

Health and Disability

A controlled early group intervention study for unaccompanied minors: Can Expressive Arts alleviate symptoms of trauma and enhance life satisfaction?

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Meyer DeMott, M. A., Jakobsen, M., Wentzel-Larsen, T. & Heir, T. (2017). A controlled early group intervention study for unaccompanied minors: Can Expressive Arts alleviate symptoms of trauma and enhance life satisfaction? *Scandinavian Journal of Psychology*.

This is the first controlled study of an expressive arts group intervention with unaccompanied minor asylum seeking children. The aim of the study was to examine whether such an intervention may alleviate symptoms of trauma and enhance life satisfaction and hope. One hundred forty five unaccompanied minor refugee boys with their stated age between 15 and 18 were allocated into a 10 session 5 weeks manualized expressive arts intervention (EXIT) or a life as usual (LAU) control group. The participants were assessed at onset and 4 times over a period of 25 months with a battery of instruments measuring post-traumatic stress symptoms (PTSS), general psychological distress (HSCL-25A), current life satisfaction (CLS) and expected life satisfaction (ELS). The instruments were presented in the participants' native languages, using touch-screen laptops and the computer program Multilingual Computer Assisted Interview (MultiCASI). There were significant time by group interactions in favor of the EXIT group for PTSS and CLS. At the end of the follow up the EXIT group had higher life satisfaction and hope for the future than the LAU group. A manualized EXIT group intervention can have a beneficial effect on helping minor refugee boys to cope with symptoms of trauma, strengthen their life satisfaction and develop hope for the future. Our findings support previous studies showing that the arts may help people in reconstructing meaning and connection with others by focusing on resources and creativity.

Key words: Expressive Arts, group intervention, unaccompanied asylum-seeking boys, trauma symptoms, life satisfaction, hope.

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INTRODUCTION

We are experiencing the largest refugee crises since the Second World War. 2016 saw a record of 65 million refugees. A refugee is someone who has been forced to flee his or her country because of persecution, war, or violence. Most likely, they cannot return home or are afraid to do so (The United Nations High Commissioner of Refugees (UNHCR)).

It is estimated that one half of the total refugee population are children. Unaccompanied minor asylum-seeking children (UASC) are the largest concern for the High Commissioner of Refugees. UASC are defined as "children who have been separated from both parents and other relatives and are not being cared for by an adult who by law or custom is responsible for doing so" (article 1 of the UN Convention, section 7). They are children under the age of 18 without parents or other care-givers

European countries received 13,300 asylum claims from UASC in 2011, which is 75% of the worldwide number (UNHCR, 2012). The number of UASC arriving in Norway has varied from 2,500 in 2009, 600 in 2011, 5,500 in 2015 to 320 in 2016 (The Norwegian Directorate of Immigration (UDI), 2017). UASC minors arriving in Norway are offered a place at a care center or reception center while their application is being processed. For UASC aged 15–18 on arrival The Norwegian Directorate of Immigration (UDI) provide reception centers located all over Norway and offer language classes for all inhabitants. Staff members are available day and night. Most centers have

recreational activities, and they give individualized support and medical follow-up if needed.

The number of centers for UASC varies from year to year according to how many applicants come to Norway. Because of a very unpredictable situation the quality of care varies from center to center.

Research on the mental state and wellbeing of minor refugees consistently points to a diversity of mental health adversities. UASC have often been exposed to complex traumatic experiences in their country of origin or during their escape, and may also be exposed to severe stress and despair in exile, which mean that they are at high risk for developing psychological disturbances (Bean, 2006; Derluyn, Broekaert & Schuyten 2008; Jakobsen, Meyer DeMott, & Heir, 2014; Jakobsen, Meyer DeMott, Wentzel-Larsen & Heir, 2017; Vervliet, Lammertyn, Broekaert & Derluyn, 2014a; Vervliet, Meyer DeMott, Jakobsen, Broekaert, Heir & Derluyn, 2014b). It has been shown that symptoms of post-traumatic stress disorder (PTSD) can go from bad to worse in refugees after arriving in a host country (Lie, 2003). Some authors have addressed a need for preventive programs and activities in refugees and recommended more research on early interventions in order to prevent psychological stress and other behavior disorders (Derluyn & Broekaert, 2007). Thus, the purpose of the present study was to examine whether an early intervention program based on expressive arts may have short or long term impact on mental health and well-being in refugee minors.

Expressive arts

Intermodal expressive arts (EXA) is an offspring of music education and therapy, art therapy, dance therapy and drama therapy. EXA was developed in the beginning of the 1970s focusing especially on bodily functions and all the communicative senses (Knill, Barba & Fuchs, 1995; Meyer DeMott, 2007). EXA considers non-verbal forms of expression to be an essential part of the human communication. EXA involves a combination of modalities such as movement, visual art, music, poetry, drama, film, etc. This intermodal approach builds on the understanding that all art expressions are body-based and connected to the senses (Knill *et al.*, 1995; Levine & Levine, 1999; Meyer DeMott, 2014).

Central to art therapy are the theories of Winnicott (1971) in which imagination may be seen as a bridge from the internal to the external world. In a healthy person, this relationship between inner and outer world, between fantasy and imagination, is a dialectical one, constantly moving. After trauma, this relationship is often deadlocked. The “play space” is the “transitional space” and gives the survivor of trauma the opportunity to get “unlocked” and free. When children start playing again after a traumatic experience, it means they have bounced back. Play is relational and can imply trust. Play relates to using imagination and creativity that ultimately can enhance their identity and increase their range of play.

Being in exile may be a stressful experience. It interrupts the sense of “going on being” and breaks the frame of reference that is provided by one’s cultural codes. It may cause regression, which takes the person back into the stage of “formlessness” (Winnicott, 1971; Sengun, 2001).

