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LSBU



MOVE AND GROOVE

EXECUTIVE

SUMMARY

Intergenerational Music Making (IMM) and Youth Sport Trust (YST) 6-week intergenerational 'Move and Groove' Pilot Project, evaluated by London South Bank University (LSBU).

April 2023



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Overview of the IMM and YST 'Move and Groove' pilot project

Intergenerational Music Making (IMM) is a pioneering, UK based, not-for-profit organisation working to advance wellbeing and social cohesion through musical creativity. The IMM mission is to promote music within health, wellbeing and community development, bridging the gap between generations and in turn tackling loneliness and isolation. IMM offer training opportunities to young people, practitioners, healthcare workers, volunteers and students that are aimed to empower such individuals and develop their practice. In December 2020, IMM launched a national, intergenerational campaign 'Together with Music' in partnership with Care England, the country's leading representative body for adult social care. 'Together with Music' aims to connect schools, community groups and creatives with their local care home or older person through music. This ongoing movement has, to date, brought together over 80,000 individuals across the health, social care, arts, and education sectors.

The Youth Sport Trust (YST) is the UK's leading charity for improving young people's education and development through sport and play. YST equips educators and empowers young people with the vision of creating a future where every child can enjoy the life-changing benefits of play and sport. Funded by Sir John Beckwith Charitable Trust and Youth Sport Trust International, 'Active Across Ages' was developed by YST in 2019 as a pilot project to improve the physical, mental, and social wellbeing of young people. In addition to achieving these outcomes it provided volunteering opportunities, developed employability skills and the confidence to be physically active. This scheme also provided opportunities to support primary to secondary transition and enhance local community relationships.

Working together, IMM and YST drew on the learning from 'Together with Music', and 'Active Across Ages' to create 'Move and Groove'. This focused, 6-week program aimed to amplify the impact of music and movement on the wellbeing of children and older adults. The 'Move and Groove' pilot was funded by the Sir John Beckwith Foundation and delivered across 10 UK locations between early-June and Mid-July 2022.

'Move and Groove' was primarily designed to improve loneliness, isolation, and general mental health and wellbeing across generations (elders and children), as well as addressing obesity and immobility. Consequently, IMM and YST as the leading organisations in their fields, designed and delivered the project, and collaborated with London South Bank University (LSBU) who designed and conducted the research element of the project. To date, the final report for the research element of this project is being drafted and the findings highlight that:

- Psychological aspects of self-reported wellbeing improved conclusively in both Elder and Child participants, supporting predictions made.
- Bio-markers (cortisol levels in saliva) markers of stress showed that cortisol levels increased conclusively in Elders and Children, contrary to predictions made.
- Qualitative feedback from the Elders, Children and those delivering the program was resoundingly positive and highlighted the value and empowerment that 'Move and Groove' provided at the individual, anecdotal level.
- Further research is required to provide a clearer picture of why differences in subjective and objective measures in participants were identified.



Aim of the Research

The primary aim of the research was to assess the following psychological aspects of wellbeing in both the Elders and Children who took part in the programme using the described research tools:

- Subjective Mood (Elders and Children):
 - The Positive and Negative Affect Schedule (PANAS; Watson et al., 1998; PANAS-Ebesutani et al., 2012).
- Subjective Loneliness (Elders):
 - The Revised UCLA Loneliness Scale (Russell et al., 1996).
- Subjective Worry (Children):
 - The Penn State Worry Questionnaire for Children (PSWQ-C; Chorpita et al., 1997).
- Subjective Depression, Anxiety, Stress (Elders):
 - The Depression Anxiety Stress Scale (DASS21; Lovibond & Lovibond, 1995).
- Objective Stress (Elders and Children):
 - “Swab Tests” to assess cortisol levels in saliva.

Research Methodology

This research utilised a primarily quantitative approach to gather the required data:

- Following instruction/training from the lead researcher at LSBU, subjective and objective measures were used to collect the data by IMM and YST-trained facilitators at each of the 10 sites.
- Data were collected as close as possible to the start of the Week 1 session, and immediately after the Week 6 session at each site, between early-June 2022 and mid-July 2022.
- 32 Elders and 38 Children provided subjective, questionnaire data at both time points, and 57 Elders and Children combined provided objective, “Swab Test” saliva data at both time points.
- Qualitative data (i.e. non-numeric, conversational evidence such as anecdotal comments and feedback) from the Elders, Children and IMM and YST-trained facilitators was also recorded.

