Title: Effects of classroom-based creative expression programs on children's well-being

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Abstract

Schools are in a unique position to offer mental health support adapted to the needs and to the varying situations of children. One way to reach a wide number of children for mental healthcare interventions is through classroom-based programs. While several instances of creative arts therapies school projects are found in the literature, no critical review of classroom-based creative expression programs exists to date. Following a review of scientific publications, 19 articles referring to 8 different programs were identified and examined in order to explore what are the effects of classroom-based creative expression interventions on children's mental health. Overall, the results indicate that programs containing a major component of creative expression can be beneficial to children but this needs to be considered with moderation. On one hand, significant improvement was found in hope, coping and resiliency, prosocial behaviors, self-esteem, impairment, emotional and behavioral problems (especially aggressive behaviors), construction of meaning and PTSD scores. On the other hand, some studies also reported no significant change in prosocial behaviors, self-esteem, emotional and behavioral problems, coping and resiliency of adolescent boys and PTSD (for a lack of a targeted intervention). These mixed results raise important questions that need to be addressed in future research.

Keywords: art therapy, children, classroom, creative arts therapies, creative expression programs, intervention, mental health, psychology, school.

Highlights:

- Classroom-based creative expression programs have been used for diverse objectives and settings.
- Outcomes following interventions are generally positive although not always significant.
- Populational characteristics might influence the impact of such programs.
- School-based research imposes some constraints that may influence the impact of a study.
- Cultural sensitivity is necessary both in intervention and study design.
Introduction

In May 2012, the World Health Assembly adopted a resolution urging its members to allocate sufficient resources to mental healthcare with the added proposition of coordinating efforts between health and social sectors (Sixty-fifth World Health Assembly, 2012, Article 13.2). This highlights an important point concerning the provision of mental health support to the world population, namely that health and social agencies need to work together in order to offer the best mental health services possible. Still, barriers to access mental healthcare do exist. When considering what were the most common obstacles both in high-income and low-income settings, the World Health Organization pinpointed to a lack of resources, difficulties in transportation and a fear of stigmatization (2003). Following this observation, it appears that a third actor needs to be included in the organization of mental health services rendered to children: schools. For families for whom access to these services is difficult and/or embarrassing, schools can be a more financially and geographically accessible service site as well as a non-stigmatizing gateway to such support (Pumariega, Rogers, & Rothe, 2005).

Literature Review

School-Based Interventions

While the most vulnerable and disadvantaged children would benefit from mental health services delivered in educational settings, such support is not always offered to them. For instance, according to a review of school-based mental health and behavioral programs conducted by Farahmand, Grant, Polo and Duffy (2011), few effective programs do exist that are designed especially for low-income urban youth. Indeed, several of the school-based assessed interventions are intended for immigrant and refugee children. This could be explained by the fact that this population's utilization rate of mental healthcare is usually low (DesMeules, Gold, Payne, & Vissandjée, 2004), making refugee and immigrant children hard to reach in typical clinical settings. Having access to mental health professionals inside the school grounds is thus an alternative that needs to be considered when wanting to get to the most vulnerable.

Community-wide traumatic events can also call for mental health services offered in school settings, where access to such support can be more convenient for those in need. When
a disaster strikes, for example, typical intervention channels or infrastructures might be weakened, even destroyed. In circumstances like these, it might be more efficient to arrange mental health interventions in schools where more children can be reached (Salloum & Overstreet, 2008). This is exemplified by a study that compared an in-school group intervention with a parent and child treatment at a mental health clinic. The authors found that both treatment were effective in reducing post-traumatic and depressive symptoms, but that the in-school group intervention was more convenient according to parents (Jaycox et al., 2010). Likewise, schools also seem to be an accommodating location for receiving mental health support in ongoing-war countries. This is shown by a program for war-affected children in Sierra Leone which combined basic education with activities targeted at healing trauma to decrease intrusion and arousal symptoms (Gupta & Zimmer, 2008). Providing mental health interventions in school settings might be a sustainable alternative during crises and this has also been proven to work in non-crisis situations (Essau, Conradt, Sasagawa, & Ollendick, 2012).

Offering mental health services in educational institutions can take multiple forms. One of the most common consists of having a mental health worker available for consultation on-site (Brindis et al., 2003). There is positive evidence that this can work as is shown by a study which documented an improvement in emotional and behavioral problems for refugee children, especially in what related to hyperactivity and peer problems (Fazel, Doll, & Stein, 2009). Encouraging outcomes were also found in a research conducted in an inner-city neighborhood in London, inhabited mainly by immigrants and refugees. Worthy of note, the mental health professional was not the only one involved in the intervention but teachers, children and their relatives also participated (O’Shea, Hodes, Down, & Bramley, 2000). This shows how an ecosystemic approach to school-based counselling can be one effective way of addressing mental health problem prevention and/or treatment.

