents. The criteria for intervention effectiveness are reducing internalizing and externalizing symptoms and increasing prosocial behavior and resilience. Second, we examine which adolescent- and/or school-related factors could explain the effectiveness of these two arms of school-based psychosocial interventions (Mediation analysis). Third, we analyze whether the adolescent- and family-related preconditions differ in the effectiveness of these two intervention arms (Moderation analysis).

The research hypotheses are:
1. Do the psychosocial school interventions have a positive effect on the mental health of immigrant adolescents? In more detail, the aim is to compare the impact of INSETT+TRT and PIER on internalizing and externalizing symptoms and prosocial behavior and resilience
1.1 We hypothesize that internalizing and externalizing symptoms will decrease statistically significantly only among adolescents participating in the INSETT+TRT and PIER interventions and not in the control group from baseline (T1) through six-month (T2) and twelve-month (T3) follow-ups
1.2 We hypothesize that prosocial behavior and resilience will increase only among adolescents participating in the two arms of interventions and not in the control group
2. Do different adolescent- and school-related factors explain (mediate) the effects of the INSETT and PIER interventions on adolescent mental health?
2.1. Concerning INSETT, we hypothesize that participation of teachers increases their multicultural awareness, sense of self-efficacy and work engagement, and decreases their work stress, which in turn is associated with the decreased internalizing and externalizing symptoms and increased prosocial behavior and resilience among the adolescents
2.2. We hypothesize that adolescents' participation in PIER intervention is associated with their increased social support, feeling of belongingness, number of inter-ethnic friendships, and

satisfaction on friendships, which in turn is associated with the decrease of internalizing and externalizing symptoms and the increase of prosocial behavior and resilience
2.3. We hypothesize that adolescents' participation in TRT intervention is associated with decreased PTSD symptoms of intrusion, avoidance and hyperarousal, which in turn is associated with decreased internalizing and externalizing symptoms and increased prosocial behavior and resilience
3. How do parent- and adolescent-related factors moderate the effectiveness of the two arms of school-based psychosocial interventions of INSET+TRT and PIER?
3.1 We hypothesize that good parental mental health and parents' high sense of competence and confidence in parenting are associated with statistically significant positive intervention-induced change in adolescents' mental health (i.e., decrease in internalizing and externalizing symptoms and increase in prosocial behavior and resilience)
3.2 We hypothesize that adolescents who report low severity of daily stressors and low perceived discrimination show more statistically significant positive intervention-induced change in their mental health (i.e., decreased internalizing and externalizing symptoms, and increased prosocial behavior and resilience)

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 03/04/2019 Tampere Region Human Sciences Ethical Review Board (Tampereen Yliopisto, Tampereen alueen ihmistieteiden eettinen toimikunta, Ethics Committee of the Tampere Region/Heikki Eilo, Main building C 141, FI-33014, Tampere University, Finland; +358 40 1901389; heikki.eilo@tuni.fi), ref: #TATET 21/2019

Primary study design
Interventional

Study design
Three-arm clustered parallel-assignment randomized wait-list control trial

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Psychosocial wellbeing

Interventions
School-based psychosocial interventions aim to meet adolescents' mental health and developmental needs. The In-service Teacher Training (INSETT) represents a universal and mental health promoting intervention provided to all students with refugee, immigrant and native background through teacher education and awareness and knowledge building. The Peer Integration and Enhancement Resource (PIER) represents a preventive intervention on school class level, enhancing beneficial peer and friendship relations. The Teaching Recovery Techniques (TRT) represents a targeted cognitive-behavioral intervention for adolescents who suffer from clinically significant level of post-traumatic stress symptoms of intrusion, avoidance, and hyperarousal. Based on the public health framework, the universal INSETT and targeted TRT interventions are offered to schools together as one intervention arm (INSETT+TRT) in order to serve students' specific mental health needs and more generally the needs of students in the whole school. General mental health support is provided through INSETT to all students and

more intensive TRT involving therapy-elements only to students with clinical levels of symptoms. The interventions are provided to adolescents, their parents/guardians, and teachers in their schools during the 2019-2020 school year or for waiting-list control schools the following school year. The effectiveness of interventions is assessed between three time points: T1 baseline before the intervention, T2 after the intervention, and T3 follow-up to assess the sustainability.