The subjective and objective data were analysed using related *t*-tests to assess Child and Elder differences in aspects of psychological wellbeing before and after the 6-week ‘Move and Groove’ program.

The qualitative data were not subjected to formal analysis techniques, but instead served as anecdotal evidence concerning the overall experience of the 6-week ‘Move and Groove’ programme.

Key Findings

Demographics:

All Elders who participated in the research element of this project were fully briefed and gave informed consent before providing their data. Parental consent was obtained on behalf of the Children who took part, and those Children for whom parental consent was given also provided their verbal assent to provide their data.

Across the 10 'Move and Groove' sites, the following demographic data were obtained concerning those who participated in the research element of this project:

- Elders, N = 32 (24 female, 8 male).
 - Age range = 45-98 years; mean age = 83.56, SD = 11.63.
- Children, N = 38 (26 female, 12 male).
 - Age range = 4-16 years; mean age = 10.89, SD = 3.43.
- For analysis of the subjective, questionnaire data:
 - Elders, N = 27.
 - Children, N=35.
- For analysis of the objective, "Swab Test" saliva data:
 - Elders and Children combined, N = 57.

Child Results: Subjective questionnaire data

To assess differences in the Children's subjective ratings of Mood (Positive and Negative) and Worry before and after the 6-week programme, related *t*-tests were performed. The data are displayed in Figure 1, below.

Subjective Mood

Positive Mood scores before (mean = 12.55, SD = 6.30) significantly increased after the 6-week programme (mean = 17.10, SD = 7.42; $t(39) = 5.81, p < .001$).

Negative Mood scores before (mean = 9.93, SD = 5.08) significantly decreased after the 6-week programme (mean = 5.43, SD = 2.41; $t(39) = 7.38, p < .001$).

Subjective Worry

Although worry scores were lower after (mean = 17.65, SD = 9.21) compared to before the 6-week program (mean = 18.30, SD = 10.25), this difference was non-significant $t(39) = 0.40, p = .691$.

