JOURNAL OF CULTURAL ANALYSIS AND SOCIAL CHANGE

Journal of Cultural Analysis and Social Change,
2025, 10(4), 3538-3556
ISSN: 2589-1316

Evaluating the Strong Families Programme in Lebanon: A Single-arm Study on Family Functioning and Child Well-being

Aala El-Khani[1,2]*, Dina Idriss-Wheeler[3], Lamia Farhat[4], Ali Yassine[5], Shatha Darwish[6], Wadih Maalouf[7]

[1,5,7] Prevention, Treatment and Rehabilitation Section, Drug Prevention and Health Branch, Division of Operations, United Nations Office on Drugs and Crime (UNODC), Vienna, AUSTRIA, Email: aala.el-khani@un.org
[2] Division of Psychology and Mental Health, The University of Manchester, Manchester, UK
[3] Faculty of Health Sciences, Population Health, University of Ottawa, Ontario, CANADA
[4]United Nations Office on Drugs and Crime (UNODC) Lebanon, UN House, Beirut, LEBANON
[6]Faculty of Health and Education, Department of Psychology, Manchester Metropolitan University, Manchester, UK

***Corresponding Author:** aala.el-khani@un.org

Citation: El-Khani, A., Idriss-Wheeler, D., Farhat, L., Yassine, A., Darwish, S., & Maalouf, W. (2025). Evaluating the Strong Families Programme in Lebanon: A Single-arm Study on Family Functioning and Child Well-being, *Journal of Cultural Analysis and Social Change*, 10(4), 3538-3556. https://doi.org/10.64753/jcasc.v10i4.3601

Published: December 24, 2025

ABSTRACT

Families in Lebanon face compounded adversities, including political instability, economic collapse, and protracted displacement crises. These conditions place significant strain on caregiver-child relationships, which are critical determinants of child well-being. The Strong Families programme, developed by UNODC, is a brief, evidence-based family skills intervention designed for low-resource and high-stress settings. This study evaluated the programme's feasibility and effectiveness in Lebanon. A single-arm pre-post design was employed. Seventy-six families with children aged 8–14 years were recruited through community-based organizations across Beirut, Mount Lebanon, and South Lebanon. Caregivers completed a demographic questionnaire, the Parenting and Family Adjustment Scales (PAFAS) and the Strengths and Difficulties Questionnaire (SDQ) at baseline (T1), post-intervention (T2), and six-week follow-up (T3). Despite high attrition, results showed significant reductions in SDQ conduct problems and total difficulties, with the greatest improvements among children with high baseline difficulties. PAFAS outcomes indicated significant decreases in coercive parenting and improvements in positive encouragement, parent-child relationship, and parental adjustment among the most challenged caregivers at baseline. Families with lower initial difficulties showed smaller or non-significant changes, suggesting a ceiling effect. No differences emerged between Lebanese and non-Lebanese participants. The Strong Families programme demonstrated feasibility and positive short-term impacts on family functioning and child mental health in Lebanon, particularly for higher-risk families. These findings support its scalability as a contextually adaptable intervention to strengthen resilience in humanitarian and fragile settings.

Keywords: Parent-Child Relations, Parenting, Child Behavior, Mental Health, Family Relations, Refugees

INTRODUCTION

Lebanon has faced severe economic, political, and social challenges in recent years, exacerbated by various regional and global events. The ongoing conflict in Gaza, combined with structural issues in the banking system and the effects of the Beirut port explosion, have significantly impacted Lebanon's fragile economy (Human Rights Watch, 2023). These crises have reversed any slight economic recovery, with tourism and investment notably affected, plunging the nation back into a recession. Additionally, Lebanon's long-standing role as host to significant numbers of refugees, has placed further strain on its resources and infrastructure (Cherri et al., 2016; Human Rights Watch, 2023). The ongoing economic crisis in Lebanon, has created widespread socioeconomic difficulties for both citizens and refugees. These issues are closely linked to continued and increased mental health problems (Première

Copyright © 2025 by Author/s. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited..

Urgence Internationale, 2023). As people face relentless economic stress and disrupted lives, the psychological and physiological impact is substantial, affecting the mental health and wellbeing of a broad spectrum of the population in Lebanon.

Caregivers and their children residing in low- and middle-income countries (LMICs) frequently endure prolonged hardship that can compromise caregiving capacities and disrupt parenting practices (Kerbage et al., 2024). These contextual adversities not only strain caregiver resources and emotional well-being but also echo across family dynamics, potentially altering child developmental trajectories adversely (Jeong et al., 2024). In such environments, the caregiver–child relationship becomes a critical determinant of whether stressors are amplified or ameliorated, acting as a potent risk factor or, conversely, a protective buffer.

Family-based programmes that foster secure and nurturing caregiver-child interactions have demonstrated considerable promise in mitigating negative outcomes, including externalizing difficulties, maltreatment, and poor mental health, and in attenuating childhood aggression (Eltanamly et al., 2021), particularly in resource-limited LMIC settings (Al Sager et al., 2024; WHO, 2009). These interventions typically equip caregivers with foundational parenting strategies, emphasizing responsive communication, emotional attunement, and adaptive coping. Integral to their success is structured opportunities for caregivers to practice these strategies, through modeling, role play, and supportive feedback, which enhances caregiver competence and confidence (Jeong et al., 2024).

A number of United Nations Office on Drugs and Crime (UNODC) and WHO initiatives have recommended evidence-based family or parenting skills programmes, as a key factor to prevent a multitude of negative social outcomes that children in LMIC are more vulnerable to (including drug use, child maltreatment, and poor mental health) (WHO, 2009,2016; UNODC, 2018). The Strong Families programme is a UNODC evidence-based family skills intervention designed for caregivers and children (ages 8–15) living in low-resource and high-stress settings, including LMICs and humanitarian contexts. The programme aims to strengthen family resilience by helping families recognize and build on their strengths, fostering positive communication, and improving coping mechanisms. For information on the intervention structure and theoretical basis see our published article Haar et al. (2021). The programme is being used in over 40 countries with findings from randomized controlled trials (RCTs) and single-arm implementation studies conducted in Iran (Haar et al., 2021), Afghanistan (Haar et al., 2020), Cambodia (El-Khani et al., 2025) and Serbia (El-Khani et al., 2021) suggesting feasibility and adaptability for delivery in low-resource and high-stress environments.

The aim of this study is to evaluate the feasibility and efficacy of the Strong Families Programme for caregivers and their children in Lebanon. The goal was to improve family skills outcomes and the mental health of caregivers and children, as reported by the caregivers. Further evaluations of an intervention in a new setting contribute to validating the existing theory of change as well as providing insights into the contextual moderators of programme outcomes.

METHODS

Study Design and Recruitment of Participants

This study employed a single arm pre-post evaluation design to assess the potential effectiveness of the Strong Families programme on the mental health, well-being, and behavior of children and their caregivers in Lebanon. A total of 76 families were recruited in 2023 through seven community-based organizations operating in vulnerable communities in the Beirut, Mount Lebanon, and South Lebanon governorates. The programme was delivered in collaboration with seven Non-Governmental Organizations and local institutions. These settings were chosen for their engagement with families in vulnerable communities and their ability to facilitate programme delivery and follow-up.

To be eligible, families were required to: (1) reside in Lebanon, (2) have at least one child between the ages of 8 and 14 years, and (3) consent to participate in the full Strong Families programme. Recruitment was facilitated by the partner organizations through community outreach and referrals. Each organization contributed approximately 10 families.

Confidentiality and Ethical Considerations

Informed consent was obtained from all caregivers prior to data collection, and verbal assent was obtained from children who participated in interviews. Confidentiality and voluntary participation were emphasized throughout the evaluation. The evaluation took place in 2023 amid Lebanon's ongoing political, economic, and social crises. High inflation, currency collapse, and instability may have influenced family stress levels, availability of support systems, and mental health baselines, and were taken into account during analysis and interpretation.