Previous research

Arts therapies are widely used in clinical and non-clinical populations with a variety of mental health complaints. A recent review of arts therapies identified thirty articles with very different approaches (Van Lith, 2016). Most of these interventions were associated with improvements in coping, self-esteem, and pro-social behavior, in addition to a reduction in emotional problems. Another review of classroom-based programs for children (Beauregard, 2014) concluded that arts therapies were suitable to young refugees, both as targeted treatments, and for building resilience. Most interventions that have been developed for young refugees, however, have limited empirical support (Tol, Song & Jordans, 2013; Van der Kolk, 2014).

According to a report by Rousseau, Drapeau, Lacroix, Bagilishya and Heusch (2005) on expressive arts therapy that examined workshops for refugee and immigrant children from different cultures this method raised the children’s self-esteem and reduced their symptoms.

Techniques from arts therapy are often used in phase-oriented treatment of trauma-exposed individuals (Van Lith, 2016). The term stabilization is widely used to describe first-phase treatments of patients who are overwhelmed by symptoms and struggle with elements of daily living such as sleeping, eating and socializing. The purpose is to strengthen functioning through breathing, relaxation and bodily exercises. There is little or no focus on

traumatic memories, in order to avoid further destabilization, and interventions are used both individually and in group settings (Cloitre, Courtois, Charuvastra, Carapezza, Stolbach & Green, 2011).

Hobfoll, Watson, Bell *et al.* (2007) made a review on early intervention after mass trauma and concluded: “Given the devastation caused by disasters and mass violence it is critical that intervention policy be based on the most updated research findings. However, to date, no-evidence based consensus has been reached supporting a clear set of recommendations for intervention during the immediate and mid-term mass trauma phases.” The review identified five empirically supported intervention principles that should be used to guide and inform intervention and prevention efforts at the early to mid-term stages. These are promoting: (1) a sense of safety; (2) calming; (3) a sense of self- and community efficacy; (4) connectedness and (5) hope.

The group intervention manual in this study is based on the first phase, stage one after trauma (Herman, 1992). The studies on stage one interventions occurring in refugee camps and conflict settings reported a range of benefits, including increased social capabilities, improved family communication, better stress management skills, and an overall reduction in trauma-related symptoms (Bass, Annan, McIvor Murray *et al.*, 2016).

Purpose of the study

We wanted to study a manualized, group intervention on arrival in this population, while making the assignment to either intervention or control group as random as possible. Based on earlier research, we developed a manual called Expressive Arts in Transition (EXIT). The objective was to study the long-term effects of a short-term, early group intervention (stage one) with unaccompanied asylum-seeking children on arrival. Specifically we wanted to investigate differences between EXIT and LAU and if the intervention might alleviate symptoms of psychological stress and trauma, and enhance life satisfaction and hope.

METHOD

Setting

Initially the study was carried out just outside of Oslo, Norway, at the arrival center (AC) for unaccompanied asylum-seeking children (UASC), and subsequently wherever they were located in other refugee facilities around Norway. Shortly after arrival, all UASC between 15 to 18 (self-reported), were placed for 3–6 weeks at the AC.

To be eligible for the study, the youth must have stayed less than 3 weeks at the AC and be willing to stay for 6 weeks more. All participants were guaranteed not to be moved during the 6 week program. At the AC the UASC were offered many activities and school. The local football club offered soccer 4 days a week and every Friday dancing.

Participants. At the center, a research assistant kept track of all new arrivals. The newly arrived who qualified for the study were given information about the content and purpose with help of a translator. The participants were 145 unaccompanied asylum-

Table 1. *Baseline demographics characteristics for 143 unaccompanied asylum seeking boys randomized to an Expressive Arts in Transition intervention group (EXIT) and a Life as usual group (LAU)*

	LAU n = 73	EXIT n = 70
Age, stated by participants. Mean (SD)	16.2 (0.9)	16.3 (0.8)
Age, decided by authorities. Mean (SD)	18.9 (2.4)	18.9 (2.6)
Parents alive		
Uncertain	4 (5.6)	2 (3.0)
Both alive	18 (25.0)	18 (27.3)
Only mother alive	32 (44.4)	28 (42.4)
Only father alive	1 (1.4)	0 (0.0)
Both parents dead	17 (23.6)	18 (27.3)
Education		
< 5 years	38 (54.3)	37 (52.9)
>=5 years	32 (45.7)	33 (47.1)
Country of origin		
Afghanistan	56 (76.7)	53 (75.7)
Somalia	13 (17.8)	13 (18.6)
Iran	3 (4.1)	1 (1.4)
Western Sahara	0	2 (2.9)
Palestine	0	1 (1.4)
Algeria	1 (1.4)	0

Notes: Numbers (with percentages) are given when others not specified. There were no significant differences between the groups in any of the characteristics.

seeking boys between 15 and 18 years old. Inclusion was restricted to the six largest language groups due to translation costs; Arabic, Dari, Farsi, Pashto, Somali, and Sorani. Because of changes in migration patterns, we ended up with a population consisting mostly of young men from Afghanistan (76%) and Somalia (18%), (Table 1). Inclusion was done in 2009 (12 weeks), 2010 (8 weeks), and 2011 (13 weeks).

Procedure. Allocation of participants to either intervention group, EXIT or life as usual LAU, was based on a predefined structure that assigned UASC from a given language group to either intervention or control, according to the week they arrived. The structure was alternated every six weeks so that all language-groups were represented in both EXIT and LAU. Altogether, 145 UASC were given oral information with the aid of a translator about the study and the content. The most important information for the participants was that both EXIT and the LAU group were guaranteed to stay at the AC for 6 weeks and that we would do our best to find them after they left the AC three times over a period of two years. The study's purpose was to learn more about what helped them to a good start as asylum-seekers and we stressed the fact that the research had no link to the asylum process. Out of the 145 UASC, 143 decided to participate, and signed the informed consent form. 143 completed screening instruments at the first testing point no later than 3 weeks after arrival in Norway (Fig. 1). Of these individuals, 131 completed the first post-assessment after 6 weeks, 118 after 5 months, 91 after 15 months and 80 after 25 months. At the time of the second assessment, the UASC had been moved from the AC and placed in asylum centers for young people or adults all around Norway.