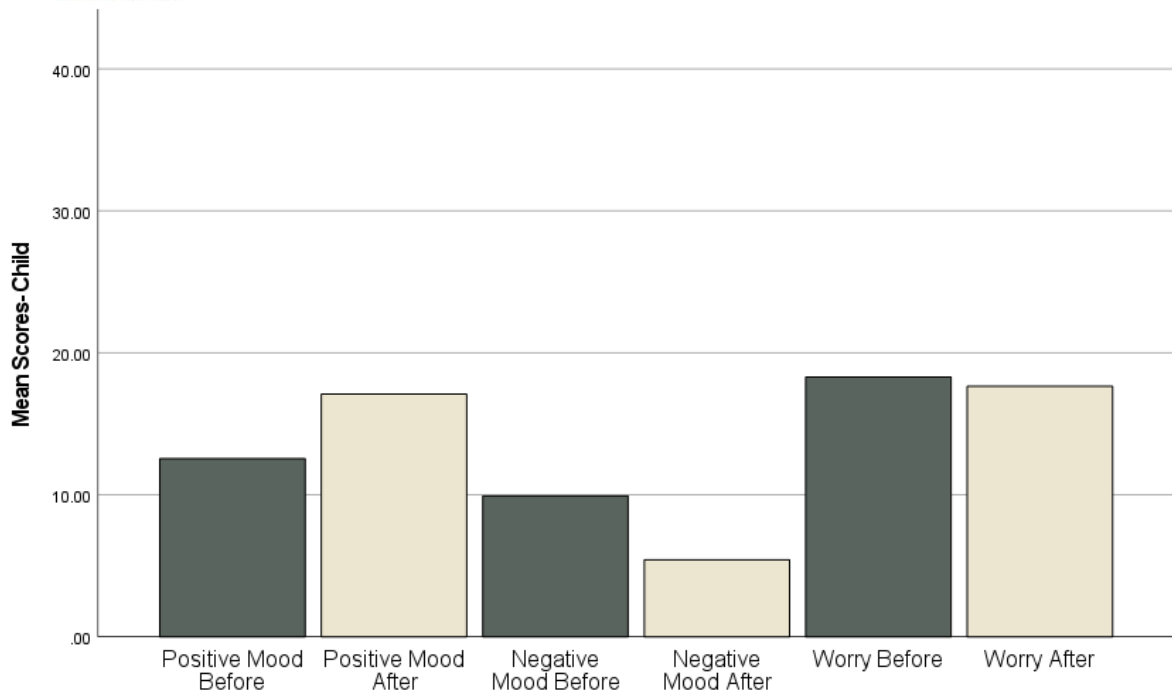


Figure 1: Child mean scores from the subjective questionnaires for Positive Mood, Negative Mood and Worry, before and after the 6-week programme.

Elder Results: Subjective questionnaire data

To assess differences in the Elders' subjective ratings of Mood (Positive and Negative), Loneliness, Depression, Anxiety and Stress before and after the 6-week programme, related *t*-tests were performed. The data are presented in Figure 2, below.

Subjective Mood

Positive Mood scores before (mean = 9.87, SD = 4.39) significantly increased after the 6-week programme (mean = 24.94, SD = 10.50; $t(30) = 13.32, p < .001$).

Negative Mood scores before (mean = 12.39, SD = 5.71) significantly decreased after the 6-week programme (mean = 6.32, SD = 2.87; $t(30) = 9.83, p < .001$).

Subjective Loneliness

Loneliness scores were significantly lower after the 6-week program (mean = 25.42, SD = 23.86) compared to before (mean = 27.29, SD = 25.51; $t(30) = 2.84, p = .008$).

Subjective Depression

Depression scores were significantly lower after the 6-week program (mean = 0.71, SD = 1.51) compared to before (mean = 1.55, SD = 3.13; $t(30) = 2.28, p = .030$).

Subjective Anxiety

Although anxiety scores were lower after (mean = 0.52, SD = 1.34) compared to before the 6-week program (mean = 1.16, SD = 3.13), a related *t*-test showed that this difference was non-significant ($t(30) = 1.83, p = .077$).

Subjective Stress

Stress scores were significantly lower after the 6-week program (mean = 0.71, SD = 1.51) compared to before (mean = 1.74, SD = 3.00; $t(30) = 2.89, p = .007$).