© 2025 by Author/s

Data Collection

Data were collected at three time points: (1) one week before the start of the programme (baseline), (2) two weeks after programme completion, and (3) six weeks after programme completion. During each wave, caregivers completed a battery of standardised tools to assess parenting practices, child behavioural health, and family functioning.

Three quantitative measures were used. A Family Demographics Questionnaire was used at baseline only. The Parenting and Family Adjustment Scales (PAFAS) Sanders et al., 2014) was used at all-time points. PAFAS assess parenting practices and family functioning, which serve as key risk or protective factors for children's emotional and behavioural well-being. The measure has demonstrated strong reliability and validity across diverse cultural settings, including Australia, Panama, China, and Arabic-speaking families in conflict-affected regions. While no established clinical cut-offs exist, for analytical purposes, families scoring in the highest 75th percentile at baseline were categorized as "most-at-risk families." This study used PAFAS to evaluate short-term caregiver outcomes, including improved confidence in family management, improved parenting skills, and increased capacity to cope with stress. The third tool is the Strengths and Difficulties Questionnaire (SDQ) and was used at all time points (Goodman, 1997). It evaluates children's emotional, social, and behavioural difficulties within the past six months. The SDQ is frequently used in family skills research to assess changes before and after an intervention, as well as in both short- and long-term follow-ups. For expansive details on these tools and how they are used, refer to our published study by Haar et al. (2021).

Statistical Analysis

Quantitative data collected and stored in EpiData were exported to an Excel spreadsheet and subsequently analyzed using STATA (version 18; StataCorp, College Station, TX, USA). The process of data cleaning and ensuring completeness involved addressing the outliers, missing data points and verifying data accuracy. Identified outliers and data errors were checked, verified, and corrected in consultation with the community outreach specialist responsible for data collection in the field in Lebanon.

We encountered numerous missing data points for both SDQ and PAFAS across various scales and time points. To address the issue of missing data, we chose to impute the SDQ data, which had more random missing points across the three time points, rather than treat them as full drop-outs. Two methods were attempted: (i) imputing the Last Observation Carried Forward (T2 for T3 and T1 for T2 when T3 or T2 was missing, respectively) or Next Observation Carried Backward (i.e., T2 for T1 when only T1 was missing); if two points were missing the case was dropped, and (ii) the imputation of the average score for the sub-scale for that time point for the missing points. The outcomes were consistent across both methods, and we present the findings the second imputation technique (i.e., average score).

We used the Shapiro-Wilk test to assess the normality of the data distribution. Additionally, Mauchly's test of sphericity was applied to verify the assumption of sphericity in repeated measures ANOVA; there were no violations of the assumption.

For FDQ, continuous variables are presented as mean, standard deviation (SD), and minimum and maximum scores, while categorical data are summarized by frequencies and proportions. A two-sample t-test (for normal distribution) or Mann-Whitney U test (for non-normal distribution) was used to compare means in demographic characteristics, while a chi-square test was used for categorical data.

For analysis of SDQ and PAFAS, repeated measures ANOVA with Bonferroni post-hoc tests were applied for comparisons of means or ranks at different time points (pre-test, post-test, and follow-up) for the normally distributed data. For non-parametric data, Friedman's ANOVA was used, with Wilcoxon Signed Rank tests applied for post-hoc. For repeated measures ANOVA, effect size was calculated using partial eta squared (ηp^2), calculated as $\eta p^2 = \{F \times df_{effect}\}/[(F \times df_{effect}) + df_{error}]$, where F is the F-statistic, df_{effect} is the degrees of freedom for the effect, and the df_{error} is the degrees of freedom for error. For the non-parametric Friedman's test, epsilon squared (ϵ^2) was used, computed as $\epsilon^2 = [X^2 - (k-1)]/[n(k-1)]$, where X^2 is the test statistic, k is the number of groups, and n is the sample size within each group. To evaluate differences across groups, such as the genders of participating children and Lebanese versus non-Lebanese participants a two-way mixed-effects analysis was employed. A sub-analysis on families at the 70th percentile in each PAFAS and SDQ subcategory at baseline was performed to compare effects on families with high problems at baseline versus those with fewer difficulties. Statistical significance was set at a p-value lower than 0.05.

RESULTS

Follow-up and Missing Data

A total of 76 families initially enrolled in the Strong Families programme in Lebanon, distributed across three

 © 2025 by Author/s

regions: 21 in Saida, South Lebanon, 19 in Beirut Governorate, and 36 in Mount Lebanon Governorate (Figure 1). Prior to the first data collection (T1), one family was excluded due to lack of Family Demographic Questionnaire (FDQ) data, and another withdrew before any data could be collected for either PAFAS or SDQ assessments. Additionally, data was collected for SDQ but not PAFAS in two cases, and vice versa in three cases; these families were excluded due to incomplete data sets. Significant attrition occurred by the second time point (T2), with 13 families lost to follow-up, impacting both PAFAS and SDQ data collections and reducing the cohort to 62 families. The attrition continued into the third time point (T3), where 16 more families dropped out, leaving 46 families for FDQ analysis, and 41 each for the SDQ and PAFAS analyses. Among these, 39 families completed both PAFAS and SDQ assessments, while 3 completed only PAFAS, and 4 completed only SDQ.

Missing data on individual questions for the FDQs were verified with field contacts and corrected accordingly. There were no individual missing data points for PAFAS, however, SDQ had missing data points (5.6% of data missing from 41 cases included) and therefore we imputed individual missing data points using mean imputation for that question. Analysis of the 29 excluded cases revealed no significant difference in gender of caregiver, gender of participating child, age of participating child, marital status, education of caregiver and partner, work status of caregiver and partner or mean number of children. Similar to the study in Afghanistan (Haar et al., 2020), there was a small age difference among caregivers, with those excluded from the study (n=29) averaging 38.5 years old, which was younger compared to the caregivers who completed the programme (n=46), who averaged 42.07 years old (p=0.0192).

Following the detailed analyses of summary statistics and consultations with field experts and project implementers, it was determined that the predominance of missing data in T2 and T3 is likely attributable to participant fatigue and logistical challenges (i.e., attending) encountered during data collection, suggesting that the missingness is most likely at random.

Demographics of Study Participants

The caregivers had an average age of 42.17 years, with a range of 28 to 61 years. Most caregivers were female (90%, n=56), with males accounting for 10% (n=6). The primary caregivers were mothers (85%, n=39), followed by fathers (13%, n=6) and grandmothers (2%, n=1). There were no significant age differences between male and female caregivers. Most caregivers were married, with no significant gender differences observed in marital status. The criteria for participation required residing in Lebanon, not necessarily being Lebanese. In terms of country of origin, 65.22% of participants indicated they were Lebanese, 13.04% Syrian, 17.39% Palestinian, and 4.35% other (i.e., Egypt and Ukraine).

On average, caregivers had 2.8 children (SD = 1.42, Median = 2, Range = 1-7), with no significant difference in the number of children between male (Mean = 3.5, SD = 2.26) and female caregivers (Mean = 2.7, SD = 1.27), p = 0.4892. The average age of the participating children was 10.74 years (SD = 2.13),5, with no significant gender differences noted. Boys had an average age of 10.95 years (SD = 2.01), and girls had an average age of 10.58 years (SD = 2.25) (p=0.2695) The distribution of participating children by gender was 43% boys (n = 20) and 57% girls (n = 26).

Educational attainment among caregivers showed that 80% had primary education, some high school or a secondary education, while 20% had obtained a university degree or higher. Regarding employment status, close to 20% of caregivers worked full-time and 13% worked part-time, while close to 70% were not working (43%), were seeking employment (17%), worked from home (2%), or had an unknown employment status (2%). More caregiver's partners worked full-time (35%) or part-time (24%) and the remaining either worked at home (2%), were looking (9%), not working (4%) or employment status was unknown (26%). Supplemental Table 1 has the detailed breakdown of demographic characteristics.