Another means of offering mental health support in school settings is through group interventions. On one hand, these can be held outside of the classroom, either during school hours (Woods & Jose, 2011) or as an extracurricular activity (Qouta, Palosaari, Diab, & Punamäki, 2012). On the other hand, some group interventions can take place directly within the classroom. For instance, several publications of classroom-based PTSD programs are found in the literature. These are generally referred to as universal because all children in the class are
targeted by the intervention no matter what their level of symptomatology is (Persson & Rousseau, 2009). Some examples of universal PTSD interventions in classrooms are directed towards children who were being witness or victim of violence in Los Angeles, USA (cognitive-behavioral therapy: Stein et al., 2003) or exposed to terrorist attacks in Israel (psychoeducation: Gelkopf & Berger, 2009; stress inoculation technique: Wolmer, Hamiel, & Laor, 2011). Their aim was to prevent the development of PTSD after trauma exposure or alleviate its negative effects. Classroom-based interventions targeting children's emotional and behavioral problems are also frequently mentioned in the literature (Hong, Yufeng, Agho, & Jacobs, 2011; Vo, Sutherland, & Conroy, 2012). Like is shown by these preceding examples, intervening directly in the classroom permit to address a variety of problems through different types of interventions.

**Creative Expression Interventions**

Creative arts therapies are increasingly being recognized for their efficacy and uniqueness in the mental health field. For a number of years, art therapy services have been offered in schools either as individual or group interventions. In the late 1970’s, the Miami-Dade County Public Schools (United States) introduced art therapy as a mental healthcare in-school service for children with autism, cognitive or emotional problems, and for children with physical disabilities. The program has been widely expanded since (Isis, Bush, Siegel, & Ventura, 2010). This successful example of school art therapy shows how this type of mental health interventions can be institutionalized. However, most creative expression mental health programs are conducted in an isolated manner, some being previously evaluated while others are not. Rigorous scientific evaluation of such programs in school settings is thus needed and the situation is urging.

Although not all school-based creative expression programs are comparable in terms of quality, some are worth mentioning here and are intended for children with specific challenges. In one school in the United Kingdom, dance was introduced into the curriculum of children with profound and multiple learning difficulties. Despite the fact that the results from the post-project evaluation were not conclusive, the impact of the project was real as the school decided to provide dance interventions to all children attending its facilities (Lamond, 2010). Eighth-grade students at-risk of not transitioning well to high school also benefited from group art therapy as
positive changes in increased coping skills and a diminution of disruptive behaviors were signalled in a publication by Spier (2010). In another research project, drama group therapy was compared with curriculum studies in terms of their efficiency in reducing behavioral and emotional problems of primary, middle and comprehensive school children. Significant effects were found in both intervention groups, though the changes in the drama intervention seemed to occur faster (McArdle et al., 2002). These projects are examples of what creative arts therapies can do in a school setting to positively impact learning, behavioral and emotional problems of school-age children.

Creative expression can also be used as a preventive tool to enhance the mental health of children in school. As a matter of fact, musical expression was employed to express emotional states and aggressive tensions in order to prevent violence from developing and/or escalating in a German school (Nöcker-Ribaupierre & Wölfl, 2010). Similarly, an after-school program for girls, *Art from the Heart*, sought to facilitate positive connections between participants (Sassen, Spencer, & Curtin, 2005). Unfortunately, both projects were offered only to a few selected students, while most children in the school could probably have benefited from these preventive interventions.

One way to reach a greater number of children with creative expression programs while not having to offer them to the entire school population is through delivering interventions to classrooms. To date, no literature review of classroom-based creative expression programs has been published. The objective of this paper was thus to identify classroom-based creative expression programs through a survey of the scientific literature and consequently to explore the effects of such interventions on the mental health of children.

**Method**

**Search**

In May 2012, a search was run through academic databases in order to identify relevant literature. Databases selected for this study were ERIC (ProQuest), FRANCIS (ProQuest), MEDLINE (Ovid), OmniFile Full Text Mega (EBSCO)(H.W. Wilson)(XML) and PsycINFO (Ovid). These are the main databases used in the field of psychology and/or education. Multi-
databases searches were completed using different combinations of the following keywords: youth, child*, ado*, kid*, “mental health”, “well-being”, school*, classroom*, arts, “art therap*”, and creativ*.