A socio-demographic questionnaire recorded data on the participants' age, country of origin, if they could read and write and

whether parents were alive. The questionnaire was administrated at baseline with the assistance of a translator (Table 1).

Other instruments were in the participants' native languages and administered through touch-screen laptops and the computer program Multilingual Computer Assisted Interview (MultiCASI): The items of the questionnaire appeared sequentially on the screen, accompanied by answering options. Each text item had a related sound file that could be activated by touch, and repeated as many times as necessary. This allowed participants with weak reading ability to answer questions without the support of an interpreter (Knaevelsrud & Muller, 2008).

Exclusion criteria were psychosis, drug abuse and aggressive behavior (dangerous to oneself or to others). The Regional committee for Medical and Health Research Ethics (REK) approved the study in 2009. Every participant was made aware that he could withdraw from the project at any time.

A manualized intervention. A pilot for an early intervention protocol was developed in 2008 and named: Expressive Arts in Transition (EXIT). This group manual is based on stage one principles: safety, stabilization, anxiety and stress management, building emotion regulation skills and trauma education. The sessions are time-limited and structured, the facilitators follow a pre-set session guide (Herman, 1992).

The manual included 2 sessions a week lasting 1.5 hours each for five weeks. All sessions followed the same structure to enhance predictability and safety. Every session started with a "welcome" ritual and ended in the same manner with "welcome" being replaced with "take care." Every session included the participants placing themselves on a "barometer" they had made with colors according to how they felt. This gave the participants the possibility to assess themselves at the beginning and end of each group session, making them aware that the exercises and methods could promote change both mentally and physically. The intention was to enhance the participants sense of self and community efficacy and ability to cope with their symptoms. In addition to the barometer each session started with mapping the symptoms present in the group. The symptoms the participants were struggling with were made transparent to all. Each session had 10–15 minutes with breathing exercises and an educational part, so they could use the exercises themselves to cope with symptoms like sleeplessness and lack of energy.

The group had at most 10 participants at any given time. Five new participants entered and five participants left at every 5th session. The participants were most of the time in a circle. The circle provides holding and all share the control of the group, by knowing who is present.

Session 1. Focus on connecting and engagement. Each participant stepped into the circle and said his name and made a movement related to an activity he liked, riding a horse, playing soccer, flying a kite, etc. The group would mirror his movement. The movement chosen enhanced the participants' feeling of being a separate individual in the group and that differences were welcome. Exploring identity in a new context.

Session 2. Focus on calming. Imagining a personal "safe place." Every participant imagined a landscape he liked and shared what



CONSORT 2010 Flow Diagram

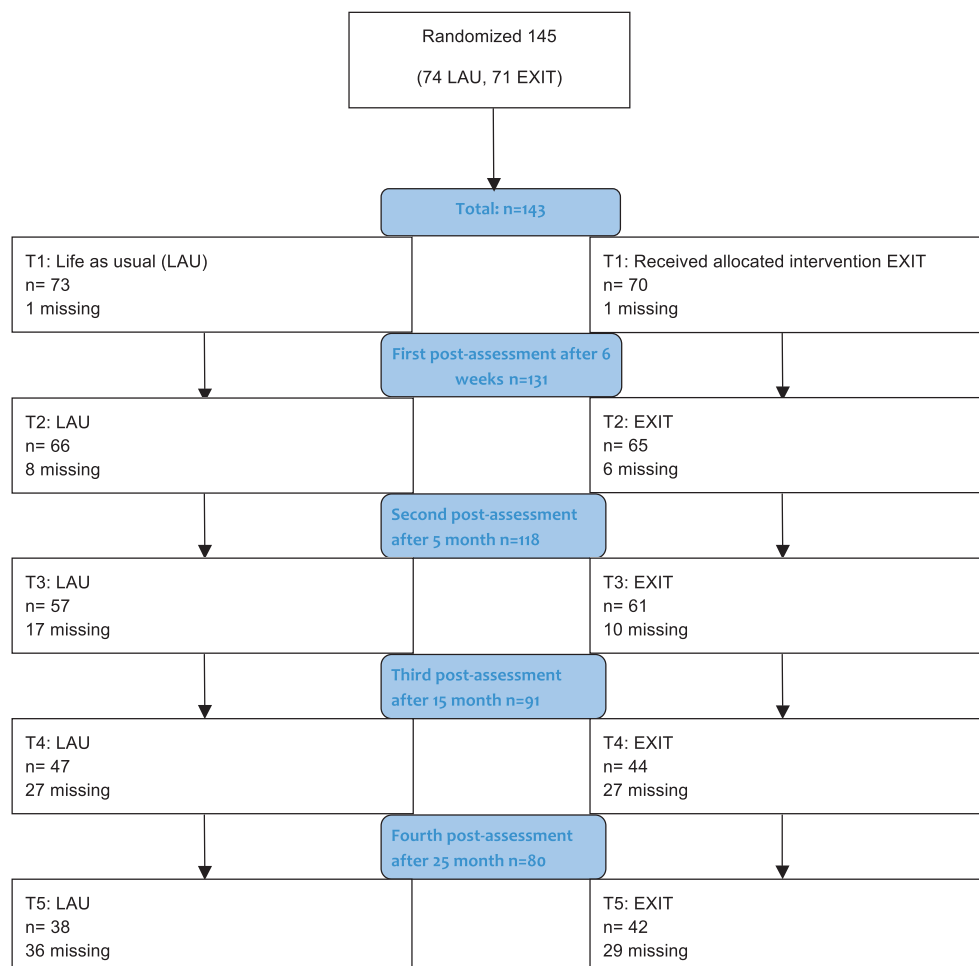


Fig 1. Flow diagram of the progress of a parallel controlled trial of two groups: Life as usual (LAU) and Expressive arts in transition (EXIT).

he was seeing, hearing, smelling and feeling with the whole group. They would paint the colors of the landscape on a separate piece of paper. An envelope was created to store all art and information in.