© 2025 by Author/s

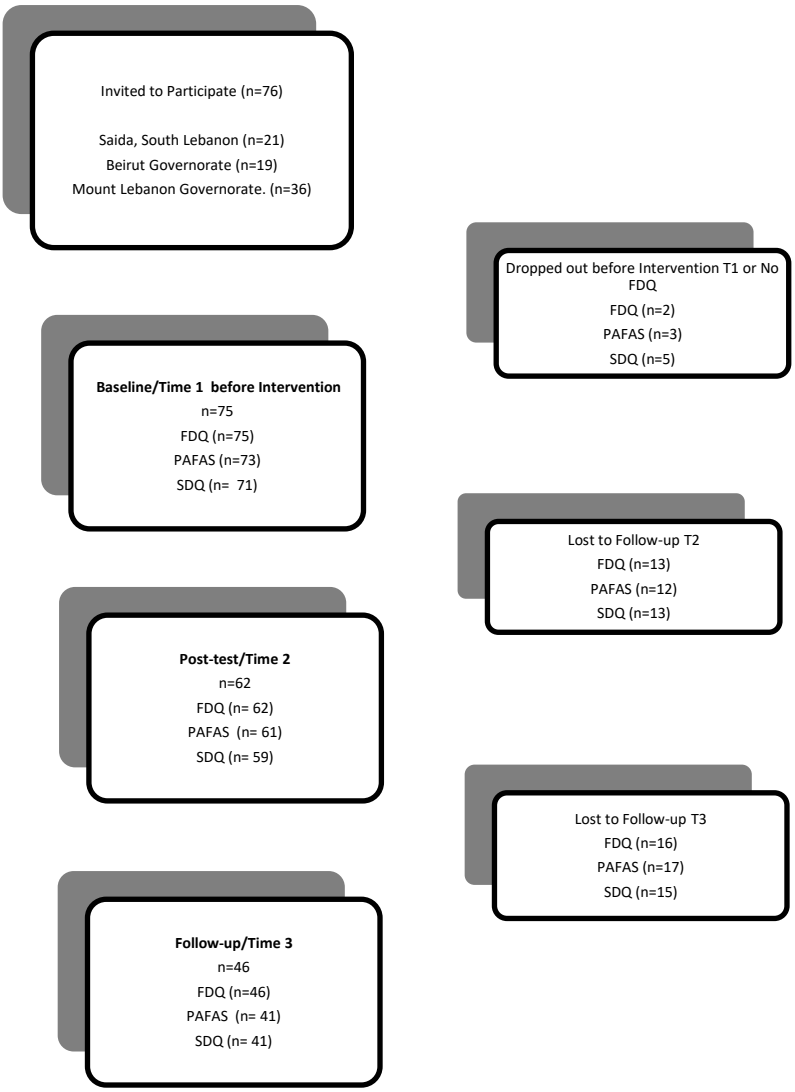

FIGURE 1. RECRUITMENT OF PARTICIPANTS, FOLLOW-UP AND MISSING DATA FROM SDQ AND PAFAS OVER TIME.

Assessment of Child Behaviour through SDQ

Examining differences across the overall SDQ subscales (Table 1), there were no significant gender differences. The Conduct Problem Scale showed a significant reduction in scores overall ($\chi^2(2)=18.62$, $p<0.0001$), particularly notable in boys ($F(2,30)=9.41$, $p=0.0007$) and girls ($\chi^2(2)=8.95$, $p=0.0114$), with significant post-test and follow-up reductions and moderate corresponding effect size. Despite these group-specific findings, emotional, hyperactivity, peer problem, and prosocial scales did not exhibit significant changes over time, nor did they differ significantly between genders. Noteworthy, the Total Difficulty Scale saw a general significant decrease ($\chi^2(2)=14.79$, $p=0.0006$) with a moderate effect size, supported by individual decreases in girls ($\chi^2(2)=10.15$, $p=0.0063$) and non-significant trends in boys ($F(2,30)=2.82$, $p=0.0754$).

 © 2025 by Author/s

Table 1. Differences In Mean Scores of The Sdq Across Intervention Time Points (Pre, Post and Follow-Up) And Between Participating Boys and Girls.

	Pre-test	**Post-test**	**Follow-up**	**Repeated Measures ANOVA**		
	Mean	**Mean**	**Mean**	**F (df comparison time, df$_{error}$); χ^2(df)**	**p-value**	**Pairwise comparison**
	SD	**SD**	**SD**	**(η_p^2;ϵ^2)**		
	[Min-Max]	**[Min-Max]**	**[Min-Max]**			
Emotional Problem Scale [0-10]						
Overall (n=41)	5.05	4.71 [a]	4.07	χ^2(2)=5.06	0.0798	-
	2.37	2.23	2.43	(ϵ^2 = 0.037)		
	[0-10]	[1-10]	[0-10]			
Girls (n=25)	5.4	4.72 [a]	4.44	χ^2 (2)=2.55	0.2792	-
	2.43	2.65	2.38	(ϵ^2 = 0.011)		
	[0-10]	[1-10]	[0-10]			
Boys (n=16)	4.5	4.69	3.5	F(2,30)=2.07	0.1432	-
	2.22	1.4	2.48	(η_p^2=0.121)		
	[0-8]	[2-7]	[0-8]			
Conduct problem scale [0-10]						
Overall (n=41)	3.88	3.05 [a]	2.88	***χ^2 (2)=18.62***	***0***	***b, d***
	2.16	1.73	1.93	**(ϵ^2 = 0.203)**		
	[0-9]	[0-8]	[0-7]			
Girls (n=25)	4.04	3.48 [a]	3.12 [a]	***χ^2(2)=8.95***	***0.0114***	***d***
	2.52	1.81	2.19	**(ϵ^2 = 0.139)**		
	[0-9]	[1-8]	[0-7]			
Boys (n=16)	3.63	2.38	2.5	***F(2,30)=9.41***	***0.0007***	***b, d***
	1.45	1.41	1.41	**(η_p^2=0.386)**		
	[1-6]	[0-5]	[0-4]			
Hyperactivity scale [0-10]						
Overall (n=41)	4.12	4	3.71	F(2,80)=0.75	0.4774	-
	2.26	1.96	2.06	(η_p^2=0.036)		
	[0-9]	[0-8]	[0-8]			
Girls (n=25)	4.48	4	4.12	F(2,48)=0.55	0.5822	-

© 2025 by Author/s

	2.5	1.76	1.92	(η_p^2=0.022)		
	[0-9]	[1-8]	[1-8]			
Boys (n=16)	3.56	4	3.06	F(2,30)=1.88	0.1707	-
	1.75	2.31	2.17	(η_p^2=0.111)		
	[1-6]	[0-7]	[0-7]			
Peer problem scale [0-10]						
Overall (n=41)	3.22	3.29	2.95	F(2,80) = 0.75	0.474	-
	1.99	1.83	1.67	(η_p^2=0.036)		
	[0-9]	[0-7]	[0-6]			
Girls (n=25)	3.36	3.32	3.16	F(2,48)=0.18	0.832	-
	2.16	1.77	1.62	(η_p^2=0.0074)		
	[0-9]	[0-7]	[1-6]			
Boys (n=16)	3	3.25	2.63	F(2,30)=0.71	0.4994	-
	1.75	1.98	1.75	(η_p^2=0.045)		
	[1-6]	[0-6]	[1-5]			
Prosocial scale [10-0]						
Overall (n=41)	8.46	8.27 [a]	8.49	χ^2 (2)=2.03	0.3619	-
	1.73	1.64	1.61	(ϵ^2 = 0.0004)		
	[3-10]	[5-10]	[5-10]			
Girls (n=25)	8.48	8.08 [a]	8.24	χ^2 (2)=2.19	0.3338	-
	1.9	1.75	1.69	(ϵ^2 = 0.002)		
	[3-10]	[5-10]	[5-10]			
Boys (n=16)	8.44	8.56	8.88	F(2,30)=0.38	0.688	-
	1.5	1.46	1.45	(η_p^2=0.025)		
	[5-10]	[6-10]	[5-10]			
Total Difficulty scale [0-40]						
Overall (n=41)	16.27	15.05 [a]	13.61 [a]	***χ^2(2)=14.79***	***0.0006***	***c, d***
	6.4	5.88	6.23	(ϵ^2 = 0.156)		
	[4-27]	[3-26]	[3-27]			
Girls (n=25)	17.28	15.52 [a]	14.84	***χ^2(2)=10.15***	***0.0063***	***d***
	6.62	5.92	6.18	(ϵ^2 = 0.163)		
	[4-27]	[5-26]	[4-27]			

© 2025 by Author/s

Boys (n=16)	14.69	14.31	11.69	F(2,30)=2.82	0.0754	-
	5.87	5.93	6	(η_p^2=0.158)		
	[5-24]	[3-23]	[3-22]			
NOTES:						
I. (I) HP2=PARTIAL ETA SQUARED EFFECT SIZE FOR REPEATED MEASURES ANOVA (PARAMETRIC); ϵ2=EPSILON SQUARED EFFECT SIZE FOR FRIEDMAN'S TEST (NON-PARAMETRIC).						
II. (ii) We conducted a two-way mixed-effects analysis to assess differences between boys and girls across all SDQ subscales and found no significant gender differences.						
III. (iii) We conducted a two-way mixed effects analysis to assess differences between Lebanese and non-Lebanese participants across all the SDQ subscales and found no significant differences.						

In a detailed examination of intervention impacts on SDQ subscales among those initially scoring in the higher and lower percentiles, we observed significant improvements primarily among those who started with more pronounced difficulties (Table 2). Specifically, the Conduct Problem Scale showed significant reductions for individuals in the ≥70th percentile at baseline ($\chi^2(2)=20.31$, $p<0.0001$), with a high effect size ($\epsilon^2 = 0.509$), indicating major improvements. Similarly, significant improvements (with moderate to high effect size) were seen in the Peer Problem Scale for the higher baseline group ($F(2,32)=6.81$, $p=0.0034$), the Prosocial Scale ($\chi^2(2)=18.14$, $p=0.0001$), and the Total Difficulty Scale ($\chi^2(2)=6.32$, $p=0.0425$) among those initially struggling the most. Conversely, those initially scoring below the 70th percentile showed less dramatic changes, with the only significant improvement noted in the Total Difficulty Scale ($\chi^2(2)=10.26$, $p=0.0059$)

Table 2. SDQ Subscale mean scores divided by families that scored very high (=>70th percentile) on the subscale at baseline (T1).

	Pre-test	**Post-test**	**Follow-up**	**Repeated Measures ANOVA**		
	Mean	**Mean**	**Mean**	**F ($df_{comparison\ time}$, df_{error}); χ^2(df)**	**p-value**	**Pairwise comparison**
	SD	**SD**	**SD**	**(η_p^2;ϵ^2)**		
	[Min-Max]	**[Min-Max]**	**[Min-Max]**			
Emotional Problem Scale [0-10]						
>=70 percentile @ T1 [Score >=6]	7.05	5.26 [a]	5	***$\chi^2(2)=6.74$***	***0.0344***	***b, d***
n=19	1.31	2.68	2.89	**($\epsilon^2 = 0.125$)**		
	[6-10]	[1-10]	[0-10]			
<70 percentile@ T1 [score<6]	3.32	4.23	3.27	F(2,42)=3.53	*0.0383*	-
n=22	1.55	1.66	1.64	(η_p^2=0.150)		
	[0-5]	[1-9]	[0-7]			
Conduct problem scale [0-10]						

>=70 percentile @ T1 [Score >=5]	5.89	4.28 a	4.17	***$\chi^2(2)=20.31$***	***0***	***b, d***
n=18	1.18	1.56	1.65	**(ϵ^2= 0.509)**		
	[5-9]	[2-8]	[1-7]			
<70 percentile@ T1 [score<5]	2.3	2.09	1.87	F(2,44)=0.72	0.4927	-
n=23	1.22	1.16	1.49	(η_p^2=0.061)		
	[0-4]	[0-4]	[0-5]			
Hyperactivity scale [0-10]						
>=70 percentile @ T1 [Score =>6]	6.77	5.15	5.08	***F(2,24)=7.32***	***0.0033***	***b, d***
n=13	1.01	1.28	1.26	**(η_p^2=0.5495)**		
	[6-9]	[3-7]	[4-8]			
<70 percentile@ T1 [score <6]	2.89	3.46	3.07	F(2,54)=0.95	0.3928	-
n=28	1.47	2.01	2.07	(η_p^2=0.0657)		
	[0-5]	[0-8]	[0-8]			
Peer problem scale [0-10]						
>=70 percentile @ T1 [Score =>4]	5.12	4	3.59	***F(2,32)=6.81***	***0.0034***	***b, d***
n=17	1.45	1.9	1.54	**(η_p^2=0.4598)**		
	[4-9]	[0-7]	[1-6]			
<70 percentile@ T1 [score<4]	1.88	2.79	2.5	***F(2,46)=3.94***	***0.0264***	***b***
n=24	0.95	1.64	1.64	**(η_p^2=0.255)**		
	[0-3]	[0-6]	[0-6]			
Prosocial scale [10-0]						
>=70 percentile @ T1 [Score =10]	10	8.32 a	9	***$\chi^2(2)=18.14$***	***0.0001***	***b, c, d***
n=16	0	1.62	1.32	**(ϵ^2 = 0.504)**		

© 2025 by Author/s

	[10-10]	[5-10]	[6-10]			
<70 percentile@ T1 [score<10]	7.48	8.24	8.16	F(2,48)=2.86	0.0673	-
n=25	1.56	1.69	1.72	(η_p^2=0.193)		
	[3-9]	[5-10]	[5-10]			
Total Difficulty scale [0-40]						
>=70 percentile @ T1 [Score=>21]	23.92	20.08 [a]	19.25	***χ^2(2)=6.32***	***0.0425***	***b, d***
n=12	1.68	4.96	4.67	**(ϵ^2 = 0.180)**		
	[22-27]	[12-26]	[12-27]			
<70 percentile@ T1 [score<21]	13.1	12.97 [a]	11.28	***χ^2(2)=10.26***	***0.0059***	***c***
n=29	4.68	4.93	5.26	**(ϵ^2= 0.142)**		
	[4-20]	[3-23]	[3-25]			

NOTES:

(i) *SD: standard deviation, a=Data not normally distributed, non-parametrical tests used for all statistics involving this group; b=significant difference between t1 and t2, c=significant difference between t2 and t3, d=significant difference between t1 and t3;* n/a = chi-squared value not sufficiently large relative to degrees of freedom, so no significance or effect detected.

(ii) ηp2=partial eta squared effect size for repeated measures ANOVA (parametric); ϵ2=epsilon squared effect size for Friedman's Test (non-parametric)

Assessment of Parenting Practices and Parent and Family Adjustment Through Pafas

Table 3 presents the changes in PAFAS scores across three assessment points (Pre-test, Post-test, Follow-up) for both the overall sample and stratified by baseline scoring percentiles (above and below the 70th percentile). Notably, participants scoring above the 70th percentile at baseline, who initially exhibited more pronounced challenges, demonstrated significant improvements in several domains. Specifically, Coercive Parenting saw a significant decrease in scores within this group ($F(2, 30)=5.52$, $p=0.0091$), with a considerable effect size ($\eta p^2=0.269$). Positive Encouragement also improved ($F(2, 44)=6.94$, $p=0.0024$, $\eta p^2=0.240$), as did Parent-child Relationship scores ($F(2, 24)=5.81$, $p=0.0088$, $\eta p^2=0.326$). Parental Adjustment had notable improvements ($F(2, 28)=6.07$, $p=0.0064$, $\eta p^2=0.303$). Family Relationships were on the cusp of statistical significance ($F(2,28)=3.14$, $p=0.0589$, $\eta p^2=0.183$), with post hoc analyses revealing significant improvement from T1 to T3. Those scoring below the 70th percentile showed fewer and non-significant changes across these scales. Overall, these results highlight differential impacts of the interventions, with more substantial benefits taking place among individuals with greater initial difficulties as evidenced by their baseline scores.

