SUPPLEMENTARY MATERIALS

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| --- | --- | --- |
| Box S1: Six Stages of the Healing in Harmony Program | | |
| STAGE | Focus | Description |
| 1 | Introduction/  Familiarization | The psychologist and music producer explain the model to the artists and help them connect with others in their session. We re-enforce social connection in order to diminish feelings of loneliness and isolation. By meeting new people with different backgrounds and different life experiences, the artists connect to and get support from each other. |
| 2 | Relaxation | Relaxation allows participants to regain serenity and gradually reduce stress and invasive anxiety. Body movement including hand clapping, foot tapping, and tapping on the chest and thigh is employed to help participants become aware of their physiological state, develop more focus, and increase the efficiency of the brain in processing information. Music helps the artists relax by regulating their mood. Its rhythmic and repetitive aspects engage the brain, which is calming and reduces impulsivity. To alter the mood states, we play background music to match the current mood of people in the group and then slowly shift to a more positive or calming musical piece. |
| 3 | Verbalization | Artists talk about their experiences and are encouraged to release negative emotions and replace them with positive ones. The artists are encouraged to talk, cry, shout or just think without being judged. An opportunity is provided for the artist to look at their problems in a different way with people who respect them and their opinions. As they talk about their pain and difficulties the psychologist helps them process and integrate their traumatic experience and help stabilize their mood with the goal of creating a more optimistic and positive mind with which to face daily life challenges. |
| 4 | Songwriting | Artists use their creativity to write their own songs to deliver their stories to the world. Composing lyrics helps the artists to express and process their emotions by achieving satisfaction with their own work. We promote creativity. Listening to or making music allows one’s brain to think creatively. The artists are encouraged to offer insight, alternative lyrics and tangible tools or themes through lyrics that can be applied to obstacles in their life and their treatment. We encourage the artists to deeply connect to their pain and past traumatic experience. Lyric analysis provides them an opportunity to identify song lyrics that may correlate with their experience. |
| 5 | Rehearsing/ Recording | This stage allows the new artists to listen to the end result of their creations. It improves their self-confidence and self-esteem and they recognize that they have the capacity and power to change things. The artists are motivated by their work and have fun and enjoy themselves bringing experiences of joy and satisfaction. |
| 6 | Dissemination | Recorded songs are disseminated through public community concerts, local radio, television, international streaming and digital storefronts. This stage is important for advocacy and is designed to help promote community reintegration. Listening to their songs on their local radio and performing in community concerts gives the artists social recognition and improves their dignity. |

Table S1: Demographic characteristics and vulnerability factors of women enrolled in the Healing in Harmony Program in South Kivu, DRC by participation status.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Participated** | |  |
|  | **Yes**  **N=167** | **No**  **N=32** | **p-value** |
| **Age** |  |  | 0.173a |
| 15-24 | 24 (14.37%) | 9 (28.12%) |  |
| 25-34 | 47 (28.14%) | 10 (31.25%) |  |
| 35-44 | 40 (23.95%) | 4 (12.50%) |  |
| 45-69 | 56 (33.53%) | 9 (28.12%) |  |
| **Education** |  |  | 0.780a |
| None | 64 (38.32%) | 14 (43.75%) |  |
| Some primary | 57 (34.13%) | 9 (28.12%) |  |
| Primary and above | 46 (27.54%) | 9 (28.12%) |  |
| **Marital status** |  |  | 0.426b |
| Married/Co-habit | 105 (62.87%) | 19 (59.38%) |  |
| Single | 9 (5.39%) | 4 (12.50%) |  |
| Divorced/Separated | 25 (14.97%) | 3 (9.38%) |  |
| Widowed | 28 (16.77%) | 6 (18.75%) |  |
| **Has children** |  |  | 0.665b |
| No | 8 (4.79%) | 2 (6.25%) |  |
| Yes | 159 (95.21%) | 30 (93.75%) |  |
| **Works own field** |  |  | 0.079b |
| No | 49 (29.34%) | 4 (12.50%) |  |
| Yes | 118 (70.66%) | 28 (87.50%) |  |
| **Works other’s field** |  |  | 0.895a |
| No | 42 (25.15%) | 9 (28.12%) |  |
| Yes | 125 (74.85%) | 23 (71.88%) |  |
| **Job/small business** |  |  | 0.873a |
| No | 104 (62.28%) | 21 (65.62%) |  |
| Yes | 63 (37.72%) | 11 (34.38%) |  |
| **Traumatic event** |  |  | 0.274a |
| No | 39 (23.35%) | 11 (34.38%) |  |
| Yes | 128 (76.65%) | 21 (65.62%) |  |
| **Sexual violence survivor** |  |  | 0.698a |
| No | 98 (58.68%) | 17 (53.12%) |  |
| Yes | 69 (41.32%) | 15 (46.88%) |  |
| **Refugee/Displaced/Forced from Home** |  |  | 0.999a |
| No | 134 (80.24%) | 26 (81.25%) |  |
| Yes | 33 (19.76%) | 6 (18.75%) |  |
| **Abandoned by husband** |  |  | 0.757a |
| No | 123 (73.65%) | 25 (78.12%) |  |
| Yes | 44 (26.35%) | 7 (21.88%) |  |
| **Abandoned by family** |  |  | 0.948a |
| No | 137 (82.04%) | 27 (84.38%) |  |
| Yes | 30 (17.96%) | 5 (15.62%) |  |
| **Abandoned by community** |  |  | 0.772b |
| No | 146 (87.43%) | 29 (90.62%) |  |
| Yes | 21 (12.57%) | 3 (9.38%) |  |

a: Chi-square test; b: Fisher’s exact test

Table S2: Distribution of average depression, anxiety and post-traumatic stress (PTSD) scores of women enrolled in the Healing in Harmony Program in South Kivu, DRC by time (-1 through +3) (n=167)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Minimum** | **Q1** | **Median** | **Q3** | **Maximum** |
| Average Depression |  |  |  |  |  |
| -1 | 1.00 | 1.67 | 2.00 | 2.47 | 3.73 |
| 0 | 1.00 | 1.73 | 2.20 | 2.67 | 3.80 |
| +1 | 1.00 | 1.07 | 1.40 | 2.07 | 3.27 |
| +2 | 1.00 | 1.10 | 1.40 | 2.10 | 3.20 |
| +3a | 1.00 | 1.00 | 1.20 | 1.80 | 2.93 |
| Average Anxiety |  |  |  |  |  |
| -1 | 1.10 | 1.90 | 2.25 | 2.90 | 4.00 |
| 0 | 1.00 | 2.00 | 2.70 | 3.00 | 4.00 |
| +1 | 1.00 | 1.10 | 1.75 | 2.40 | 3.40 |
| +2 | 1.00 | 1.00 | 1.40 | 2.15 | 3.80 |
| +3a | 1.00 | 1.00 | 1.30 | 2.00 | 3.50 |
| Average PTSD |  |  |  |  |  |
| -1 | 1.00 | 1.31 | 1.81 | 2.50 | 3.63 |
| 0 | 1.00 | 1.56 | 2.06 | 2.69 | 3.63 |
| +1 | 1.00 | 1.06 | 1.31 | 2.00 | 3.25 |
| +2 | 1.00 | 1.06 | 1.25 | 1.94 | 3.13 |
| +3a | 1.00 | 1.06 | 1.13 | 1.50 | 2.94 |

a: Time point +3 includes Group 1 only

Table S3: Distribution of average depression, anxiety and post-traumatic stress (PTSD) scores at initial assessment of women in the Healing in Harmony Program in South Kivu, DRC by Group (n=167)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Minimum** | **Q1** | **Median** | **Q3** | **Maximum** |
| Average Depression |  |  |  |  |  |
| Group 1 | 1.07 | 1.80 | 2.37 | 2.92 | 3.80 |
| Group 2 | 1.27 | 1.93 | 2.43 | 2.72 | 3.73 |
| Group 3 | 1.00 | 1.43 | 1.80 | 2.07 | 2.67 |
| Average Anxiety |  |  |  |  |  |
| Group 1 | 1.20 | 2.20 | 2.60 | 3.08 | 4.00 |
| Group 2 | 1.10 | 2.20 | 2.60 | 3.30 | 4.00 |
| Group 3 | 1.10 | 1.60 | 1.90 | 2.35 | 3.20 |
| Average PTSD |  |  |  |  |  |
| Group 1 | 1.06 | 1.63 | 2.00 | 2.78 | 3.63 |
| Group 2 | 1.00 | 1.80 | 2.34 | 2.75 | 3.63 |
| Group 3 | 1.00 | 1.19 | 1.44 | 1.81 | 2.81 |

Table S4: Women’s perception of self and life at initial assessment by Group, the Healing in Harmony Program in South Kivu, DRC (n=167)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Group** | | | |  | |
|  | **1**  **(N=70)** | **2**  **(N=46)** | **3**  **(N=51)** | **p-valuea** | |
| Happy | 42.9% (31.3%, 54.5%) | 37.0% (23.0%, 50.9%) | 45.1% (31.4%, 58.8%) | 0.704 | |
| Sad | 41.4% (29.9%, 53.0%) | 45.7% (31.3%, 60.1%) | 21.6% (10.3%, 32.9%) | 0.026 | |
| Proud | 30.0% (19.3%, 40.7%) | 23.9% (11.6%, 36.2%) | 51.0% (37.3%, 64.7%) | 0.011 | |
| Hopeful | 80.0% (70.6%, 89.4%) | 80.4% (69.0%, 91.9%) | 74.5% (62.6%, 86.5%) | 0.714 | |
| Like themselves | 38.6% (27.2%, 50.0%) | 34.8% (21.0%, 48.6%) | 43.1% (29.5%, 56.7%) | 0.699 | |

a Chi-square test