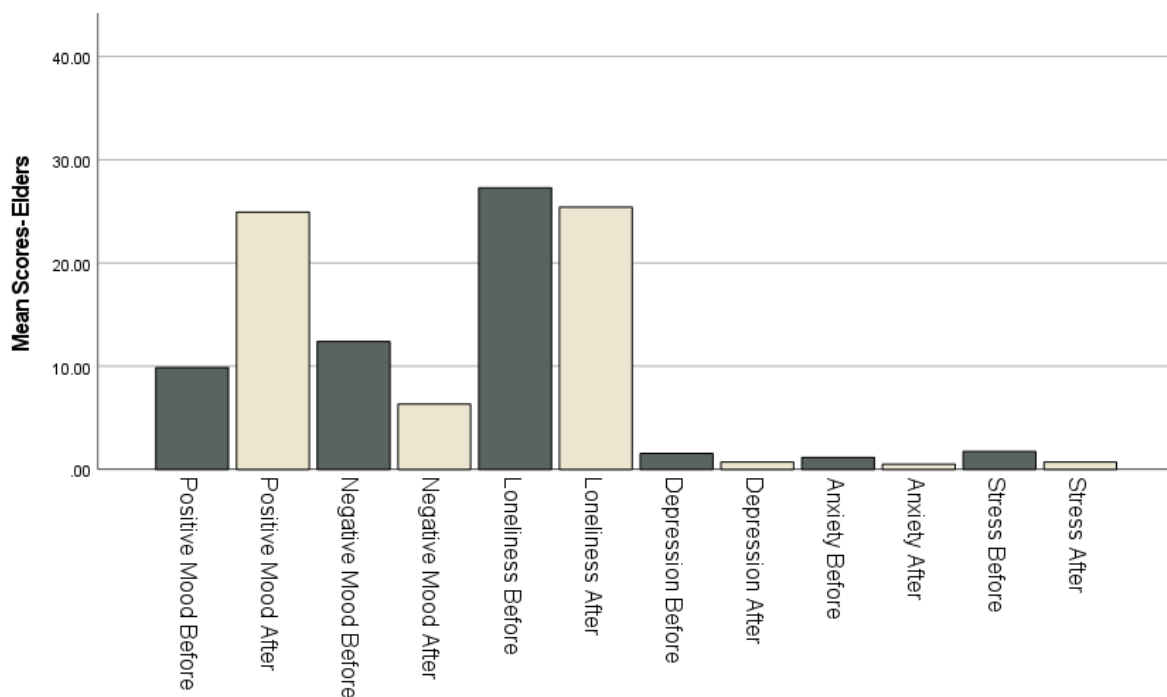


Figure 2: Elder mean scores from the subjective questionnaires for Positive Mood, Negative Mood, Loneliness, Depression, Anxiety and Stress, before and after the 6-week programme.

Child and Elder Results: Objective “Swab Test” cortisol data combined

To assess differences in objective Stress ratings (cortisol levels in saliva) before and after the 6-week programme, related *t*-tests were performed on the combined Elder and Child data. The data are presented in Figure 3, below.

Objective Stress

Mean cortisol levels (mean = 0.10, SD = 0.07) significantly increased after the 6-week program (mean = 0.14, SD = 0.13; $t(56) = 2.06, p = .044$).

Bio-marker

results:

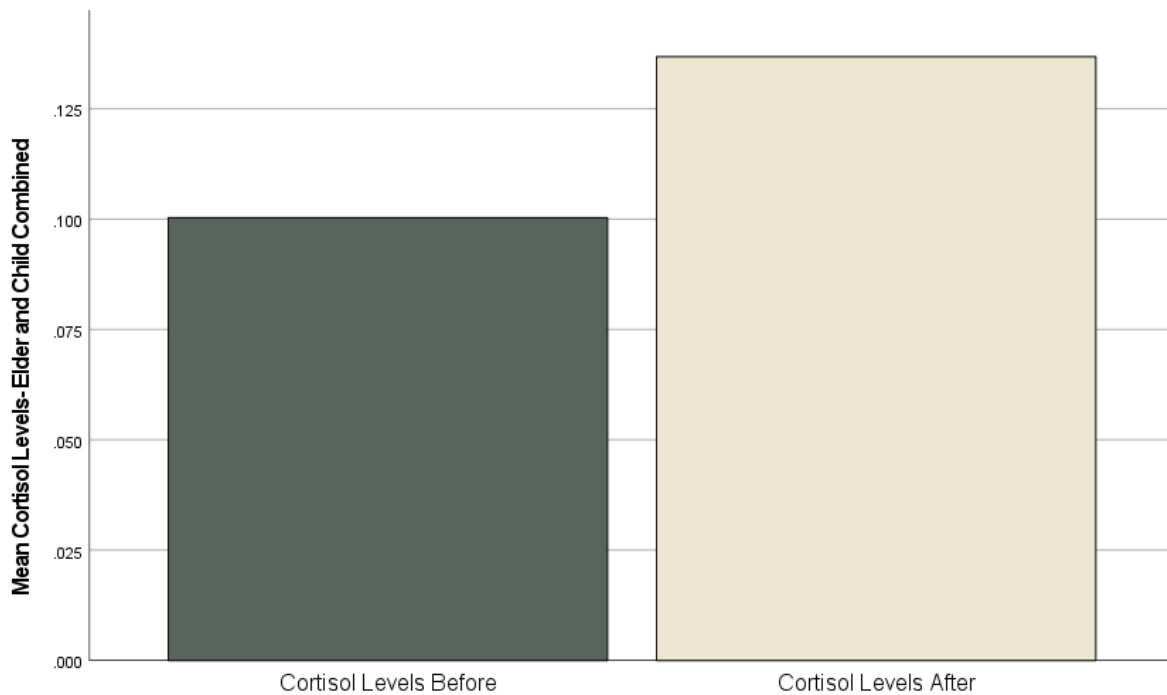


Figure 3: Mean Child and Elder Cortisol levels combined, before and after the 6-week programme

Data collected from bio-markers showed surprising results, where cortisol levels increased after participation, rather than decreasing as predicted.