© 2025 by Author/s

Table 3. Mean PAFAS sco
res overtime overall and for families above and below the 70th percentile in each subcategory at baseline (T1).

	Pre-test	**Post-test**	**Follow-up**	**Repeated Measures ANOVA**			
	Mean (SD)	**Mean (SD)**	**Mean (SD)**	**F (df_{time}, df_{error}); χ^2(df)**	**p-value**	**Pairwise comparison**	**Estimated effect size (ηp^2)/(ϵ^2**
	[Min-Max]	**[Min-Max]**	**[Min-Max]**				
PARENTING							
Parental Consistency [0-15]	6.24	6.02	6.29	F(2,80)=0.29	0.749	-	0.007
Overall	1.71	2.06	2.14				
n=41	[3-11]	[1-10]	[3-12]				
>=70 percentile @ T1 [Score =>7]	7.72	6.78	6.56	F(2, 34)=2.34	0.1112	-	0.1211
n=18	1.18	1.96	2.12				
	[7-11]	[3-10]	[3-10]				
<70 percentile@ T1 [score <7]	5.09	5.43	6.09[a]	χ2(2)=2.59	0.2744	-	0.013
n=23	1.04	1.97	2.17				
	[[3-6]	[1-9]	[3-12]				
Coercive Parenting [0-15]							
Overall	6.61	6	6.1	F(2,80)=0.84	0.4352	-	0.021
n=41	3.22	2.52	3				
	[1-14]	[1-12]	[0-13]				
>=70 percentile @ T1 [Score =>8]	9.88	6.88	7.63	**F(2,30)=5.52**	**0.0091**	**b**	**0.269**
n=16	2.09	2.6	3.32				
	[8-14]	[3-12]	[2-13]				
<70 percentile@ T1 [score <8]	4.52	5.44	5.12	F(2,48)=2.07	0.1372	-	0.079
n=25	1.69	2.35	2.35				

© 2025 by Author/s

	[1-7]	[1-11]	[0-11]				
Positive Encouragement [0-9]							
Overall	1.73	1.27	1.32	$\chi2(2)=1.37$	0.5022	-	n/a
n=41	1.53	1.38	1.19				
	[0-6]	[0-6]	[0-5]				
>=70 percentile @ T1 [Score =>2]	2.83	1.52	1.61	**F(2,44)=6.94**	**0.0024**	**b,d**	**0.24**
n=23	1.11	1.24	1.37				
	[2-6]	[0-5]	[0-5]				
<70 percentile@ T1 [score <2]	0.33	0.94	0.94	$\chi2(2)=5.11$	0.0779	-	0.086
n=18	0.49	1.51	0.8				
	[0-1]	[0-6]	[0-2]				
Parent-child Relationship [0-9]							
Overall	1.24	0.98	1.27	F(2,80)=0.74	0.4792	-	0.018
n=41	1.7	1.46	2.04				
	[0-6]	[0-5]	[0-8]				
>=70 percentile @ T1 [Score =>2]	3.46	1.85	2.15	**F(2, 24)=5.81**	**0.0088**	**b,d**	**0.326**
n=13	1.2	1.91	2.76				
	[2-6]	[0-5]	[0-8]				
<70 percentile@ T1 [score <2]	0.21	0.57	0.86	***χ2(2)=5.64***	***0.0592***	***d***	***0.065***
n=28	0.42	1	1.48				
	[0-1]	[0-4]	[0-5]				
FAMILY ADJUSTMENT							
Parental Adjustment [0-15]							
Overall	5.59	5.61	5.46	F(2,80)=0.07	0.9365	-	0.002
n=41	2.18	2.55	2.31				
	[0-12]	[0-14]	[0-14]				

© 2025 by Author/s

>=70 percentile @ T1 [Score =>7]	7.73	6.8	5.47	**F(2,28)=6.07**	**0.0064**	**d**	**0.303**
n=15	1.28	2.43	1.96				
	[7-12]	[4-14]	[0-7]				
<70 percentile@ T1 [score <7]	4.35	4.92	5.46	F(2,50)=2.49	0.0932	-	0.091
n=26	1.52	2.4	2.53				
	[0-6]	[0-10]	[2-14]				
Family Relationships [0-12]							
Overall	3.63	3.46	3.12	F(2,80)=0.92	0.3956	-	0.023
n=41	2.37	2.77	2.08				
	[0-8]	[0-10]	[0-7]				
>=70 percentile @ T1 [Score =>]	6.13	5.13	4.4	***F(2.28)=3.14***	***0.0589***	***d***	***0.183***
n=15	1.19	2.8	2.35				
	[5-8]	[0-10]	[1-7]				
<70 percentile@ T1 [score <]	2.19	2.5	2.38	F(2,50)=0.27	0.7675	-	0.011
n=26	1.52	2.28	1.5				
	[0-4]	[0-8]	[0-6]				
Parental Teamwork [0-9]							
Overall	3.54	3.66	3.59	$\chi2(2)=0.33$	0.8477	-	n/a
n=41	2.6	2.72	2.59				
	[0-9]	[0-9]	[0-9]				
>=70 percentile @ T1 [Score =>6]	6.69	6.38	6.23	$\chi2(2)=0.1935$	0.9078	-	n/a
n=13	1.18	2.29	1.79				
	[6-9]	[0-9]	[3-9]				
							n/a
<70 percentile@ T1 [score <6]	2.07	2.39	2.36	$\chi2(2)=0.6667$	0.7165	-	
n=28	1.54	1.83	1.89				

© 2025 by Author/s

	[0-5]	[0-6]	[0-6]				

Notes:

(i) SD: standard deviation, a=Data not normally distributed, non-parametrical tests used for all statistics involving this group; b=significant difference between t1 and t2, c=significant difference between t2 and t3, d=significant difference between t1 and t3; n/a = chi-squared value not sufficiently large relative to degrees of freedom, so no significance or effect detected.

(ii) ηp2=partial eta squared effect size for repeated measures ANOVA (parametric); ϵ2=epsilon squared effect size for Friedman's Test (non-parametric)

(iii) We conducted a two-way mixed effects analysis to assess differences between Lebanese and non-Lebanese participants across all the SDQ subscales and found no significant differences.

DISCUSSION

Summary of Findings

The Strong Families programme successfully engaged 62 families across Lebanon, with recruitment efforts extending through various governorates; Mount Lebanon, central Beirut, and the southern regions, via non-governmental organizations (NGOs) operating in resource-limited settings. Not surprisingly, more than a third of participants (37%) were from non-Lebanese backgrounds, including Syrian, Palestinian, Ukrainian, and Egyptian origins, several of whom arrived as refugees or had been displaced from conflicts in their own regions. Recruitment conducted by key NGOs in the region engaged families primarily from low socio-economic backgrounds, as evidenced by the majority being female caregivers (90%) who were partnered (86%), held primary or secondary high school education (80%), and were predominantly unemployed (66%). This study is similar in profile to and extends the efforts of previous initiatives conducted in low-resource settings among refugee families affected by conflict, displacement and other stressful circumstances, such as in Afghanistan (Haar et al., 2020), Iran (Haar et al., 2021), and Serbia (El-Khani et al., 2021).

Overall, the programme demonstrated some effects on behavioral and familial adjustments as assessed by the SDQ and PAFAS. Notably, significant improvements were observed in Conduct Problem scale and Total Difficulty scales across all participants, with pronounced benefits for child mental health for families initially scoring above the 70th percentile for emotional, conduct, hyperactivity, peer-problem, prosocial and total difficulties scales — indicating the intervention's efficacy in addressing more severe challenges.