Session 3. Focus on efficacy, identity and hope. Future scenarios: what do you imagine you will be doing five years from today? Move from one end of the room “the present” to the other end “five years ahead in time.” Walk back to the present – turn around and look at your past. What resource is important to not lose track of? Turn around and decide what is your first step to achieve your future dream? Moving physically can help the participants to move mentally. To imagine a good future changes the choices you make in the present. The next step for a withdrawn boy can be to ask for help to do homework and get up in the morning.

Session 4. Focus on self-efficacy. Finding your inner “resource animal,” find its movements and sounds. Dance the animal’s dance and have the rest of the group mirror the movements and sounds. The animal movement can release tension and energize. Mirroring all participants animal movements enforces connection, engagement and focus in the here and now.

Session 5. Focus on connectedness. Goodbye ritual; “welcome” was replaced with “take care.” Five out of ten participants leave the group and five new ones begin. The ones who are leaving the group receive a diploma for their participation, which they all put in their envelopes – the envelopes reminded them of the importance of keeping track of all certificates and documents. The five who continued knew the structure and became co-facilitators for the new participants, which gave them leadership roles. The same structure was repeated in sessions 6–10.

The intervention was conducted by Expressive Arts (EXA) therapists under the project leader's supervision. A staff member from the reception center would participate and assist. In addition to the EXA therapist who was employed at the AC there were four EXA therapists who had been trained in the EXIT intervention manual/structure. Two therapists led each session. A translator for each foreign language spoken in the group, participated in the intervention program and took part in exercises and activities that were conducted.

Control group. The LAU group was offered an information program, schooling and sport activities. A soccer program was offered four days a week, Monday to Thursday. On Friday, there was a dance activity. Thus, depending on their own incentive, the LAU boys were engaged in several positive activities.

Measurements. Measurements were performed in both groups at baseline (T1), at the end of the 6-week intervention program (T2), and at 5 months (T3), 15 months (T4) and 25 months (T5).

Exposure. Serious Life Events checklist (SLE) was developed by Tammy Bean and colleagues (Bean, Derluyn, Eurelings-Bontekoe, Broekaert & Spinhoven 2004) in order to assess if an adolescent meet the criteria A1 (experienced a traumatic event) in the Diagnostic and Statistical Manual of Mental Disorders, Fourth edition (DSM-IV), for a diagnosis of post-traumatic stress disorder (PTSD). It is a self-report questionnaire which asks whether or not the participant has experienced 12 different kinds of traumatic events, such as separation from family, natural disaster, war and physical or sexual abuse. The instrument was scored by answering yes or no on each item.

Psychological distress. The Hopkins Symptom Checklist-25 (HSCL-25) (Mollica, Caspiyavin, Bollini, Truong, Tor & Lavelle, 1992; Mollica, Wyshak, de Marneffe, Tu, Yang & Khuon, 1996) is a self-administered questionnaire designed to measure anxiety and depression. It has been validated in various clinical and community samples (Hollifield, Warner & Lian, 2002; Silove, Manicavasagar, Mollica *et al.*, 2007). The HSCL-37-A version is an extension of the HSCL-25 and has also been applied in a number of refugee studies with minors (Bean, Eurelings-Bontekoe, Derluyn & Spinhoven, 2004; Bronstein, Montgomery & Ott, 2013). The additional 12 items measuring externalizing behavior are not included in this paper. Each item was scored with 1 (not bothered) to 4 (extremely bothered). Scores ≥ 2 was considered probably clinically significant (Jakobsen *et al.*, 2016).

Post-traumatic Symptom Score (PTSS). The Harvard Trauma Questionnaire (HTQ) (Mollica *et al.*, 1992) is a comprehensive instrument that was developed to assess potentially traumatic experiences and post-traumatic symptoms in various cultural contexts. The HTQ has been validated for use with refugee populations in several studies (Mollica *et al.*, 1992; Silove *et al.*, 2007). Its psychometric properties were first established in a highly traumatized, clinical population, but it has also been evaluated with a larger community sample and with asylum-seeking adolescents (Hodes, Jagdev, Chandra & Cunniff, 2008; Jones & Kafetsios, 2005). The HTQ part IV comprises 30 symptom items, among which the first 16 items measure 'The

symptoms of PTSD' according to the DSM-IV (APA, 1994). These 16 items are measured on a four point Likert scale, ranging from "not at all" (1) to "extremely" (4). Scores ≥ 2 was considered probably clinically significant (Jakobsen, Meyer DeMott & Heir, 2016).

Life satisfaction. Cantril's Ladder of Life Satisfaction measures current life satisfaction (CLS) with a single-item question (Cantril, 1965). In addition, we expanded the use of this instrument by asking about expected life satisfaction in one year (ELS). Both questions were scored on a ten-point Likert scale visualized as a vertical ladder, ranging from "worst possible life imagined" (1) to "best possible life imagined" (10).

Data analysis. Differences between the LAU and EXIT groups for age variables, whether parents were alive, education and the SLE variables were investigated by exact chi square tests using Monte Carlo with 10,000 replications. Linear mixed effects models investigated the differences in the time trajectories between the LAU and EXIT groups with fixed effects including groups (LAU or EXIT), categorical time (T1–T5) and their interaction, and random differences between and within persons.

Analyses used R (The R Foundation for Statistical Computing, Vienna, Austria) with the R package nlme for mixed effects models.

RESULTS

Figure 1 shows the participants' flow through the entire study, based on participants answering at least one question at each time point. Participants not found at one time point would be looked for at the next T and if traced would be included in that time point. At every time point, there were participants that were not available for different reasons: some had a meeting with the immigration authorities, others were moved to a new reception center, or they did not live at the given address any more. Yet, we were able to find many again at the next time point. Common reasons for non-participating were being denied asylum and disappearing or being picked up by the police and sent out of Norway.

Completing and lost participants did not significantly differ between the two groups EXIT and LAU at any time point or overall ($p \geq 0.210$). No significant difference was found in the demographics (Table 1) between the groups at baseline. There is in the study no significant difference between the two groups on number of participants tested to be over 18. At baseline, there was no significant difference between symptoms of depression, anxiety or post-traumatic stress.

There were no significant differences between EXIT and LAU in their experiences of previous stressful life events (SLE) at baseline. Life threatening events were experienced by 53 (79%) and 64 (89%) of EXIT and LAU participants respectively, death of a loved one by 48 (72%) and 54 (75%), life threatening disease by 15 (22%) and 24 (32%), physical maltreatment by 49 (73%) and 59 (81%), disaster by 36 (55%) and 41 (58%), and war or armed conflict by 31 (47%) and 37 (51%). The final result of the asylum-seeking process did not differ between the groups; 24 (34%) of the EXIT group was granted asylum compared to 18 (25%) in the LAU group.

Trajectories of mental health, life quality and hope

Figure 2 shows posttraumatic stress in EXIT and LAU across time. There was a significant time by group interaction ($p = 0.042$), but no significant group differences at any time point ($p_s \geq 0.053$). In the LAU group, there were overall significant time differences ($p = 0.048$) with significant increases from T2 to T4 ($p = 0.009$) and T5 ($p = 0.014$). In the EXIT group, there were no overall significant time differences ($p = 0.178$).

Figure 3 shows general psychological distress in the two groups during the follow-up. There was a close to significant time by group interaction ($p = 0.053$), but no significant group differences at any time point ($p_s \geq 0.181$). In the LAU group, there were overall significant time differences ($p < 0.001$) with significant increases from T1 to T4 ($p < 0.001$), from T2 to T4 ($p < 0.001$) and T5 ($p = 0.011$), and from T3 to T4 ($p = 0.013$). In the EXIT group there were no overall significant time differences ($p = 0.486$).

Figure 4 shows current life satisfaction in the two groups. There was a significant time by group interaction ($p = 0.020$), and significant group differences at T2 ($p = 0.048$), T4 ($p < 0.001$) and T5 ($p = 0.003$), but not at T1 and T3 ($p_s \geq 0.060$). There were no significant time differences in LAU ($p \geq 0.055$). In EXIT, there were significant increases from T1 to T3 ($p = 0.022$), T4 ($p < 0.001$), and T5 ($p < 0.001$), from T2 to T4 ($p = 0.005$) and T5 ($p = 0.003$), from T3 to T4 ($p = 0.042$) and T5 ($p = 0.028$).

Figure 5 shows expected life satisfaction one year ahead in time. There was no significant time by group interaction ($p = 0.130$), but significant group differences at T4 ($p = 0.010$) and T5 ($p = 0.007$). In the LAU group, there were overall significant time differences ($p = 0.003$) with significant decreases from T1 to T4 ($p = 0.003$) and T5 ($p = 0.008$), and from T2 to T4 ($p = 0.002$) and T5 ($p = 0.007$). In the EXIT group, there were no overall significant time differences ($p = 0.553$).

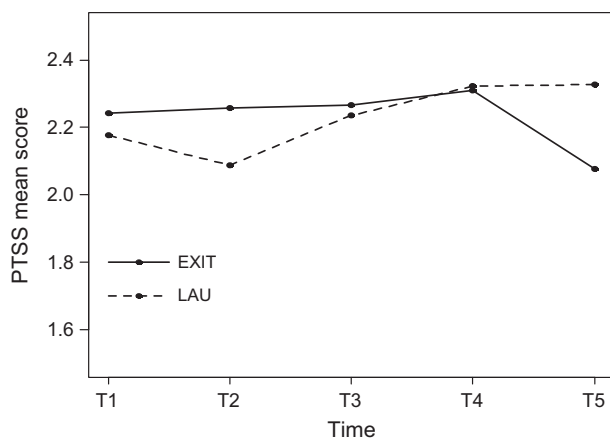


Fig 2. Post-traumatic stress in Expressive Arts in Transition intervention group (EXIT) and Life as usual group (LAU) during 25 months of follow-up after five weeks of intervention.

Notes: PTSS: Post-traumatic stress symptom score; Time: T1 = Baseline, T2 = 6 weeks, T3 = 5 months, T4 = 15 months and T5 = 25 months. p (time by group interaction) = 0.042.

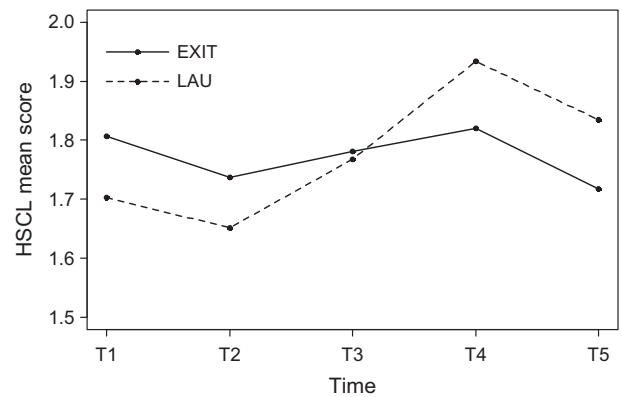


Fig 3. General psychological distress in Expressive Arts in Transition intervention group (EXIT) and Life as usual group (LAU) during 25 months of follow-up after five weeks of intervention.

Notes: HSCL: Hopkins symptom checklist; Time: T1 = Baseline, T2 = 6 weeks, T3 = 5 months, T4 = 15 months and T5 = 25 months. p (time by group interaction) = 0.053.