In order to select studies that would need further inspection, an examination of the detailed records (title, abstract, keywords and subjects) was done. Because this first set of results included a limited number of items, reference lists of relevant articles and books as well as thematic issues were scanned to widen the pool of results. Searches by relevant authors and related articles in the search engines were also carried out for the same reason. It is possible that relevant articles were overlooked in the process, thus this literature review does not claim to be exhaustive.

**Inclusion Criteria**

Studies that were included in this review had to meet 5 inclusion criteria: a) the main goal of the program must have been to improve the psychological well-being and/or mental health of school-aged children (5 to 17 years old); b) the interventions must have taken place within classroom settings and not only within the school at large. This excluded individualized interventions and programs that removed children from their classroom for treatment; c) a major component of the program must have been art (visual arts, drama, music, dance/movement). In the context of this literature review, sandplay was considered an art as it involves the creative construction of worlds in sandtrays and is well adapted to young children; d) the program under study must have been previously evaluated or else include an evaluation component at the time of reporting; e) studies with publication dates between January 2000 and May 2012 were included in this literature review.

**Results**

Following the above-mentioned methods, the initial search returned 499 results on May 18th 2012. Out of these results, 33 references were worth closer examination. As a result, 25 references were excluded, 7 of which owing to the fact that the intervention program was taking place in a school setting but not within classrooms. In the end, the second set of references ended
up of comprising of 8 articles which met inclusion criteria and which represented a total of 5 different programs.

Since the number of programs was small, the reference lists of the selected articles were reviewed and the search was also expanded to include books on the topic and journals' special issues (e.g. special issue in 2010 on Art therapy in the schools, *Art Therapy*, 27(2)). Searches of articles by relevant authors and related articles in the search engine also permitted to expand the list to 19 studies, which were discussing a total of 8 different programs, with interventions taking place in 9 different countries: Nepal, Palestine, Turkey, Indonesia, Israel, Uganda, Sri Lanka, U.S.A. and Canada (see Table II).

**Methodology**

With regards to methodology, 4 programs were evaluated at least once through randomized controlled trials (RCTs) and one other involved the comparison of experimental and control groups. As for the remaining 3 programs, they were all quasi-controlled studies with 2 of them that involved randomization. Furthermore, half of the 8 programs entailed a longitudinal study which also included a qualitative component.

**Objectives**

Overall, the objectives of the programs were varied. Interestingly, the programs which were set in a Western context were aimed at an immigrant and refugee population (Art and Storytelling, Sand Play, PEACE and Drama Plurality). These programs had usually a broader objective, that of enhancing the children's psychological well-being, whereas the programs which took place in non-Western countries aimed more specifically at reducing post-traumatic stress disorder (PTSD) and its related symptoms (e.g., anxiety, depression, fear…). In the context of these programs, PTSD was either caused by exposure to organised violence or to a
<table>
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<tr>
<th>Program's name</th>
<th>Authors/Reference</th>
<th>Country</th>
<th>Age</th>
<th>Inclusion criteria/particularities</th>
<th>Art modality</th>
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<tr>
<td>Overshadowing the Threat of Terror (OTT)</td>
<td>Berger, Rony, Pat-Horenczyk, R., &amp; Gelkopf, M. (2007).</td>
<td>Israel</td>
<td>7 to 11 (grade 2 to 6) (n = 142)</td>
<td>Possible PTSD: exposed to suicide bombing.</td>
<td>Art</td>
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<td>Study</td>
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<td>Lu, L., Petersen, F., Lacroix, L., &amp; Rousseau, C. (2010).</td>
<td>Canada</td>
<td>7 to 12 (m = 9.9)</td>
<td>Special education classes (autism spectrum).</td>
<td>Drama</td>
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<td>Moneta, I., &amp; Rousseau, C. (2008).</td>
<td>Immigrants in Canada</td>
<td>13-16</td>
<td>Special classes (learning and behavioural difficulties)</td>
<td>Drama</td>
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<td>Rousseau, Cécile, Singh, A., Lacroix, L., Measham, T., &amp; Jellinek, M. S. (2004).</td>
<td>8 to 12</td>
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natural disaster, like it was the case with the CBI in Turkey, which was implemented after an important earthquake. Even though the programs were oriented towards alleviating PTSD, the reduction of symptoms was done through different means, for instance by facilitating resilience, empowerment, coping, prosocial behaviors, hope or social support.

**Outcomes**

Generally, the effects of the programs were beneficial on children's mental health. The interventions seemed to significantly increase children's well-being by lowering impairment in adolescents (Plurality), improving hope scores (ES-SL, CBI-Nepal, CBI-Indonesia), especially for older children in Nepal, and by facilitating the construction of meaning in immigrant and refugee children (Art and Storytelling, Sand Play). However, despite these encouraging outcomes, mixed results were found in the literature regarding prosocial behaviors, self-esteem, coping and resiliency. Indeed, the CBI program in Nepal reported an increase in prosocial behaviors for girls whereas the PEACE program reported no significant improvement in this area. Also, another population, autistic children, showed increase verbal expression and sustained social interaction with their peers and the workshop facilitators after 10 weeks of sandplay interventions (Sand Play). With regards to effects on self-esteem, Art and Storytelling program helped in achieving higher levels of feeling of popularity and satisfaction, with noteworthy effects on boys' self-esteem, while the drama interventions of Plurality led to no significant improvement in the participants' self-esteem. Lastly, as the CBI program was aiming at improving the well-being of Palestinian youth, not all participants benefited from the program. Even though the CBI contributed to maintaining and improving the coping strengths and resiliency of girls and children aged below 12, no important gains were obtained for adolescent boys between the age of 12 and 16.

Many programs contributed to the well-being of children by decreasing emotional and behavioral problems. Participation in a program, Art and Storytelling, led to a diminution of the level of internalizing and externalizing symptoms. This diminution was not affected neither by age, gender nor fluency in host society language (the interventions were taking place in welcoming classes, with immigrant and refugee children). Also, another study, evaluating Drama Plurality, showed that participants gained a better
understanding of their emotions after participating in the drama workshops. This likely had a positive effect on emotional and behavioral problems even if it was not significant. On the other hand, a study carried out in the previous year found that there was no improvement in terms of emotional and behavioral problems for youth participating in the same program. One might hypothesize that the difference in the population under study (adolescents with learning and behavioral difficulties from a multiethnic school for the former and youth attending welcoming classes in the latter) might have caused these mixed results.

Some outcomes were more specific and showed how aggression and problem behaviors evolved (PEACE, CBI-Nepal). Studies related to both programs found that aggressive behaviors decreased with the interventions, this being particularly true for Nepalese boys. However promising these results may be, there are still mixed results in this area, with moderate reduction of SDQ\(^1\) scores in children who participated in Sand Play workshops and whose families had gone through organized violence back in their home country.

**PTSD**

Some programs were aimed specifically at reducing symptoms of distress due to exposure to traumatic events and at preventing further development of PTSD. This was especially true for the CBI, ES-SL and OTT programs. Overall, there were significant decreases of PTSD and PTSD-related symptoms for all three programs. In Sri Lanka, the ES-SL program succeeded in improving the scores for PTSD severity, functional problems, somatic complaints, depression and hope. As for the OTT program, there were also significant reductions on all measures of PTSD symptoms, somatic complaints and anxiety. In addition, the authors mentioned age and gender effects as younger children benefited more from the interventions than older ones and as boys' functional impairment improved more than girls'.

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\(^1\) The Strengths and Difficulties Questionnaire screens for the presence of symptoms in the following areas: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems and prosocial behaviors (http://www.sdqinfo.com/a0.html)
Still, studies related to the CBI program reported mixed results depending on the country in which the interventions took place. As a matter of fact, in Turkey, the authors indicated that there was a significant improvement in distress indices, more precisely with regards to aspects related to anxiety, depression, self-esteem and affect management. Whereas for Indonesian children, there were still improvement in PTSD symptoms but not for those related to PTSD (physical, depressive, anxiety and functioning symptomatology). Finally, treatment from the CBI which took place in Nepal could not influence in a positively significant manner symptoms of PTSD, anxiety and depression due to, according to the authors, the fact that the interventions were not targeted enough.

**CBI Programs**

From all the programs which were examined for this review, the CBI was the one that was evaluated the most and for which the greatest number of articles have been published (5 articles out of 19). It was also the one which was implemented and adapted for the greatest number of contexts, i.e. Nepal, Turkey, Indonesia and Palestine. The CBI structure is adaptable to ages 7 through 19 (Macy, Johnson Macy, Gross, & Brighton, 2003) and its content can be adjusted to different settings (CBI-Palestine). Because of the changing nature of this program, its main elements will be presented here (a more detailed manual is available upon request at the Center for Trauma Psychology in Boston, U.S.A. (Jordans et al., 2010)).

The CBI has been conceived in response to the earthquakes that occurred in Turkey in the fall of 1999. In collaboration with local experts, the authors devised a template for interventions which is based on 2 key assumptions: 1) following exposure to potentially traumatic events, an immediate professional, trauma-specific and short-term support is required to help lessen the psychological impact on children and; 2) nonverbal means of expression are needed to facilitate the elaboration of the traumatic experience (Macy et al., 2003). The second point is based on numerous studies that established that artistic modalities help in processing traumatic memories that survivors are unable to verbalize due to their fragmentation (Avrahami, 2005; Collie et al., 2006; Talwar, 2007).

The interventions of the CBI consist of thrice-weekly 60-minute sessions which are carried out over a span of 5 weeks (CBI-Nepal). Groups are comprised of around 15
children (CBI-Indonesia) who participate in a series of activities that are arranged under weekly themes (CBI-Turkey) such as safety and control (week 1), stabilization and awareness (week 2), trauma narrative (week 3), appraisal narrative (week 4) and future orientation & social networks (week 5) (Jordans et al., 2010, p. 820). Themes are progressive such that safety, trust and stabilization are ensured from the start in order to permit further work. The authors believe in using locally trained interventionists to run the sessions. These people may or may not have previous training in mental health, but they usually have experience in humanitarian aid. In order to be qualified to run the program, they receive a 2-week long training, the exact content of which is not described in the articles (CBI-Indonesia).

The CBI program is aiming at identifying coping resources within each child and helping them use these resources in order to facilitate healthy recovery from traumatic exposure (CBI-Palestine). The program is based on the empirically-derived practice models of cognitive-behavioral therapy (CBT) and systematic desensitization (Turkey) which were integrated to cooperative play and creative-expressive exercises such as dance, drama, music and silent storying (art) (Indonesia, Nepal). These components are organized around a structure, which is consistent from meeting to meeting, i.e. an opening ritual, a theme-centered central activity, some group cooperative play and a closing ritual (Jordans et al., 2010).

4 artistic modalities are pervading throughout the sessions: art (drawing – called by the authors “silent stories”), drama games as well as a combination of music and dance. Music and movement are useful before exercises that can recall traumatic memories in order to soothe and calm the children. Rhythm helps the children trust their environment and organize their experience (Macy et al., 2003). This is further enabled by silent stories, an example of which is given by the same authors whereby participants are asked to “tell a silent story [draw] […] about what they thought was actually happening during the threat or traumatic event” (p. 67). As for drama games, they are used to put words to feelings, to give them a concrete expression via a visual image and to experience this new learning through action. At the end of the drama exercises, the group is given time in order to process what happened (Macy et al., 2003).
Artistic expression is central to the CBI and it plays an important role in the interventions. This nonverbal mode of expression has a unique character which seems to have beneficial effects on the well-being of children who survived a traumatic event. As shown previously, classroom-based creative expression programs do have a positive impact on children’s mental health as is evidenced by many of the studies presented in this review. Still, the results suggest that there are different elements that influence the impact of these programs, and these need to be considered.

Discussion

The objective of this literature review was to explore what are the effects of classroom-based creative expression programs on the mental health of children. The publications on the topic are still scarce and more research needs to be done to ascertain the impact of this kind of programs. From the results of this study, it was found that classroom-based programs which contained a major component of creative expression could be beneficial to children participating in them. Significant improvement was found in hope, coping and resiliency, prosocial behaviors, self-esteem, impairment, emotional and behavioral problems (especially aggressive behaviors), construction of meaning and PTSD scores. However, some studies also reported no significant changes in prosocial behaviors, self-esteem, emotional and behavioral problems, coping and resiliency of adolescent boys and PTSD (for a lack of a targeted intervention). These mixed results raise important questions that would need to be addressed in further study.

Methodological Design

School-based research poses certain constraints due to institutional limitations (Rousseau, Drapeau, et al., 2005). One has to do with randomization of participants. In most schools, it is impossible to switch students from one class to the other according to which treatment group they have been allocated. In the studies examined for this review, this resulted in major differences between groups, thus making comparison difficult (Jordans et al., 2010; Rousseau et al., 2007; Rousseau, Drapeau, et al., 2005). Another hindrance refers to the fact that assessors, namely teachers, cannot be blinded to treatment status (Tol et al., 2008). With interventions taking place in classrooms, it is difficult, not to
say impossible that schoolteachers not know in which experimental group their class is. A third constraint pertains to long-term impact assessment of the intervention. Actually, follow-up studies in educational settings are laborious to organize due to the fact that students might change classes, schools, move out of the neighborhood or drop out of school, making it difficult to trace students from one assessment time to the other. As a matter of fact, several authors mentioned that the lack of a follow-up assessment was a weakness in their study (Ager et al., 2011; Berger & Gelkopf, 2009; Berger, Pat-Horenczyk, & Gelkopf, 2007; Jordans et al., 2010; Moneta & Rousseau, 2008; Rousseau et al., 2007; Rousseau, Benoit, Lacroix, & Gauthier, 2009; Shechtman & Mor, 2010). Doing research in school settings comes with several methodological challenges that one has to take into account when evaluating the impact of mental health program.

**Populational Characteristics**

While school-based settings impose certain restrictions, the influence of populational characteristics on the programs’ impact needs also to be considered as a second point. The different intervention programs took place in different contexts with children from different countries, cultures, ages, background and presenting issues (e.g. learning difficulties, autism, PTSD). This likely might have influenced the outcomes of the studies. Indeed, Tol and collaborators (2010) investigated mediators and moderators of the CBI program in Indonesia. Their findings specified some moderators that can affect the effectiveness of the treatment, but also some others that did not seem to have influenced the program’s impact on children’s well-being. On one hand, girls and children living in small households and those receiving support from adults outside of their family unit seemed to benefit more from the program. This was corroborated by Shechtman & Mor (2010) who illustrated that gender as well as social support and group cohesiveness could affect treatment’s effect, with girls and those benefiting from a greater support from their surroundings showing a decrease in anxiety scores superior to boys' or those with a lower level of social support. On the other hand, age, exposure to political violence, displacement, connectedness and other social support did not have a significant impact on the treatment’s effects according to Tol’s research.
Culture

Culture is also another characteristic of the population under study and cultural sensitivity, both of the interventions and of the methodology used to evaluate the efficacy of the programs needs to be examined closer as its quality might have a great impact on the treatment’s effect. As mentioned earlier, the reviewed programs were put in place in 9 different countries, with most of them considered in the low-income category and if taking place in high-income countries, they were aiming at a disadvantaged population. In general, the reviewed programs were sensitive to the sociocultural backgrounds of the people they were working with. In the case of the PSSA, the authors worked in collaboration with Ugandan local authorities to make sure the children who needed the most help would benefit from the program. This kind of collaboration with local experts has proven successful with former child soldiers in Liberia (Gregory & Embrey, 2009) and in Rwandan refugee camps (Scholte, van de Put, & de Jong, 2004).

Also, sensitivity to how the intervention is done by adapting its content to local contexts or population was frequently mentioned (ES-SL, CBI, Plurality, Art and Storytelling). Nevertheless, cultural adaptation of programs consists not simply in adding elements of other cultures in the interventions, like stories or songs/music, as this was the case with the PEACE program. More than adding cultural elements to the interventions, the program’s basic structure needs to be reconsidered attentively. But this does not mean that these elements from the different cultural traditions do not have their place in the interventions, quite the contrary. As Lacroix et al. mentioned, “the results of an earlier pilot project had shown, […] that a relative lack of multicultural figurines limited the children’s ability to create other-than-host-society scenes” (2007, p. 744). By adding elements from the children’s cultural background, the intervention becomes more meaningful to them.

Care needs to be taken when culturally adapting a program that was created by Westerners for Westerners (Summerfield, 2000). Even with the best of intentions, local understandings of some concepts might require a completely different intervention than the one that was originally thought of. It might be best, in cases like this, to rethink the program thoroughly in collaboration with local experts. This was the case with the ES-SL program where the authors stated that they “spent a great deal of effort exploring how emotions are
transmitted and processed, how views are expressed and how rituals regarding emotional pain, mourning and death are manifested in the Sri Lankan society” (Berger & Gelkopf, 2009, p. 369). However, even though the importance of cultural adaptations is recognised by some authors, this crucial step is not always carried out. For instance, Tol and colleagues (2008) mentioned in one of their articles that the interventions they facilitated in Indonesia could have been adapted to reflect local expressions of trauma, although no further details were given about the possible adaptation. Interestingly enough, the same authors (Jordans, Tol, Komproe, & De Jong, 2009) report in their systematic review of treatment approaches for children in war that the fact that most publications lack a detailed description of the cultural adaptation of the program was a major lacuna.

Sensitivity to who is leading the interventions is also of utmost importance when working in settings culturally different from the researcher’s. In this respect, 6 programs out of 8 took care in choosing who would be responsible to administer questionnaires, interview the children, and facilitate the interventions. Also, the use of local research assistants was widespread and when working with a heterogeneous clientele, as was the case with the Sand Play, Plurality and Art and Storytelling programs who worked with immigrants, the interventionists were coming from different cultural backgrounds. This ensured, among others, that there would not be a repetition of the clash between the dominant and nondominant cultures.