Although the mean PAFAS subscale scores for both parenting and family adjustment showed a decreasing trend over time, indicating improvement, the statistical tests did not reveal significant changes for the overall scores. This is likely due to the already low baseline scores, which left limited scope for noticeable improvement. Similar to the study in Serbia (El-Khani et al., 2021), in a targeted analysis, families categorized by the 70th percentile—those initially facing greater challenges—demonstrated significant enhancements on several subscales. Marked improvements were observed in areas such as Coercive Parenting, Positive Encouragement, Parent-child Relationships, and Parental Adjustment, highlighting positive changes in parenting practices and family dynamics among the most challenged groups at baseline.

In our study, comparisons between Lebanese and non-Lebanese families (i.e., Syrian and Palestinian refugees and migrants) revealed no significant differences in scores, contrasting with findings from a previous study in Iran which reported disparities between caregivers originating from Iran and those from Afghanistan (Haar et al., 2021). This may be attributable to the current sociopolitical climate in Lebanon, which presents unique stressors and instability affecting both host citizens and refugees alike, potentially leveling differences typically observed between refugees or displaced persons and citizens (World Health Organization, 2022).

Comparison with Other Findings

The lack of significant differences in the overall mean scores for the PAFAS sub-scales prompted a focus on sub-groups identified as higher risk. Since specific thresholds for the PAFAS instrument are not established for distinguishing such groups, a 70th percentile cutoff at baseline was adopted to identify the 'most at risk' families, following the approach used in other studies (El-Khani et al., 2021). In terms of parenting, the intervention did not seem to affect parental consistency, which assesses the regularity and predictability of a caregiver's disciplinary actions and responses to child behavior. This subscale ranges from 0 to 15, and families scoring above the 70th percentile (scores > 7) were already performing well initially. In contrast, findings from Serbia indicated that higher

© 2025 by Author/s

risk families had an average score around 10 at baseline (El-Khani et al., 2021). Coercive parenting, positive encouragement, parent-child relationships all showed significant improvements across time from t1 to t3, except for coercive parenting, where significant improvements were from t1 to t2. Regarding family adjustment, there were no significant effects on parental teamwork. Despite a consistent decrease in average scores from T1 to T3 among families in the 70th percentile scoring above 6 [range 0-9], these changes did not reach statistical significance over time. One possibility might be that as a large percentage of participants were unemployed, the fathers spent a significant amount of time away from the family looking for work, often returning every few weeks. This may allow for fewer opportunities for parental teamwork or knowledge sharing.

For SDQ outcomes, our findings align with previous trials of family skills intervention in LMIC in which conduct problems and total difficulties were most responsive to the intervention, whereas emotional and peer-related issues showed smaller or non-significant changes (Kerbage et al., 2024; Simic et al., 2022). One reason might be that the Strong Families Programme is designed to strengthen parenting practices, improve communication, and reduce coercive or inconsistent discipline, all of which directly target children's externalizing behaviours, such as aggression, non-compliance, and conduct problems (Haar et al., 2020). In contrast, internalizing difficulties such as emotional distress or peer relationship challenges may be less immediately responsive, as they often require sustained support, broader social interventions, or more individualized therapeutic approaches (Morris et al., 2017). Additionally, emotional problems may be more strongly influenced by chronic contextual stressors, such as poverty or exposure to conflict, which cannot be fully mitigated within the short time frame of a brief parenting intervention (Fazel et al., 2014). Thus, while Strong Families is effective in reducing overt behavioural difficulties, additional or complementary interventions may be necessary to address the subtler domains of child mental health.

Interestingly, the reduction in total difficulty scores appeared more pronounced among girls than boys. Several factors may explain this gender difference. First, evidence suggests that girls are often more responsive to improvements in the emotional climate of the household, particularly in contexts where caregiver–child communication and warmth are strengthened (Keiley et al., 2015). Also, cultural norms in Lebanon and the broader region may socialize girls to be more attuned to relational dynamics within the family, making them especially sensitive to interventions that target communication, cohesion, and positive parenting. Taken together, these findings highlight the importance of considering gendered pathways of change when evaluating family-based interventions.

Strengths and Limitations

A key strength of this study is its implementation in Lebanon during a period of acute national instability, demonstrating feasibility and acceptability in a fragile context. The use of validated and widely applied tools (SDQ and PAFAS) allows for comparability with other Strong Families evaluations and broader parenting intervention research. Moreover, stratified analyses by baseline percentile strengthen confidence that observed improvements are not solely regression to the mean but reflect genuine intervention effects for higher-risk families.

However, limitations must be acknowledged. First, the study employed a single-arm design without a control group, limiting causal inference. Second, attrition rates were high, particularly at follow-up, likely reflecting contextual challenges but nonetheless reducing statistical power. Third, outcomes relied exclusively on caregiver reports, which may introduce reporting bias. Fourth, the short follow-up period prevents conclusions about the sustainability of observed improvements. Finally, interestingly, many of the participants started off well at T1, this implies a ceiling effect, where families with fewer initial difficulties had limited room to demonstrate measurable improvements. This parallels previous research of Strong Families that indicates that while children experience positive effects, those with lower baseline scores at T1 benefit the most. For future evaluations, it may be useful to supplement SDQ and PAFAS with sensitivity measures (e.g., scales of parental self-efficacy or child wellbeing beyond clinical symptoms) that can capture smaller improvements among families starting from lower difficulty levels.

Implications for Policy, Practice and Further Research

The findings underscore the importance of embedding evidence-based family skills programmes within humanitarian and fragile contexts. The data suggest that tailored interventions, like Strong Families are effective in heterogeneous populations and can significantly ameliorate behavioral and family-related challenges among most challenged groups. At a policy level, scaling up parenting interventions should be considered part of national mental health and psychosocial support strategies in Lebanon and similar LMICs. Practically, community-based delivery through NGOs proved feasible and can help overcome systemic resource constraints. Further adaptation may enhance engagement and retention, particularly to address attrition.

Future research should prioritize controlled trial designs to strengthen causal inference and extend follow-up to assess long-term outcomes. Also, research examining moderators of programme effectiveness, such as caregiver

 © 2025 by Author/s

gender, displacement status, or socioeconomic hardship, would provide insight into tailoring interventions for maximum impact.

CONCLUSIONS

The Strong Families Programme demonstrated significant benefits for family functioning and child well-being in Lebanon, particularly among families facing the greatest initial challenges. These findings add to a growing body of evidence supporting the programme's adaptability and effectiveness across diverse LMIC and humanitarian settings. Despite limitations, the study highlights the programme's potential as a scalable and contextually relevant tool to strengthen resilience in families under stress.

KEY PRACTITIONER MESSAGES

What is known?

- Caregiver-child relationships are powerful determinants of child mental health, particularly in low- and middle-income countries (LMICs) and humanitarian settings where adversity is widespread.
- Evidence shows that brief family skills interventions, can strengthen parenting practices and reduce child behavioural difficulties across diverse LMICs. However, limited research has been conducted inLebanon, a country facing overlapping crises of political instability, economic collapse, and displacement.

What is new?

- This study is the first to evaluate the UNODC family skills intervention, the Strong Families programme, in Lebanon.
- Findings demonstrate the programme's feasibility and acceptability, alongside positive impacts on family functioning and child behaviour. Significant improvements were observed in coercive parenting, positive encouragement, parent-child relationships, and child conduct problems.
- The strongest benefits were found among families with high baseline difficulties, suggesting that the programme functions effectively as a selective prevention strategy. Families with lower baseline challenges demonstrated smaller changes, indicating possible ceiling effects.

What is significant for clinical practice?

