



BOSTON COLLEGE

School of Social Work

RESEARCH PROGRAM ON CHILDREN AND ADVERSITY

**Digital Mental Health Innovations to Support Scaling Out a Family
Strengthening Intervention for Afghan Refugee Families:
An Interdisciplinary Collaboration**

PI: THERESA S. BETANCOURT, SC.D., M.A.

SALEM PROFESSOR IN GLOBAL PRACTICE, BOSTON COLLEGE SCHOOL OF SOCIAL WORK

DIRECTOR, RESEARCH PROGRAM ON CHILDREN AND ADVERSITY

Co-PIs:

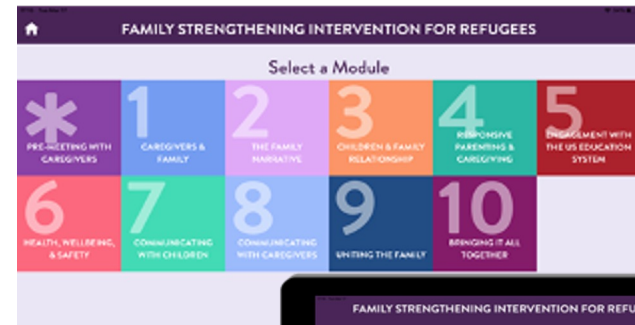
Nam Wook, Kim, PhD, MS. Department of Computer Science

Avneet Hira, PhD, MS. Department of Engineering

Sunand Bhattacharya, MS, School of Social Work & Office of Vice Provost

Presentation Overview

- **Background**
- **Aim and goals of project**
- **Interdisciplinary approach**
- Proposed **methodology**
- Expected **outcome and deliverables**
- **Future research** and directions



Boston College Research Program on Children and Adversity (RPCA): Goals



- Identify processes contributing to **risk** and **resilience** in children, families and communities facing adversity globally
- Contribute to developing the **evidence base** on intervention strategies:
 - Help **close the implementation gap**
 - Support development of **high quality and effective programs and policies in low resource settings**

RPCA Current Project Portfolio

- **Children affected by armed violence Chechen IDPs, Ethiopia-Eritrea border, N Uganda, Sierra Leone (R01HD073349, U19MH109989, R01MH128928-01)**
 - Longitudinal study of war-affected youth (3 waves of data collected 2002-2008 (*Child Development*, 2010; *JAACAP*, 2010; *Social Science & Medicine*, 2009). Randomized controlled trial published in *JAACAP* in 2014
 - 5th wave of data on the Intergenerational Impact and Social/Biological mechanisms driving the impact of War in Sierra Leone beginning in Summer of 2022
- **Children Affected by HIV/AIDS, ECD home visiting for extreme poverty Rwanda (R34MH084679, World Bank/USAID/Elma/LEGO/Echidna/OAK)**
 - Evaluation of an evidence-based Family Strengthening Intervention for families affected by HIV (*AIDS Care*, *Pediatrics*) Pilot and current scale-up of the *Sugira Muryango* early childhood development home-visiting intervention and investigation of the longitudinal and spillover effects on siblings
- **Promoting resilience and healthy parent-child relationships in refugee families New England (NIMHD R24MD008057, R01MD010613), Application FSI Adaptation (BC ATIG, SIGECS) and Afghan Family Strengthening Initiative (W.K. Kellogg Foundation, USCRI)**
 - CBPR study of a Family Strengthening Intervention for Refugees (Somali Bantu and Bhutanese refugees) and adaptation to Afghan families.
 - Application to develop and test FSI app for Somali Bantu/Bhutanese/Afghan refugees

Our Interdisciplinary Team



Avneet Hira, PhD, MS. Professor,
Engineering, CO-Project Director

Her research focuses on affordances of technology, humanistic design, and engineering epistemology

Nam Wook, Kim, PhD, MS. Professor,
Computer Science, CO-Project
Director

His research vision is to lower barriers for everyone to understand and communicate complex data.



Theresa S. Betancourt, ScD, MA
Director RPCA &
Principal Investigator

Her central research interests include the resilience and protective processes in child and adolescent mental health and child development; refugee families; and applied cross-cultural mental health research

Sunand Bhattacharya, Office of the
VP, Research, Design, and
Innovation.

His focus is to build a future-forward culture of collaborative research and innovation across Boston College using design-driven methodologies.



Euijin Jung, PhD MSW, PostDoc
fellow, RPCA

Her central research is to support refugee communities and build the evidence base surrounding family strengthening interventions for refugees resettled in the New England Area.

Farhad Sharifi, MSW, Research
Associate, RPCA

Originally from Afghanistan, his focus is to build culturally relevant family strengthening programs for Afghan refugees resettled in the New England area.



Project Aim and Goals

- 1. To work with faculty, students, and staff at BCSSW, Computer Science, and Engineering** to adapt the digital FSI-R app to the culture, technical literacy, and context of Afghan families for greater scalability
- 2. To pilot test the digital app** among a sample of Afghan trained home visitors working with refugee families in MA to assess ownership, feasibility, acceptability, and initial impact of the intervention in improving family functioning and promoting child mental health and well-being
- 3. To develop best practices** for adaptation of mHealth tools across cultural contexts using human-centered design techniques

د کورنیو پیاوړتیا پروګرام د
افغان کورنیو لپاره
یا (FSI)

Family Strengthening Intervention for Afghan Refugees
(برنامه یی برای تقویت فامیل های مهاجر افغان)

The Family Strengthening Intervention:

Bhutanese: Springfield, MA

Somali Bantu: Lewiston, ME



National Institute
on Minority Health
and Health Disparities

- Community Based Participatory Research (CBPR)
- **Co-developed a home visiting family-based preventive intervention** for Somali Bantu and Bhutanese refugees in New England
 - 10 modules, engages caregivers and youth
- **Pilot Study** (N= **80 families with children ages 7-17**) to test feasibility and acceptability
- Hybrid Type II **Effectiveness-Implementation Study** (N= **107 families**); Process evaluation, fidelity monitoring
- Opportunities to expand to Afghan resettling families and many other diverse refugee families with appropriate partnerships





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Original article

Family-Based Mental Health Promotion for Somali Bantu and Bhutanese Refugees: Feasibility and Acceptability Trial

Theresa S. Betancourt, Sc.D., M.A.^{a,*}, Jenna M. Berent, M.P.H.^a, Jordan Freeman, M.P.H.^a, Rochelle L. Frounfelker, Sc.D., M.P.H., M.S.S.W.^b, Robert T. Brennan, Ed.D., M.A.^a, Saida Abdi, Ph.D., L.C.S.W., M.S.W., M.A.^c, Ali Maalim^a, Abdurahman Abdi^a, Tej Mishra, M.P.H.^a, Bhuwan Gautam, M.P.A.^a, John W. Creswell, Ph.D.^{d,e}, and William Beardslee, M.D.^{c,f}

^aResearch Program on Children and Adversity, Boston College School of Social Work, Massachusetts

^bDivision of Social and Transcultural Psychiatry, Department of Psychiatry, McGill University, Montreal, Canada

^cBoston Children's Hospital, Boston, Massachusetts

^dDepartment of Family Medicine, University of Michigan Medical School, St. Ann Arbor, Michigan

^eCollege of Education and Human Services, University of Nebraska-Lincoln, Lincoln, Nebraska

^fJudge Baker Children's Center, Harvard University, Boston, Massachusetts

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Keywords: Refugees; Family functioning; Youth mental health; Prevention; Intervention

A B S T R A C T

Purpose: There are disparities in mental health of refugee youth compared with the general U.S. population. We conducted a pilot feasibility and acceptability trial of the home-visiting Family Strengthening Intervention for refugees (FSI-R) using a community-based participatory research approach. The FSI-R aims to promote youth mental health and family relationships. We hypothesized that FSI-R families would have better psychosocial outcomes and family functioning post-intervention compared with care-as-usual (CAU) families. We hypothesized that FSI-R would be

IMPLICATIONS AND CONTRIBUTION

This study used a community-based participatory research approach to engage communities in the delivery and testing of