In-service Teacher Training (INSETT).
Teachers in the INSETT+TRT intervention arm will receive In-Service Teacher Training (INSETT). This intervention will run over a period of 10-12 weeks and will consist of 3 interrelated course modules. One module is an online course completed by the individual teachers. The course features 8 sections (4–5 hours of study in total) focusing on relevant themes like trauma and stress, the therapeutic window of tolerance, self-regulation and coping, and identity and belonging. Each section provides theory, case histories, exercises, and recommendations for further reading. The remaining 2 modules consist of whole-day seminars delivered in a group setting. The first seminar takes place before the online course and introduces the course along with fundamental terms and information about the refugee experience. The second seminar takes place after the online course is completed and allows participants to consolidate learning and share their experiences.
The INSETT intervention aims to promote psychosocial support for newcomer students and social cohesion in the school environment by enhancing teachers' competence and self-efficacy in three key areas: (1) Promoting and supporting mental health and well-being among newcomer students with refugee and migration backgrounds; (2) encouraging positive interethnic relationships in linguistically and culturally diverse school settings; and (3) fostering relationships with parents/caregivers to promote co-operation and involvement with schoolwork. The teachers' training and awareness building is expected to benefit refugee and immigrant students directly and their caregivers indirectly.

Teaching Recovery Techniques (TRT).
The TRT is a group treatment for three to six students who scored clinically significant PTSD symptoms (CRIES-8) and suffer from probable disorder. It is delivered to qualifying adolescents in the intervention schools and may also be delivered to their parent/guardian, though adolescents do not need to have a participating guardian to take part in TRT. The TRT is provided by trained school welfare personnel such as school psychologists, counsellors, nurses or special teachers. The TRT is a manualized intervention developed by the Children and War foundation, based on trauma-focused cognitive behavioral therapy (TF-CBT). The aims are to reduce PTSD symptoms, increase resilience, stabilize trauma reactions, and provide practical techniques and strategies to deal with traumatic memories, physical and behavioral arousal and withdrawal. Treatment elements include psychoeducation (in playful and multimodal ways), normalizing reactions to trauma, working with nightmares, framing techniques to master intrusive memories and trauma reminders and scaling techniques to deal with arousals. Homework such as sleep hygiene or reflective observation of own responses/reactions to trauma reminders are an essential part of the TRT. In each session, the core aim is to create a sense of safety, increase feelings of competence and shared hope. The parents' sessions include information about normal and worrying responses to traumatic events and learning of effective coping strategies.
The group form implementation includes seven sessions of 90 to 120 minutes including skills training, rehearsal and homework. Session one is about getting to know each other and session seven a follow-up. Each session starts with reminding of agreed rules (e.g., confidentiality and safety). The TRT handbook provides each session with several tools, techniques and procedures to work in the group to achieve the treatment aims. School personnel delivering the TRT will participate in two-day intensive training provided by a licensed trainer from Children and War Foundation, Norway or from the Finnish Trauma Therapy Center, Finland.

Peer Integration and Enhancement Resource (PIER).
The PIER intervention is delivered by lower and upper secondary school teachers, counsellors, and special teachers in school classes including both native and refugee- and immigrant students. The PIER aims at supporting safe, positive peer interactions and social relationships in multi-ethnic schools by strengthening sense of belonging, empathy, role-taking and learning from each other in group exercises involving minority and majority students. The manualized intervention consists of eight sessions ranging between 45 to 90 minutes, with structured welcoming and ending-rituals, multimodal group activities such as cartoon drawing, role-play, movies, drama, and ways of reflecting various identities, migration and racism. The topics cover experiences of refugee and persecution, facing loss and danger, creating and maintaining friendship and feeling of belonging. The school staff delivering the PIER participated in two day training, where in the first day they were trained into each session and received the resource material needed for the intervention, and in the second day they shared their experiences and provided the RWS trainers (researchers) with valuable ideas to improve the PIER.

The waitlist-control arm will receive services as usual. Following the implementation of the interventions in the intervention arm cluster, the waitlist-control cluster will be offered the INSETT intervention after follow-up data has been collected.

Intervention Type
Behavioural

Primary outcome(s)
Measured at baseline, after the intervention, and at follow up.
1. Psychological distress and prosocial behavior measured using the Strengths and Difficulties Questionnaire (SDQ)
2. Positive development and resilience: Child and Youth Resilience Measure (CYRM-12)
3. PTSD symptoms: Children's Revised Impact of Events Scale (CRIES-8)

Key secondary outcome(s)
1. Self-report questionnaires (multi-lingual) completed by all participating adolescents:
1.1. Sociodemographic factors: gender, age, country of birth, migration status, time in host country and family composition
1.2. Experience of the number of stressors in daily life: Daily Stressors questionnaire (DSSYR; Vervliet)
1.3. Social Support: Multidimensional Scale of Perceived Social Support
1.4. Wellbeing: item developed for this study.
1.5. Existence of interethnic friendships and Satisfaction on friendships: items developed for this study.
1.6. Discrimination: The Perceived Ethnic Discrimination Questionnaire Community Version (PEDQ-CV)
1.7. Academic achievement / Executive functions: The Amsterdam Executive Function Inventory (AEFI)
1.8. School Belonging: The psychological sense of school membership among adolescents (PSSM)