- For practitioners, these results highlight that brief, community-delivered parenting interventions can be implemented successfully even in highly unstable environments.
- The Strong Families model is short, low-cost, and scalable, making it well-suited for integration into community and national psychosocial support systems in Lebanon and similar humanitarian settings.
- Clinicians and service providers should prioritize engaging families at highest risk, while researchers should pursue controlled trials with longer follow-up and multi-informant measures to consolidate evidence and guide policy adoption

ACKNOWLEDGEMENTS

The authors sincerely appreciate the dedicated team of the United Nations Office on Drugs and Crime (UNODC) Lebanon office - Rose Marie Kerkor, Michel Abboud, Tony Abbas, and Joseph Ghorayeb - who implemented the programme with professionalism and commitment. The study presented in this paper is based on their interventions with families, which provided the foundation for the research. The authors also thank Reind Said for collecting the data, as well as the partner organizations for their outreach to families and for providing their facilities. Special thanks are extended to all colleagues as well as to the UNODC Lebanon Head of Office Renee Sabbagh for guidance and support and Mirna Bou Habib, UNODC deputy regional representative for overseeing the regional project under which this study was conducted.

The Strong Families programme was originally developed and tested in Afghanistan thanks to the generous support of the US-INL (Bureau of International Narcotics and Law Enforcement Affairs). An acknowledgment is due to the governments of France (particularly of the MILDECA), Sweden, Japan and The Kingdom of Saudi Arabia for their support for the dissemination of the Strong Families programme globally. None of these donors were implicated in the research.

Study Funding

The study was conducted within the framework of the United Nations Office on Drugs and Crime (UNODC) Regional Office for the Middle East and North Africa (ROMENA) regional project, "Youth 4 Impact"(Project number: XAMMB7). This project aimed to help young men and women, including those marginalized and at risk,

© 2025 by Author/s

to become more empowered to face life's challenges and gain resilience against crime, violence and drugs. The "Youth 4 Impact" project was implemented in Egypt, Lebanon, Libya, Palestine, and Sudan, over a period of two years (December 2021 - October 2024) with the support of the German Federal Ministry of Development and Economic Cooperation (BMZ).

Conflict of Interest

The authors confirm no conflict of interest

Ethical Information

Informed consent was obtained from all subjects involved in the study. Participation in the study was voluntary, and families did not receive any monetary compensation for their participation. The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Institutional Review Board of the UNODC in Vienna HQ and Lebanon.

REFERENCES

Al Sager, A., Goodman, S. H., Jeong, J., Bain, P. A., & Ahun, M. N. (2024). Effects of multi-component parenting and parental mental health interventions on early childhood development and parent outcomes: a systematic review and meta-analysis. The Lancet Child & Adolescent Health, 8(9), 656-669.

Cherri, Z., Arcos González, P., & Castro Delgado, R. (2016). The Lebanese–Syrian crisis: Impact of influx of Syrian refugees to an already weak state. Risk Management and Healthcare Policy, 9, 165–172.

El-Khani, A., Haar, K., Stojanovic, M., & Maalouf, W. (2021). Assessing the Feasibility of Providing a Family Skills Intervention, "Strong Families", for Refugee Families Residing in Reception Centers in Serbia. International Journal of Environmental Research and Public Health, 18(9), 4530.

El-Khani, A., Idriss-Wheeler, D., Chea, S., Darwish, S., & Maalouf, W. (2025). Impact of a Brief Family Skills Training Programme "Strong Families" in a Low–Middle-Income-Country: Cambodia. Children, 12(6), 728.

El-Khani, A.; Haar, K.; Stojanovic, M.; Maalouf, W (2021). Assessing the Feasibility of Providing a Family Skills Intervention, "Strong Families", for Refugee Families Residing in Reception Centers in Serbia. Int. J. Env. Res. Public Health 18, 4530.

Eltanamly, H., Leijten, P., Jak, S., & Overbeek, G. (2021). Parenting in times of war: A meta-analysis and qualitative synthesis of war exposure, parenting, and child adjustment. Trauma, Violence, & Abuse, 22(1), 147-160.

Fazel, M., Patel, V., Thomas, S., & Tol, W. (2014). Mental health interventions in schools in low-income and middle-income countries. The Lancet Psychiatry, 1(5), 388–398.

Goodman, R(1997). The Strengths and Difficulties Questionnaire: A Research Note. J. Child Psychol. Psychiatry, 38, 581–586.

Haar, K., El-Khani, A., Molgaard, V., & Maalouf, W. (2020). Strong families: A new family skills training programme for challenged and humanitarian settings: a single-arm intervention tested in Afghanistan. BMC Public Health, 20(1), 634. https://doi.org/10.1186/s12889-020-08701-w

Haar, K., El-Khani, A., Mostashari, G., Hafezi, M., Malek, A., & Maalouf, W. (2021). Impact of a brief family skills training programme ("Strong Families") on parenting skills, child Psychosocial functioning, and resilience in Iran: A multisite controlled trial. International journal of environmental research and public health, 18(21), 11137.

Human Rights Watch. (2023). Lebanon: Events of 2022. In World Report 2023. https://www.hrw.org/world-report/2023/country-chapters/lebanon

Jeong, J., Bliznashka, L., Sullivan, E., Hentschel, E., Jeon, Y., Strong, K. L., & Daelmans, B. (2024). Parenting and family interventions in low- and middle-income countries for child and adolescent mental health: A systematic review. Comprehensive Psychiatry, 132, 152483.

Keiley, M. K., Howe, T. R., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2015). The timing of child physical maltreatment: A cross-domain growth analysis of impact on adolescent externalizing and internalizing problems. Development and Psychopathology, 13(4), 891–912.

Kerbage, H., El Chammay, R., & Haddad, R. (2024). Parenting interventions in conflict-affected settings: Lessons from the Middle East. Frontiers in Public Health, 12, 1356897.

Morris, A. S., Robinson, L. R., Hays-Grudo, J., Claussen, A. H., Hartwig, S. A., & Treat, A. E. (2017). Targeting parenting in early childhood: A public health approach to improve outcomes for children living in poverty. Child Development, 88(2), 388–397.

Première Urgence Internationale. (2023). Break the Stigma: Let's Talk about Mental Health in Lebanon. Première Urgence Internationale. https://www.premiere-urgence.org/en/break-the-stigma-lets-talk-about-mental-health-in-lebanon/

 © 2025 by Author/s

Sanders MRMA, Haslam DM, Filus A, Fletcher R (2014). Parenting and family adjustment scales (PAFAS): validation of a brief parent-report measure for use in assessment of parenting skills and family relationships. Child Psychiatry Hum Dev,45(3):255–72.

Simic, J., Lakic, A., Bjelosevic, E., Haar, K., & Cluver, L. (2022). Evaluation of the Strong Families programme in Serbia: Promoting positive parenting in humanitarian contexts. European Child & Adolescent Psychiatry, 31(7), 1065–1077.

UNODC (2018). WHO & UNODC, International Standards on Drug Use Prevention. In Second Updated Edition; UNODC and WHO: Vienna, Austria.

WHO (2009). Violence Prevention; The Evidence. Preventing Violence through the Development of Safe, Stable and Nurturing Relationships between Children and their Parents and Caregivers; WHO: Geneva, Switzerland.

WHO (2016). CDC; EndViolence Against Children; PAHO; PEPFAR; Together for Girls; UNICEF; UNODC; USAID; The World Bank. INSPIRE: Seven Strategies for Ending Violence Against Children; WHO: Geneva, Switzerland,

WHO, (2022). World Report on the Health of Refugees and Migrants (Licence: CC BY-NC-SA 3.0 IGO). World Health Organization. . Licence: CC BY-NC-SA 3.0 IGO

Creech, A., Hallam, S., McQueen, H. and Varvarigou, M. (2013). The power of music in the lives of older adults.