The choice of the measures used in evaluating the effects of programs taking place in non-Western contexts is tricky as most psychological instruments are built for measuring Western concepts that have recognized manifestations in the West (Betancourt, Speelman, Onyango, & Bolton, 2009; Summerfield, 2000). Translating the material to the local language might not be enough as the process of translation might modify the original meaning. In fact, more work needs to be done in order to ensure the development of culturally valid instruments (Tol et al., 2010). At different levels, authors discussed in this review took that into consideration and attempted to use culturally validated measures to screen for symptoms and to evaluate the change in these symptoms (PSSA, CBI, Sand Play, Art and Storytelling, Plurality). Others used pictorial instruments as an attempt at universal comprehension and accessibility, as the test was to be used with immigrant
children (Koshland & Wittaker, 2004). However, this might have been insufficient as the use of pictorial instruments can also be culturally biased (Rosselli & Ardila, 2003).

Even if many aspects of cultural sensitivity were taken into account by most researches, they showed a weakness with regards to how the data were interpreted. In fact, some authors mentioned the role that culture or ethnicity might have played on the outcomes, but without including these aspects in their frame of analysis (Jordans et al., 2010; Khamis, Macy, & Coignez, 2004). The only programs that showed sensitivity at this level, were those aimed at immigrants and refugee children in Canada (Sand Play, Art and Storytelling, Plurality). These studies included variables related to the migration process (e.g. reason for migration, exposure to violence, and fluency in host country official language) in the analysis of the collected data. This permitted to nuance their findings, but also to render a picture that is much closer to the reality of these people. In order to ensure that the outcomes of their studies are valid, researchers need to be sensitive not only to how they conduct research in different cultural and/or socioeconomic contexts, but also to how they interpret the data.

Creative Expression

A third important question raised by this literature review relates to how the specificity of the artistic medium used in the intervention might have impacted the treatment’s outcomes. Indeed, the programs included in this review differed in terms of the art modality and of the importance that was given to the artistic/creative expression in the interventions protocol. Most studies lacked a detailed description of the intervention within the article which did not permit a fair comparison between programs. Nevertheless, several authors specified that a manual regarding the intervention protocol was available upon request (PSSA, CBI, ES-SL, OTT) even though compliance to the manual was very difficult to determine in some instances (Ager et al., 2011). This deficiency in intervention description might be explained by the fact that the creative expression activities can be very complex and too lengthy to describe in the space provided by a scientific article. Still, in the case where a detailed description would be provided in publications, one might question the ethical aspect of facilitating an intervention without adequate training.
Very few studies exist that compare the effects of the different creative arts therapies on the mental health of people. Most of these studies compare the effects of some of the creative arts therapies alone and combined with another treatment approach, be it among others, cognitive-behavioral therapy (Pifalo, 2006, 2007), solution-focused therapy (Matto, Corcoran, & Fassler, 2003) or academic assistance (Freilich & Shechtman, 2010). Even if the distinct healing mechanisms of each art modality are difficult to identify and compare, it is possible to hypothesize that each art form might be better adapted to some treatment objectives, populations and/or contexts. In the publications reviewed for this study, some authors stated the rationale for using specific arts-based interventions, but this was not common practice. For instance, role play was used to counter powerlessness in Turkish children following an earthquake (Macy et al., 2003). In the same vein, drama activities were chosen for their transformative power and for giving young immigrants and refugees tools to try out and play with different identities (Rousseau et al., 2007). When examining the rationale of the drama interventions, both programs, even though delivered in very different contexts and with different populations, had similar objectives, that of empowering participants. Nonetheless, drama is not the only nonverbal mode of expression which is used to facilitate empowerment as is shown in other studies (Czamanski-Cohen, 2010; Gilboa, Yehuda, & Amir, 2009; Harris, 2007; Wallace-DiGarbo & Hill, 2006).