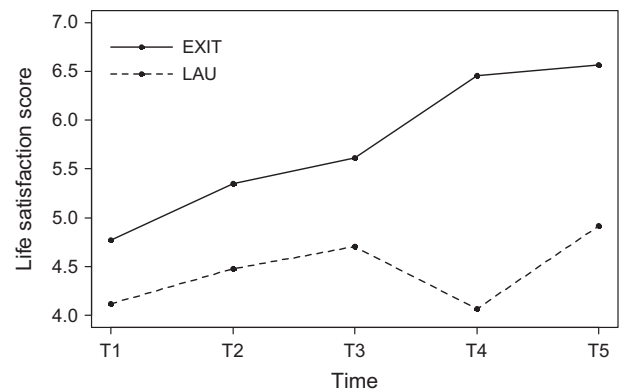


Fig 4. Life satisfaction in Expressive Arts in Transition intervention group (EXIT) and Life as usual group (LAU) during 25 months of follow-up after five weeks of intervention.

Notes: Time: T1 = Baseline, T2 = 6 weeks, T3 = 5 months, T4 = 15 months and T5 = 25 months.

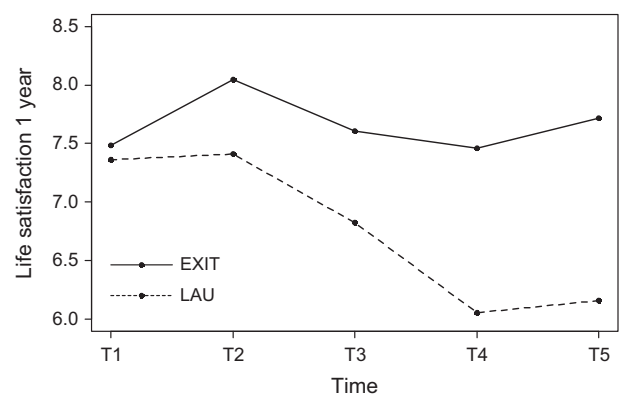


Fig 5. Life satisfaction expected in 1 year in Expressive Arts in Transition intervention group (EXIT) and Life as usual group (LAU) during 25 months of follow-up after five weeks of intervention.

Notes: Time: T1 = Baseline, T2 = 6 weeks, T3 = 5 months, T4 = 15 months and T5 = 25 months. p (time by group interaction) = 0.130.

DISCUSSION

In this study, a five-week expressive arts program (EXIT) was compared with life as usual (LAU) in an arrival center for unaccompanied minor refugee boys. The study showed some differences in the trajectories of mental health complaints, life satisfaction and expectations during a 25 month follow-up, with more positive outcomes for the EXIT group. The differences were most modest for mental health and most evident for life satisfaction and hope for the future. At the end of the follow up the boys in the EXIT group had higher life satisfaction and hope for the future than the boys in the control group.

The authors have not been able to find similar research done with this population on arrival. Anyway, our findings support related studies showing that group interventions with arts therapy can have positive effects on young people living under challenging conditions (Beauregard, 2014). There may be several beneficial outcomes of such interventions, from reduction of emotional problems (Quinlan, Schweitzer, Khawaja & Griffin, 2015) to creation of hope (Yohani, 2008; Yohani & Larsen 2009). Our results support previous studies on stage one interventions in refugee camps and conflict settings reporting better stress management skills, and an overall reduction in trauma-related symptoms (Bass *et al.*, 2016).

Most studies on group interventions with survivors of violence have focused on stress management and alleviation of trauma symptoms and few have measured the change in social networks and the ability to ask for help (Bunn, Goesel, Kinet & Ray, 2016). In our study we measured life satisfaction in the present and the expected life satisfaction in one year. Our hypothesis is that both life satisfaction and hope may have increased as a result of being able to connect to a social network.

An unexpected finding in our study was that the differences between EXIT and LAU did not appear immediately after the intervention, but developed gradually over the observation period. Several factors might explain the different development of the two groups. The EXIT intervention focused on calming, contact, engagement, safety and hope. The participants were given a "toolkit" with coping strategies. They learned how to calm themselves and take contact with others. Being able to master stress symptoms might have enhanced their self-confidence. Without the psycho educative learning that took place in the EXIT group the participants of the LAU group did not gain the knowledge on how to cope when PTSS symptoms emerged.

Another explanation for the reduction in PTSS symptoms in the EXIT group in the long term perspective may be that most of them received a final answer to their asylum application. Living in a situation of not knowing is stressful. However, this was true for both groups and cannot explain the observed differences between the groups.

The outcome of the individual asylum applications was revealed to the asylum-seekers between 1 and 2 years after the arrival, and the negative impact of refusal was expected since several studies have found that difficulties obtaining legal residence are associated with a range of psychological problems (Hodes *et al.*, 2008). We also know that longitudinal studies indicate a trend towards reduction of mental health symptoms for resettled refugees over time (Fazel, Reed, Panter-Brick & Stein,

2012). This, in association with our findings, emphasizes the importance of a supportive post migration environment for all refugees with pre-migratory experiences of serious trauma and human rights violations (Jakobsen *et al.*, 2017).

A majority of the UASC had experienced traumatic events such as war or disasters, physical or sexual abuse, loss of close relatives, or grotesque witness experiences. In the absence of parental support, these young people might have been in particular need of social ties and activities that could strengthen their attachment, identity and resilience (Silove, 2005; Vervliet *et al.*, 2014a). The EXA group in a very basic way gives the feeling of being connected with others, which is important for the refugee who has lost his connection with his own country, people and culture. It gives a sense of continuity and hence a feeling of security. The group is a place where the participant has a sense of "going on being" (Sengun, 2001).

Our experiences in the implementation of this study suggest that the five principles of trauma intervention in stage one, promoting safety, calming, self-efficacy, connectedness and hope (Hobfoll *et al.*, 2007), may be appropriately addressed through group intervention with EXIT. Furthermore, a sense of group belonging may be beneficial when starting the process of new-patriation in a foreign country (Meyer DeMott, 2007).

Strengths and limitations

This study is a contribution to demanded research on early interventions to prevent psychological stress (Derluyn & Broekaert, 2007; Jakobsen *et al.*, 2014) and the need to evaluate practice in the field (Murray, Davidson & Schweitzer, 2010; Rousseau *et al.*, 2005). Strengths of the study were several follow-ups through a long-time period and use of computer-based assessments that enabled participation of illiterate subjects without need of interpreters. The control group LAU participated in many activities of the same activities as the EXIT group.

Some limitations should be noted. First, the allocation of participants to intervention or control group was not completely randomized, but rather based on a predefined structure that took into account the participant's language and time of arrival. Second, there was dropout throughout the follow-up period, which may have influenced the results. Third, the origin of participating refugees was mainly from two countries, which may limit the generalizability of the findings.

Implications

Unaccompanied minor refugees are often traumatized and can have reduced mental health on arrival (Vervliet *et al.*, 2014b). They often meet a demanding situation in a new country (Derluyn & Broekaert, 2007). Group interventions with expressive arts may be a cost-effective supplement to basic care for unaccompanied minor refugees after arrival to a host country.

The EXIT program has recently been carried out in Norway in school programs for refugees, stress management courses for the helpers and training for public health nurses (Regional center for violence, traumatic stress and suicide (RVTS) north, 2015–2017). Experience has shown that the manual is easy to learn.

Universities in Norway and Switzerland are giving certificate and continuing education programs in EXIT. All students must fulfill a 5 week supervised practicum leading an EXIT group wherever he or she lives in the world. All practicums are being evaluated and will give future knowledge. Politicians and policy makers have called for evidence based early intervention programs for unaccompanied refugee children. EXIT and components of the manual can also be carried out with adults and families (Meyer DeMott, 2007).

Further research

EXIT is today applied with other populations that have been traumatized and should be subjects for further research. Additional aims to those in our study may be examinations of impact on resilience, social connection and engagement.

Conclusion

A five-week expressive arts group stage one intervention program in the first phase after arrival may be beneficial in helping refugee boys to alleviate and cope with symptoms of trauma, and promote life satisfaction and hope.

This study was supported by the Norwegian immigration authorities (UDI). The authors thank the participants who gave their consent to participate in this study. We thank the EXIT group leaders Siv Lotherington and Gunnar Reinsborg. A special thank you to our onsite coordinator and EXIT group leader Liv Berit Løken, without her and the staff at Hvalstad it would have been impossible to carry out the study. We thank all the translators and especially Tariq Ershadi, who was the main translator and contributed to the safety and the trust during the whole time of the study.

REFERENCES

- American Psychiatric Association (APA) (1994). *Diagnostic and statistical manual of mental disorders* (4th edn). Washington, DC: American Psychiatric Association.
- Bass, J. K., Annan, J., McIvor Murray, S., Kaysen, D., Griffiths, S., Cetinoglu, T. et al. (2013). Controlled trial of psychotherapy for Congolese survivors of sexual violence. *New England Journal of Medicine*, *368*, 2182–2191.
- Beauregard, C. (2014). Effects of classroom-based creative expression programs on children's wellbeing. *Arts in Psychotherapy*, *41*, 269–277.
- Bean, T. (2006). Assessing the psychological distress and mental healthcare needs of unaccompanied refugee minors in the Netherlands. Dissertation Leiden University.
- Bean, T., Derluyn, I., Eurelings-Bontekoe, E., Broekaert, E. & Spinhoven, P. (2006). Validation of the multiple language versions of the Reactions of Adolescents to Traumatic Stress questionnaire. *Journal of Traumatic Stress*, *19*, 241–255.
- Bean, T., Eurelings-Bontekoe, E., Derluyn, I. & Spinhoven, P. (2004). *Stressful life events (SLE): User's Manual 2004*. Oegstgeest: Centrum'45.
- Bronstein, I., Montgomery, P. & Ott, E. (2013). Emotional and behavioural problems amongst Afghan unaccompanied asylum-seeking children: Results from a large-scale cross-sectional study. *European Child & Adolescent Psychiatry*, *22*, 285–294.
- Bunn, M., Goesel, C., Kinet, M. & Ray, F. (2016). Group treatment for survivors of torture and severe violence: A literature review. *Torture*, *26*, 45–67.
- Cantril, H. (1965). *The pattern of human concerns*. New Brunswick, NJ: Rutgers University Press.
- Cloitre, M., Courtois, C. A., Charuvastra, A., Carapezza, R., Stolbach, B. C. & Green, B. L. (2011). Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. *Journal of Traumatic Stress*, *24*, 615–627.
- Derluyn, I. & Broekaert, E. (2007). Different perspectives and behavioural problems in unaccompanied refugee children and adolescents. *Ethnicity & Health*, *12*, 141–162.
- Derluyn, I., Broekaert, E. & Schuyten, G. (2008). Emotional and behavioural problems in migrant adolescents in Belgium. *European Child & Adolescent Psychiatry*, *17*, 54–62.
- Fazel, M., Reed, R. V., Panter-Brick, C. & Stein, A. (2012). Mental health of displaced and refugee children resettled in high-income countries: risk and protective factors. *Lancet*, *379*, 266–282.
- Herman, J. L. (1992). *Trauma and recovery*. New York: Basic Books.
- Hobfoll, S. E., Watson, P., Bell, C. C., Bryant, R. A., Brymer, M. J., Friedman, M. J. et al. (2007). Five Essential Elements of Immediate and Mid-term Mass Trauma Intervention: Imperical Evidence. *Psychiatry*, *70*, 283–315.
- Hodes, M., Jagdev, D., Chandra, N. & Cunniff, A. (2008). Risk and Resilience for psychological distress amongst unaccompanied asylum seeking adolescents. *Journal of Child Psychology and Psychiatry*, *49*, 723–732.
- Hollifield, M., Warner, T. D. & Lian, N. (2002). Measuring trauma and health status in refugees: A critical review. *JAMA*, *288*, 611–621.
- Jakobsen, M., Meyer DeMott, M. A. & Heir, T. (2014). *Prevalence of psychiatric disorders among unaccompanied minor refugee boys*. Clinical practice & epidemiology in mental health. England: Bentham Science Publishers.
- Jakobsen, M., Meyer DeMott, M. A. & Heir, T. (2016). Validity of screening for psychiatric disorders in unaccompanied minor asylum seekers use of computer-based assessment. *Transcultural Psychiatry*
- Jakobsen, M., Meyer DeMott, M. A., Wentzel-Larsen, T. & Heir, T. (2017). The impact of the asylum process on mental health: A longitudinal study of unaccompanied refugee minors in Norway. *BMJ Open*–2016–015157
- Jones, L. & Kafetsios, K. (2005). Exposure to political violence and psychological well-being in Bosnian adolescents: A mixed method approach. *Clinical Child Psychology and Psychiatry*, *10*, 157–175.
- Knaevelsrud, C. & Muller, J. (2008). *MultiCASI, Multilingual Computer Assisted Self Interview*. Multilicense Volume License. CD-ROM, Springer.com
- Knill, P. J., Barba, H. N. & Fuchs, M. N. (1995). *Minstrels of soul. Intermodal expressive therapy*. Toronto: Palmerston Press.
- Levine, S. K. & Levine, E. G. (1999). *Foundations of expressive arts therapy: Theoretical and clinical perspectives*. London: Jessica Kingsley Publishers.
- Lie, B. (2003). *The triple burden of trauma, uprooting and settlement. A non-clinical longitudinal study of health and psychosocial functioning of refugees in Norway*. Oslo: Faculty of Medicine
- Meyer DeMott, M. A. (2007). *Repatriation and Testimony. Expressive Arts Therapy. A phenomenological study of Bosnian war refugees with focus on returning home, testimony and film*. PhD Thesis: Arts, Health & Society Division (EGS) in Switzerland and Norwegian Centre for Violence and Traumatic Stress Studies, Oslo.
- Meyer DeMott, M. A. (2014). *Breaking the silence: Expressive arts as testimony*. In G. Overland, E. Guribye & B. Lie (Eds.), *Nordic work with traumatized refugees: Do we really care* (pp. 192–200) Cambridge: Cambridge Scholars Publishing.
- Mollica, R. F., Caspiavin, Y., Bollini, P., Truong, T., Tor, S. & Lavelle, J. (1992). The Harvard Trauma Questionnaire – validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic-stress-disorder in Indo-Chinese refugees. *Journal of Nervous and Mental Disease*, *180*, 111–116.
- Mollica, R. F., Wyshak, G., de Marneffe, D., Tu, B., Yang, T. & Khuon, F. (1996). Hopkins Symptom Checklist 25 (HSCL-25): Manual Cambodian, Laotian and Vietnamese versions. *Torture*, (Suppl 1), 35–42.

- Murray, K. E., Davidson, G. R. & Schweitzer, R. D. (2010). Review of refugee mental health interventions following resettlement: best practices and recommendations. *American Journal of Orthopsychiatry*, 80, 576–585.
- The Norwegian Directorate of Immigration (UDI) (2017). Statistics and analysis. Retrieve from <http://www.udi.no/oversikter/Statistikk-og-analyse/Statistikk/Asyl/Enslige-mindrearige-asylsokere>.
- Quinlan, R., Schweitzer, R. D., Khawaja, N. & Griffen, J. (2015). Evaluation of a school-based creative arts therapy program for adolescents from refugee backgrounds. *The Arts in Psychotherapy*, 47, 72–78.
- Rousseau, C., Drapeau, A., Lacroix, L., Bagilishya, D. & Heusch, N. (2005). Evaluation of a classroom program of creative expression workshops for refugee and immigrant children. *Journal of Child Psychology and Psychiatry*, 46, 180–185.
- Sengun, S. (2001). *Migration as a transitional space and group analysis. The group analytical society*. London: Sage.
- Silove, D. (2005). From trauma to survival and adaptation: Towards a framework for guiding mental health initiatives in post-conflict societies. In D. Ingleby (Ed.), *Forced migration and mental health: Rethinking the care of refugees and displaced persons* (pp. 29–51). New York: Springer Science.
- Silove, D. M., Manicavasagar, V., Mollica, R. F., Thai, M., Khiek, D., Lavelle, J. & Tor, S. (2007). Screening for depression and PTSD in a Cambodian population unaffected by war: Comparing the Hopkins Symptom Checklist and Harvard Trauma Questionnaire with the Structured Clinical Interview. *The Journal of Nervous and Mental Disease*, 195, 152–157.
- Tol, W. A., Song, S. & Jordans, M. J. D. (2013). Annual research review: Resilience and mental health in children and adolescents living in areas of armed conflict – a systematic review of findings in low- and middle-income countries. *Journal of Child Psychology and Psychiatry*, 54, 445–460.
- UNHCR (2012). *Global trends 2011*. Geneva: United Nations High Commissioner for Refugees.
- van der Kolk, B. (2014). *The Body keeps the score: Brain, Mind, and Body in the healing of trauma*. New York: Penguin.
- Van Lith, T. (2016). Art therapy in mental health: A systematic review of approaches and practices. *The Arts in Psychotherapy*, 47, 9–22.
- Vervliet, M., Lammertyn, J., Broekaert, E. & Derluyn, I. (2014a). Longitudinal follow-up of the mental health of unaccompanied refugee minors. *European Child & Adolescent Psychiatry*, 23, 337–346.
- Vervliet, M., Meyer DeMott, M. A., Jakobsen, M., Broekaert, E., Heir, T. & Derluyn, I. (2014b). The mental health of unaccompanied refugee minors on arrival in the host country. *Scandinavian Journal of Psychology*, 55, 33–37.
- Winnicott, D. W. (1971). *Playing and reality*. London: Routledge.
- Yohani, S. C. (2008). Creating an ecology of hope: Art-based interventions with refugee children. *Child & Adolescent Social Work Journal*, 25, 309–323.
- Yohani, S. C. & Larsen, D. J. (2009). Hope lives in the heart: Refugee and immigrant children's perceptions of hope engendering sources during early years of resettlement. *Canadian Journal of Counselling*, 43, 246–264.

Received 29 March 2017, accepted 6 September 2017