FSI-R Module Characteristics

- Brief, **strengths-based** approach
- Recognize and build on existing family strengths to enhance **resilience**
 - Protective resources = “**active ingredients**” for preventing mental health problems
- **Manualized** protocol
 - Includes detailed set of materials Manual and Workbook
- **Weekly** meetings between family and interventionist
- Separate sessions for **children and adults**
- Two major concepts: **Family Narrative and Family Meeting**



1 – 2	Introduction; Family Narrative
3	Children and Family Relationships
4	Responsive parenting and caregiving
5	Engagement with the US education system
6	Promoting Health, Wellbeing, and Safety
7 – 8	Communicating with Children and Caregivers
9	Uniting the Family
10	Bringing It All Together

Project Phases

Adapt FSI-R Content for Afghan Families

- Apply Community-based Participatory Research (CBPR) and co-creation methods to **evaluate the current paper-based FSI content** to make modifications that are more responsive to the **needs of newly resettling Afghan families**.
- Apply findings from the above goal and **make cultural modifications** to improve fit for Afghan refugees

The mHealth Solution: Co-Design: Use human-centered design processes to evaluate **cultural nuances, technical literacy, human-factors in use and acceptance of digital tools**

- Apply findings for:
 - **Identifying media** like graphics, vignette, charts or videos materials that are relevant to Afghan culture.
 - **Graphic design, programing and development of the app** and its UI/UX that is culturally relevant to Afghan families
 - UI/UX testing to assess **the app's usability, feasibility, and acceptability** for Afghan home visitors and families

Testing and Dissemination

- **Run ongoing community co-design groups and user-testing sessions** with Afghan community members, including both youth and adults, based on design-thinking and human-centered design principles
- **Pilot testing of the FSI-R app** delivered via home-visiting with 2-4 Afghan families in Springfield Massachusetts, to assess engagement, feasibility, and acceptability



Future Plans and New Directions

- This mHealth Solution will enable **rapid scale-up** of the Afghan FSI-R by increasing the efficiency and by **enhancing supports to monitor and improve the quality of the delivery**
- The app developed through this grant, will be the first step toward seeking greater funding to **integrate training and quality improvement innovations including** videos or audio materials to respond to the low literacy and low tech literacy of many resettling refugee populations.
 - This includes designing online training videos and assessments of home visitor competency for ensuring high quality and ethical delivery of the intervention.
- The **ultimate goal** is to **expand the reach of this prevention model** to support refugee families and build capacity and help to address mental health disparities facing refugees. Given the fast-evolving nature of the current Afghan resettlement processes in the U.S, the FSI-R App can eventually be widely disseminated via partnerships with resettlement agencies and ORR affiliates, to support their family-based prevention
- Further, **dissemination of the insights** gathered from the incorporation of the human-centered design process in developing mHealth solutions will be actively shared through **collaborative presentations and publications.**

Thank you!

Our Team



Avneet Hira, PhD, MS.
Professor, Engineering,
CO-Project Director



Nam Wook, Kim, PhD, MS.
Professor, Computer Science,
CO-Project Director



Theresa S. Betancourt, ScD, MA
Director RPCA &
Principal Investigator



Sunand Bhattacharya,
Office of the VP,
Research, Design, and
Innovation.



Joshua Bogus, MPH
Associate Director for
Research, RPCA



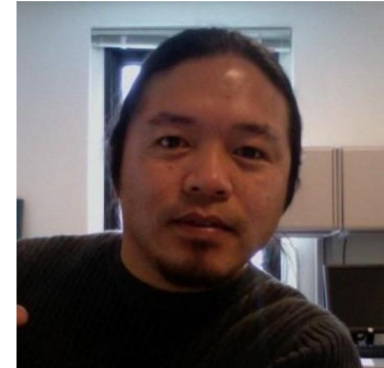
Farhad Sharifi, MSW
Refugee Advisor, RPCA



Euijin Jung, PhD, MSW
Post Doc Fellow, RPCA



Rachel Stram,
Administrative Manager,
RPCA



Kul Thapa
Designer, UI/UX BC
IT