Because of their inherent characteristics, some art forms might better satisfy the needs of specific populations than others. When talking about sandplay, Lacroix and colleagues (2007) thought that this mode of expression was better adapted to young children who had not yet developed the ability to represent their inner world in a pictorial way. For these youngsters, visual arts would not have been suited to their needs. Further, it is important to consider that when working in low income countries, resources might be scarce and art materials difficult to find and very expensive to acquire. Moreover, these children might not be used to their utilisation and might require an adaptation period, which is not necessarily possible when working in emergency situations, when an immediate response is needed (Wolmer, Laor, Dedeoglu, Siev, & Yazgan, 2005). Again, having studies completed in very different contexts (e.g. following earthquakes, suicide bombing, migration, organized violence…) make a comparison between art modalities very arduous.
It is also difficult to compare the outcomes of programs that may have different objectives or different means to reach them. However, even when keeping that in mind, there are some common points to classroom-based creative expression programs that indicate a positive future for this type of intervention, especially when dealing with non-Western populations be it in low-income countries or in an immigration context. The first refers to the fact that intervention programs are conducted within classrooms. Even though some authors reviewed in this study raised a question on the universal applicability of the interventions especially when some of the children show a high level of distress (Tol et al., 2010), classroom-based universal interventions do have a considerable number of advantages. One of the first advantages pertains to the easy access to a large number of children. This can prove particularly helpful in emergency situations when a large-scale immediate intervention is needed (Macy et al., 2003). Moreover, the fact that the intervention is taking place in the classroom normalizes their experience and tends to avoid stigmatization (Wolmer et al., 2005). Also, the concrete boundaries of the classroom provide structure and limit-setting which are necessary for feeling safe to express oneself and for the healing process to take place (Gibbons, 2010). For instance, doing something together, like drumming, permits to create connections among participants and foster group cohesion and community (V. Camilleri, 2002). This enhancement of social support in schools is also particularly beneficial for those who experienced trauma (Stein et al., 2003). Finally, even though the heterogeneity found in classrooms might complicate the process of intervention, it also gives participants the opportunity to explore their differences (Rousseau, Lacroix, et al., 2003).

Another common trait to classroom-based creative expression programs is their unique approach to expression through creative arts. By means of dance, music, drama, sandplay or visual arts activities, it is possible to address problems in a non-threatening way (Conrad, Hunter, & Kriehok, 2011). Creative expression is especially good for trauma-related stress as it offers a playful approach to treatment. Actually, a number of promising studies have been published on the effects of creative arts therapies in the treatment of post-traumatic stress disorder (Abu Sway, Nashashibi, Salah, & Shweiki, 2005; Avrahami, 2005; Baker, 2006; Harris, 2007; Malchiodi, 2008; Talwar, 2007). Other treatment objectives have also been met by creative arts therapies. For instance, the
interplay between resiliency and art therapy have been investigated by Worrall and Jerry (2007). Treatment programs aiming at children and youth with emotional difficulties have also included art therapy (Freilich & Shechtman, 2010; Tibbetts & Stone, 1990). Having programs that are comprised of a creative component is thus a promising venue for intervening with children in a school context.

**Limitations**

This study presents limitations that pertain both to the definition of terms involved in this literature review and to the comparison between studies. As a matter of fact, when reviewing the publications, "mental health" and "well-being" were used as search terms. However, this terminology is broad and may have overlooked programs with specific aims, like reducing aggressive behaviors. This review might thus be biased towards more general programs, although interventions aimed at reducing PTSD were common. Another phrase, "creative expression", is also problematic. It is a wide-ranging terminology which can lead to ambiguous interpretation. Even tough the art modalities included in this review were named, other creative/expressive might have been omitted. Hence, this review does not claim to be exhaustive.

When thinking about creative expression as being a "main" component of the intervention program, this was very subjective. Indeed, none of the publications included in this review mentioned the importance given to these expressive tools in the intervention program. This is quite understandable, as creative expression is hard to quantify. Authors might have given more or less importance to creative expression as being part of a program depending on what ideas they intended to convey in their article. The comparison between programs was thus rendered more difficult because of this reason.

Other limitations to the present study have already been mentioned throughout the text with regards to the existing difficulty in comparing the interventions. In fact, the programs examined in this review took place in different contexts with different populations that varied according to age, country, culture, and presenting issue (e.g., learning and behavioral difficulties, autism, PTSD). In order to be in a position to compare programs, it would have been simpler to select programs with the same specific aim (for example, reducing PTSD symptoms) and calculate the effect sizes of studies' results.
through a comparison of Cohen's $d$. This was the case with Rolfsnes and Idsoe's study (2011) and Jordans and colleagues' systematic review of mental health care for children in war (2009).

**Conclusion**

This literature review highlighted a few classroom-based creative expression programs aimed at enhancing the well-being of children. The outcomes of the studies, although lacking in consistency and methodological rigor in some cases, are encouraging and can lead us to believe that this type of intervention might be beneficial for children’s well-being. However, one needs to be cautious with these results as some studies also reported no improvement. This draws attention to the paucity of strong evaluation of this type of programs. As more research is conducted in this field, the impact of classroom-based creative expression programs could be ascertained, thus making them valid prevention and treatment tools. In turn, education authorities should consider integrating this type of intervention in the regular school curricula as a preventive measure. To achieve this, awareness has to be raised among decision makers and mobilization of those concerned by this change, namely teachers and school professionals, needs to be successfully carried out.
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