Qualitative Evidence Examples:

“As soon as the leaders took the floor all nerves disappeared, and they were radiant. Joking and laughing as they led activities, speaking clearly and demonstrating the activities and songs. Re-starting when one resident went wrong & supported him gently, so he didn’t feel embarrassed”- Janice Price, School Lead for Highfields School.

“Seeing the students leaving and skipping out the door. The older adults their responses genuine, not just anecdotal, improvements but reports from staff and other direct observations, has been just a joy to behold.”- Dr Richard Wright, Lead GP Tupwood Care Home.



Conclusions and Recommendations

The primary aim of the research was to assess psychological aspects of wellbeing in both Elders and Children who took part in the IMM and YST 'Move and Groove' pilot programme that was delivered across 10 UK sites between June and July 2022.

Subjective Questionnaire Assessment Conclusions:

Subjective psychological constructs pertaining to Mood (Positive/Negative), Worry, Loneliness, Depression, Anxiety and Stress were assessed before and after the 6-week program in Elder and Child participants. Analyses revealed statistically significant findings in both Elder and Child participants' subjective wellbeing (mood, loneliness, and depression). Child participants' Positive and Negative Mood levels, and Elder participants' Positive and Negative Mood levels and Loneliness, Depression and Stress levels all improved significantly, supporting predictions made. Although Elder participants' Anxiety levels, and Child participants' Worry levels both decreased over the 6-weeks as expected, these differences were not statistically conclusive. It is therefore broadly supported that the 6-week IMM and YST 'Move and Groove' music and movement program had a resoundingly positive effect on the subjective wellbeing of both the Elder and Child participants.

Subjective Questionnaire Assessment Recommendations:

It is recommended that future collaborations include follow up assessments after 3- and 6-months to assess the longevity of the effects of 'Move and Groove' on subjective wellbeing. It is also recommended that subjective ratings of stress are obtained for Child as well as Elder participants. The research team noted that there are some challenges with collecting more data from younger children, where attention to more questions may be difficult for many participants. This will allow for a more complete comparison across generations, as well as across objective and subjective measures.

Objective "Swab Test" Cortisol Data Assessment Conclusions:

Objective measures of stress (cortisol levels in saliva) before and after the 6-week 'Move and Groove' programme revealed unexpected findings. Analyses showed that objectively, stress levels had statistically increased over the 6-week program, contrary to predictions made. While the Children's subjective stress levels were not assessed subjectively, the combined objective findings appear to contradict the results for the Elder's subjective stress ratings, which decreased as expected. It is therefore broadly concluded that while these findings are unexpected, they perhaps provide evidence that further study is needed in this under-researched area.

Objective "Swab Test" Cortisol Data Assessment Recommendations:

Further, nuanced research such as, a larger sample or separation of demographic data, into objective stress is necessary to provide a clearer picture of why differences in subjective and objective measures of stress were identified.



Steps Forward

LSBU- Conferences and Publications:

In February 2023, LSBU presented the key findings associated with this research project at the 'Intergenerational practice: Creating change together' Conference. Delegates at this event were experts, practitioners and academics from the health, social care, arts and education sectors.

LSBU are preparing a full evaluation report of the project and its outcomes that will be published in a relevant, peer-reviewed journal of an internationally excellent standard.

LSBU and IMM continue to collaborate and are currently delivering a series of Patient and Public Involvement (PPI) group sessions with an active steering group comprising stakeholders and service users. These sessions are designed to support and add to the findings of the 'Move and 'Groove' collaboration by enhancing the quality, reliability and value of the ongoing research. The findings from the PPI group sessions will be used to develop and inform a sector-wide logic model (see Mills et al., 2019) that will provide a framework of efficacy around complex interventions such as 'Move and Groove'. This logic model will clarify mechanisms, outcomes, relevant contextual factors and knowledge gaps at both the micro- and macro-levels, ultimately serving as a theoretical basis to promote social change and cohesion through intergenerational music making.



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