Research Studies in Music Education, 35(1), 87–102. https://doi.org/10.1177/1321103X13478862

Crewdson, J. A. (2016). The effect of loneliness in the elderly population: A review. Healthy Aging & Clinical Care in the Elderly, 8, 1. https://doi.org/10.4137/HACCE.S35890

Darrow, A. A. and Johnson, C. M. (1994). The effect of participation in an intergenerational choir on teens' and older persons' cross-age attitudes. Journal of Music Therapy, 31(2), 119–134. https://doi.org/10.1093/jmt/ 31.2.119

Dassa, A. and Amir, D. (2014). The role of singing familiar songs in encouraging conversation among people with middle to late stage Alzheimer's disease. Journal of Music Therapy, 51(2), 131–153. https://doi.org/10.1093/jmt/ thu007

Daykin, N., Mansfield, L., Meads, C., Julier, G., Tomlinson, A., Payne, A., Grigsby Duffy, L., Lane, J., D'Innocenzo, G., Burnett, A., Kay, T., Dolan, P., Testoni, S. and Victor, C. (2018). What works for wellbeing? A systematic review of wellbeing outcomes for music and singing in adults. Journal of Public Health, 138(1), 39–

46. https://doi.org/10.1177/1757913917740391

Fu, M. C., Belza, B., Nguyen, H. and Logsdon, R. (2018). Impact of group-singing on older adult health in senior living communities: A pilot study. Archives of Gerontology and Geriatrics, 76, 138–146. https://doi.org/10.1016/ j.archger.2018.02.012

Galinha, I. C., García-Martín, M. Á. and Lima, M. L. (2022). Sing4Health: Randomised controlled trial of the effects of a singing group program on the subjective and social well-being of older adults. Applied Psychology: Health and Well-Being, 14(1), 176–195. https://doi.org/10.1111/aphw.12297

Gick, M. L. and Nicol, J. J. (2015). Singing for respiratory health: Theory, evidence and challenges. Health Promotion International, 31(3), 725–734. https://doi.org/10.1093/heapro/dav013

Gitlow, L. (2014). Technology use by older adults and barriers to using technology. Physical & Occupational Therapy in Geriatrics, 32(3), 271–280. https://doi.org/10.3109/02703181.2014.946640

Goll, J. C., Charlesworth, G., Scior, K. and Stott, J. (2015). Barriers to social participation among lonely older adults: The influence of social fears and identity. PLoS ONE, 10(2), e0116664. https://doi.org/10.1371/ journal.pone.0116664

Hà, B. T. T. (2015). Hạn chế và thách thức của công tác xã hội trong chăm sóc người cao tuổi hiện nay [Limitations and challenges of social work in older adults care today]. Tạp chí Xã hội học, 4(132), 17–24.

Hạnh, M. T. (2016). Đời sống của người cao tuổi Việt Nam trong giai đoạn già hóa dân số [Life of the older adults in Vietnam in the period of population aging]. VNU Journal of Social Sciences and Humanities, 2(1b), 26–42.

Harris, M. T., Blocker, K. A. and Rogers, W. A. (2022). Older adults and smart technology: Facilitators and barriers to use. Frontiers in Computer Science, 4, 835927. https://doi.org/10.3389/fcomp.2022.835927

Harrison, F., Low, L. F., Barnett, A., Gresham, M. and Brodaty, H. (2014). What do clients expect of community care and what are their needs? The community care for the elderly: Needs and service use study (CENSUS). Australasian Journal on Ageing, 33(3), 208–213. https://doi.org/10.1111/ajag.12118

Heinz, M., Martin, P., Margrett, J. A., Yearns, M., Franke, W., Yang, H.-I., Wong, J. and Chang, C. K. (2013). Perceptions of technology among older adults. Journal of Gerontological Nursing, 39(1), 42–51. https://doi.org/ 10.3928/00989134-20121204-04

HelpAge International Vietnam. (2024). Chia sẻ kinh nghiệm phát triển mô hình câu lạc bộ liên thế hệ tự giúp nhau [Sharing experiences in developing the intergenerational self-help club model], HelpAge International

© 2025 by Author/s

Vietnam. Available at: https://helpagevietnam.org/tin-tuc/2024/chia-se-kinh-nghiem-phat-trien-mo-hinh-cau-lac-bo-lien-the-he-tu-giup-nhau/. (Accessed 18 January 2025).

Hillman, S. (2002). Participatory singing for older people: A perception of benefit. Health Education, 102(4), 163–171. https://doi.org/10.1108/09654280210434237

Hoàng, N. H. (2022). Khả năng thích ứng của người cao tuổi đối với công nghệ số: Một cuộc khảo sát Xã hội học ở thành phố Hồ Chí Minh [Older adults' adaptation to digital technology: A sociological survey in Ho Chi Minh City]. Tạp chí Khoa học xã hội Thành phố Hồ Chí Minh, 2(282), 39–56.

Hogg, M. A. and Vaughan, G. M. (2008). Social Psychology. Floor Lehi: Pearson.

Huang, L. H. and Lin, Y. C. (2002). The health status and needs of community elderly living alone. Journal of Nursing Research, 10(3), 227–236. https://doi.org/10.1097/01.JNR.0000347602.81885.69

Johnson, J. K., Louhivuori, J. and Siljander, E. (2017). Comparison of well-being of older adult choir singers and the general population in Finland: A case-control study. Musicae Scientiae, 21(2), 178–194. https://doi.org/10.1177/1029864916644486

Joseph, D. and Southcott, J. (2018). Music participation for older people: Five choirs in Victoria, Australia. Research Studies in Music Education, 40(2), 176–190. https://doi.org/10.1177/1321103X18773096

Kang, J., Scholp, A. and Jiang, J. J. (2018). A review of the physiological effects and mechanisms of singing. Journal of Voice, 32(4), 390–395. https://doi.org/10.1016/j.jvoice.2017.07.008

Kim, J., Cuevas, H. and Wood, S. T. (2023). Effect of music interventions on cognitive function in older adults with mild cognitive impairment: A systematic review. Research in Gerontological Nursing, 16(5), 259–268. https://doi.org/10.3928/19404921-20230609-01

Knowles, M. S., Holton III, E. F. and Swanson, R. A. (2014). The Adult Learner: The definitive classic in adult education and human resource development. Oxfordshire: Routledge. https://doi.org/10.4324/9781315816951

Lee, A. H. C. (2013). The musical experiences, motivations, and preferences of positive ageing in Taiwan.

International Journal of Community Music, 6(1), 79–92. https://doi.org/10.1386/ijcm.6.1.79_1

Lee, J., Davidson, J. W. and Krause, A. E. (2016). Older people's motivations for participating in community singing in Australia. Journal of Community Music, 9(2), 191–206. https://doi.org/10.1386/ijcm.9.2.191_1

Lehmberg, L. J. and Fung, C. V. (2010). Benefits of music participation for older adults: A review of the literature.

Music Education Research International, 4(1), 19–30.

Li, S. and Southcott, J. (2012). A place for singing: Active music engagement by older Chinese Australians.

International Journal of Community Music, 5(1), 59–78. https://doi.org/10.1386/ijcm.5.1.59_1

Martin, L. G. (1990). The status of South Asia's growing elderly population. Journal of Cross-Cultural Gerontology, 5, 93–117. https://doi.org/10.1007/BF00116568

Martins, R. H. G., Gonçalvez, T. M., Pessin, A. B. B. and Branco, A. (2014). Aging voice: Presbyphonia. Aging Clinical and Experimental Research, 26(1), 1–5. https://doi.org/10.1007/s40520-013-0143-5

Na, Z. Y. and De Dios, S. A. (2020). Singing benefit on the physical, psychological, spiritual, and social well-being as perceived by senior citizens: Basis for program development. Journal of Education, Psychology and Humanities, 68.

Nguyễn, A. T. (2015). Già hóa dân số và an sinh xã hội đối với người cao tuổi ở Việt Nam [Population aging and social security for the older adults in Vietnam]. VNU Journal of Social Sciences and Humanities, 1(1), 46–53.

Shrestha, L. B. (2000). Population aging in developing countries: The elderly populations of developing countries are now growing more rapidly than those in industrialized nations, thanks to health advances and declining fertility rates. Health Affairs, 19(3), 204–212. https://doi.org/10.1377/hlthaff.19.3.204

Shuell, T. J. (2021). Learning theory, instructional theory, and adaptation, in R. E. Snow, P.-A. Federico and W. E. Montague (eds), Aptitude, Learning, and Instruction (pp. 277–302). Oxfordshire: Routledge. https://doi.org/10.4324/9781003163145-24.

 © 2025 by Author/s