2. Questionnaires completed by the teachers:
2.1. Background factors: sex, age, teaching background, number of students.
2.2. Multicultural awareness and understanding: Teacher Multicultural Attitude Scale (TMAS)
2.3. Teachers' self-efficacy: Teachers’ Sense of Efficacy Scale (TSES)
2.4. Stress symptoms: Single item stress index

2.5. Work exhaustion/burnout: Bergen burnout inventory
2.6. Work engagement (vigour, dedication, absorption) : Utrecht work engagement scale (UWES)
2.7. Teacher-parent collaboration: Trust Scale (TS)
2.8. Classroom atmosphere: Items from a school intervention study

3. Questionnaires (multi-lingual) will be completed by parents of the participating adolescents:
3.1. Sociodemographic factors: sex, age, marital status, number of children, employment, education, income, time in host country, migration status, reason for migration, separation of family members during migration
3.2. Parental self-reported health: One item of the SF-36
3.3. Mental health: General health questionnaire (GHQ-12)
3.4. PTSD symptoms: PTSD-8 questionnaire
3.5. Teacher-Parent collaboration: Trust Scale (TS)
3.6. Experience of discrimination: Brief Perceived Ethnic Discrimination Questionnaire – Community version (PEDQ-CV)
3.7. Social support: Enriched Social Support Instrument (ESSI)
3.8. Parenting: Me as a Parent (MaaP)
3.9. Parent-rated strengths and difficulties of the child: Strengths and Difficulties Questionnaire - parent rated (SDQ-25 with impact supplement)

The same quantitative measures in all timepoints will be used in both intervention programs and control condition for the adolescents and teachers and parents. Students and teachers participate the data collection in all three timepoints, and parents are invited to participate in two timepoints (T1 & T3).

4. The data collection also includes series of qualitative focus group discussions to deepen the understanding of the intervention experiences of students, teachers and parents.

Completion date
31/03/2022

Eligibility

Key inclusion criteria
The participating schools were recruited based on three criteria:
1. Voluntariness i.e., based on advertised information school authorities expressed their needs and willingness to participate in interventions
2. A considerable share of refugee and immigrant background pupils in secondary school classes (13–15-year-olds), estimated as 30–50% in classes
3. The school accepted to serve as a waiting-list school until the next school year. Additional recruitment was targeted to schools locating near asylum-seeker centers

Inclusion criteria for INSETT schools:
1. Must be multi-ethnic secondary schools that have grades 7–9 and preparatory classes for newcomer adolescents
2. Must have an interest in participating in the psychosocial school interventions

Inclusion criteria for teachers: Teacher consents to participation

Inclusion criteria for adolescents who receive TRT:
1. Adolescent self-consents to participate

2. CRIES-8 score ≥ 17
3. Participation in TRT group recommended by TRT-trained student welfare professional

Inclusion criteria for parents/guardians:
1. Parent/guardian consents to participation
2. Parent/guardian has a child who receives TRT

Inclusion criteria for adolescents not receiving TRT: Adolescent self-consents to participate

Inclusion criteria for PIER schools:
1. Must be multi-ethnic secondary schools that have grades 7–9
2. Must have an interest in participating in the psychosocial school interventions

Inclusion criteria for adolescents receiving PIER: Adolescent self-consents to participate

Participant type(s)
Mixed

Healthy volunteers allowed
No

Age group
Mixed

Sex
All

Total final enrolment
3062

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
19/08/2019

Date of final enrolment
31/03/2020

Locations

Countries of recruitment
Finland

Study participating centre
Tampere University
Kalevantie 4

Tampere
Finland
33100

Sponsor information

Organisation
Tampere University

ROR
https://ror.org/033003e23

Funder(s)

Funder type
Government

Funder Name
Horizon 2020

Alternative Name(s)
EU Framework Programme for Research and Innovation, Horizon 2020 - Research and Innovation Framework Programme, European Union Framework Programme for Research and Innovation

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.
Reeta Kankaanpää, reeta.kankaanpaa@tuni.fi
Type of data: repeated measures survey data
Data will become available: 2021 – 2022
Data will be shared with researchers for example for meta-analysis purposes or verifying the

conducted analyses.
Access criteria: upon request
Participants gave informed consent to use the anonymized data for research purposes.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		20/03/2022	05/09/2022	Yes	No
Protocol article		27/01/2022	22/04/2022	Yes	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes