

# Circus Mojo Evaluation Report



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## Executive Summary

### Introduction

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#### **What is Social Circus?**

Social circus is a social intervention that utilizes circus training to help at-risk children positively handle their situations (Rivard, Bourgeault, & Mercier, 2010).

Social circus promotes social rehabilitation and prevents social exclusion (Kinnunen et al., 2013) by providing social, psychological, and physical benefits.

#### **At-Risk Children and Social Circus.**

Social circus helps at-risk children and adolescents by providing them with positive life experiences (Kinnunen et al., 2013) such as social inclusion. Children and adolescents who are socially excluded are at higher risk for having a mental illness and other difficulties than non-excluded children. Social circus increases team spirit, confidence, social networks, and positively influences participants' moods by decreasing symptoms of depression (Kinnunen et al., 2013). Research has also demonstrated a relationship between team cooperation and increased social skills (Chaddock et al., 2010; Halperin et al., 2013; Kinnunen et al., 2013).

#### **Psychological Effects of Social Circus for At-Risk Children**

Identifying activities where the child can truly enjoy himself/herself and that aim to improve the child's mood, especially in at-risk children, can help alleviate mental health symptoms. Social circus has a positive impact on children's moods, while also engaging them so that they have a desire to participate, can be a vital aspect of the treatment plan. Circus programs also teach skills that can be completed independently or in a group setting, this way they can lead to further inclusion but be a skill that one can continue on his/her own.

#### **Physical Effects of Social Circus for At-Risk Children**

Sedentary behavior has been linked to poor mental health symptoms including depression and anxiety (Biddle & Asare, 2012) while physical activity has been associated with increased cognitive functioning, self-esteem, reduced anxiety, and reduced depression as well as physical health benefits (Janssen & Leblanc, 2010). Social circus is a way to incorporate physical activity into an environment that does not have exercise equipment. Circus Mojo brings equipment to the site and provides equipment for the child to utilize at home.

#### **Social Effects of Social Circus for At-Risk Children**

Children who are at-risk or who have a disability can have issues participating in group activities. An important part of improving mental health and social skills is social interaction. Social circus provides this social interaction along with a sense of achievement and worth.

Identifying problems that are a hindrance to children's success can be beneficial but motivation and positive feedback instill hope in children (Pedrotti, Edwards, & Lopez, 2008) which helps them realize their full potentials and has been linked to many positive benefits.

#### **Parental and Staff Involvement in Social Circus for At-Risk Children**

A child's family plays an integral role in the success of a treatment plan through their role in teaching skills such as perseverance and motivation (Heckman & Masterov, 2004). Children from disadvantaged environments often lack the promotion of these crucial skills. Teaching children these important coping skills has been linked to success later in life.

Parents and staff members both encounter struggles when working with children with disabilities. A program that can give parents and staff members a better idea of a child's interests and abilities can help the adults introduce new activities that are likely to engage the child. By successfully engaging children, parents and staff members are better able to balance power struggles.

## **Circus Mojo**

Circus Mojo is a social circus program located in Northern Kentucky where physical circus skills unite with creative expression. The purpose of Circus Mojo's program is to foster positive social, behavioral, and cognitive development for a group of children whom have been identified as "at-risk." Circus Mojo is a creative and innovative way to address the issues at-risk youth deal with and prevent risky behaviors.

## **Program Aims**

The Circus Mojo program aims to aid at-risk children and adolescents by: (1) growing participants' personal and social development by bolstering their self-esteem and trust in others, (2) helping participants acquire social skills through teamwork and cooperation, (3) reducing depressive symptomology through increasing self-esteem and positive social interactions, and (4) reducing anger and frustration.

## **Evaluation Design**

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Circus Mojo partnered with Jenny O'Donnell, Psy.D and C.A.R.E. Consultancy to collect independent program evaluation data for the 2015-2016 year. A pilot evaluation was conducted by O'Donnell Consulting prior to O'Donnell Consulting partnering with C.A.R.E. Consultancy. The same protocols and methodology were used for the main program evaluation. Two evaluations were conducted as a part of the Circus Mojo program evaluation by C.A.R.E. Consultancy: a main evaluation and indirect evaluations.

Participants ranged from kindergarten through twelfth graders and were from various local schools, residential facilities, and an inpatient psychiatric unit. Surveys were administered prior to the start of the Circus Mojo program (pre-survey) and upon completion of the Circus Mojo program (post-survey). Additionally, demographic data and program satisfaction data were collected. For the indirect evaluation, Circus Mojo staff administered a survey to judge the participants' social success in the program to parents and supervising staff members.

The pre- and post- program surveys measured depression symptom severity (Kutcher Adolescent Depression Scale; KADS), social self-efficacy (Self-Efficacy Questionnaire for Children; SEQ), Conflict Resolution (Individual Protective Factors Index; IPFI), Optimism (The Life Orientation Test-Revised; LOT-R), Perceived Social Support (Multidimensional Scale of Perceived Social Support; MSPSS), and Self-Esteem (Rosenberg Self-Esteem Scale; RSES).

Statistical analyses were run to determine whether or not there were changes in the participants' scores from the beginning of the Circus Mojo program to after the Circus Mojo program.

## **Evaluation Findings**

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### **Main Evaluation**

Participants' levels of peer social support ( $t(60) = 2.04, p < .05$ ), their self-esteem ( $t(49) = 3.75, p < .001$ ), and ability to deal with cooperation skills ( $t(60) = -2.46, p < 0.05$ ) improved from the beginning to the end of the Circus Mojo program.

Statistically significant differences were not found for the Depression, Social Self-Efficacy, Self-Control, Optimism, or Suicidality. Though these scores did improve from the beginning to the end of the program, the changes were not statistically significant.

Circus Mojo program satisfaction data was collected to evaluate participants' levels of satisfaction with the program. Overall participants were satisfied or very satisfied with the Circus Mojo program and rated that they felt comfortable with the program, felt like they were a part of the program, felt committed to the program, supported in the program, and accepted at the Circus Mojo program.

For the indirect evaluation, parents and staff members rated that participants generally felt excitement about being involved in the Circus Mojo program, showed increased physical activity and body control, improved group dynamics and cooperation, and better family dynamics as a result of the Circus Mojo program. Additionally, parents and staff members felt that the circus instructors were good leaders, gave clear directions, and were easy to work with.

### **Indirect Evaluation**

Results indicated that the respondents either agreed or strongly agreed that the Circus Mojo program had beneficial effects on the child's psychological, social, and physical well-being, family dynamics, and parent/staff to child interactions. According to the respondents, Circus Mojo provided good instruction during the program, ensuring that the children worked together cohesively and performed appropriately difficult tasks by building skills over the course of the program. Parents and staff members agreed that social circus provides a myriad of positive outcomes and that the Circus Mojo staff played an integral role in ensuring that the children experienced these positive outcomes.

### **Limitations**

One problem when using self-report measures is that they are not always the most reliable method of obtaining information. The younger children had some difficulties understanding survey content and therefore may not have answered all questions appropriately. However, these measures were chosen because they obtain valuable information on the children's views.

Additionally, the program was not standardized across all classes. This is due to the vision of Circus Mojo, which is to ensure that all participants learn new skills and enjoy themselves. Some of the participants had already taken part in a Circus Mojo camp, which means they would have had prior exposure to the Circus Mojo techniques. However, results revealed no differences between children who had previously participated in Circus Mojo and those who had not. Additionally, for the indirect evaluation, staff and parent reports are not the most sufficient means of understanding a child's view, however, these methods had to be utilized to protect the children's confidentiality.

Finally, this program took place over the course of several weeks which adds potential for other factors to influence the participants' scores. The change, or lack thereof, in scores from prior to the start of the Circus Mojo program to the conclusion of the program could be influenced by factors outside of the one-hour Circus Mojo program.

## Introduction

### What is Social Circus?

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Social circus is the official name of the innovative social intervention approach that utilizes circus training to help at-risk children positively cope with their situations and has been widely utilized in parts of Europe (Rivard, Bourgeault, & Mercier, 2010). The Effective Circus Group in Finland completed one of the largest research studies to evaluate the effectiveness of social circus (Kinnunen, et al., 2013). The researchers ran multiple social circus classes for children and measured multiple variables during the classes, such as social exclusion, social rehabilitation, and mental health.

Kinnunen et al. (2013)'s research demonstrated that social circus promotes social rehabilitation and prevents social exclusion. They defined social exclusion as people who are either unemployed or are in school but lack the means to achieve post-secondary education. The researchers also interviewed circus staff members and participants and found social, psychological, and physical benefits of participating in social circus. People from all age groups, including those with disabilities, can actively participate in social circus activities. Social circus activities require teamwork and cooperation in order to be successfully completed. The social circus environment provides a safe-zone where participants can fail to complete a task without feeling inferior; this is in part due to the fact that circus skills are learned, so all children, regardless of physical or mental capability, start at the same level and acquire skills together. Social circus also requires physical exercise, however these exercises can be modified for people who have physical and/or mental disabilities (Kinnunen et al., 2013).

### At-Risk Children and Social Circus

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Social circus can help at-risk children and adolescents who have the motivation to learn by providing them with positive life experiences (Kinnunen et al., 2013). One such positive experience is social inclusion. Children, adolescents, and adults who lack the social or cognitive skills needed for employment, or to attend a post-secondary institution, tend to become socially excluded. Individuals who are socially excluded are at higher risk for having a mental illness and lower socioeconomic status than non-excluded children. The researchers found that social circus increased team spirit, built confidence, and created a social network among previously socially excluded youth. Social circus has also been shown to positively influence participants' moods; when a participant successfully completed a task in the circus his/her mood was positively elevated and this elevated mood lasted even after the social circus class had ended (Kinnunen et al., 2013).

Research has demonstrated a relationship between increased social skills and physical exercise involving team cooperation (Chaddock et al., 2010; Halperin et al., 2013; Kinnunen et al., 2013). Because social circus focuses on both cooperative teamwork and physical exercise, individuals participating in social circus should see an increase in social skills once the social circus program is complete.

Social circus can increase a child's overall mood, therefore reducing depressive symptomology (Kinnunen et al., 2013). These elevations in mood can be due to several factors, including increased physical exercise, increasing the amount of positive social interactions, and increasing self-esteem.

### **Psychological Effects of Social Circus for At-Risk Children**

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Identifying activities where a child can truly enjoy himself/herself and that aim to improve the child's mood, especially in at-risk children, can help alleviate mental health symptoms. Mental health treatment adherence is a prevalent issue that can lead to relapse and poor health outcomes (Kauppi, Hätönen, Adams, & Välimäki, 2015). Finding a program like social circus that has a positive impact on a child's mood, while also engaging that child so that he or she has a desire to participate, can be a vital aspect of his/her treatment plan. Further, through circus skill teaching programs, the child will learn tasks that he or she can do independently or in a group that likewise bring him or her satisfaction and a sense of involvement. This type of program also teaches the child a potential new vocational skill or hobby (such as juggling) that he or she can continue on his or her own, outside of the program.

### **Physical Effects of Social Circus for At-Risk Children**

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Sedentary behavior has been linked to exacerbation of poor mental health symptoms including depression and anxiety (Biddle & Asare, 2012). Routine physical activity has been associated with increased cognitive functioning (including increased academic performance), improvements in self-esteem, reduced anxiety, and reduced depression. Daily physical activity in children has also been positively correlated with a variety of physical health benefits, including better bone density, lower obesity rates, and healthy blood pressure levels than in children who did not exercise daily (Janssen & Leblanc, 2010).

Social circus is a way to incorporate physical activity in an environment that may not have exercise equipment or sufficient space to get cardio activity such as running. Circus Mojo brings equipment, such as a tight-rope and large globe, to the site and provides additional equipment, such as juggling balls and feathers, for the child to utilize at home. Social circus not only improves children's moods and amounts of exercise but it also promotes an enthusiasm in children to participate in activities without prompting from adults or without the need for organized activities. For these reasons, this type of program is important to incorporate as an intervention into treatment plans that aim to decrease mental health symptom severity and foster well-child coping mechanisms for anxiety and depression.

### **Social Effects of Social Circus for At-Risk Children**

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Children who are at-risk or who have a disability can have issues participating in group activities. An important part of improving mental health, as well as developing pro-social skills, is social interaction.

Identifying problems that are a hindrance to children's success can be beneficial; however, research reveals that motivation and positive feedback are more successful tactics as they instill hope in children (Pedrotti, Edwards, & Lopez, 2008). Instilling hope in children, through encouragement and positive feedback, can help them realize their full potentials and has been linked to many positive benefits. Among these benefits are increased academic success, better athletic performance, improved physical health, and positive psychological adjustment. Positive psychological adjustment can assist children in feeling more comfortable in social settings and thus promote social interactions.

### **Parental and Staff Involvement in Social Circus for At-Risk Children**

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A child's family plays an integral role in the success of a treatment plan through their role in teaching skills such as perseverance and motivation (Heckman & Masterov, 2004). Children from disadvantaged environments often lack the promotion of these crucial skills. Programs that target children in these environments can help teach children and caretakers/families these skills that they can later utilize at

home. Teaching children these important coping skills has been linked to success later in life, including reduced involvement in crime and improved labor market outcomes. By developing and practicing skills such as perseverance and self-motivation outside of, but also in conjunction with a clinical or school setting, children and adolescents can feel comfortable utilizing these skills in a variety of settings on their own.

Parents and staff members both encounter struggles when working with children and adolescents with disabilities. They balance attending to the individual's needs while helping him/her learn social skills and daily living activities. A program that can give parents and staff members a better idea of a child's interests and abilities can help the caretakers introduce new activities that are likely to engage the child or adolescent. By successfully engaging the youth, parents and staff members are better able to balance the power struggles inherent to those relationships when caring for the child or adolescent.

### **Program Description**

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Circus Mojo is a youth circus arts program where physical skills such as juggling, balancing, and stilt walking coalesce with creative expression such as improvisation, character development, and group performance. In this multidimensional program, which combines artistry with athleticism, students conquer doubt and learn a varied skill set in a collaborative, non-competitive environment. The Circus Mojo program aims to teach and present the circus arts with a fresh perspective and encourage everyone to express their unique mojo—talent, zeal, confidence, drive, and spirit.

The purpose of Circus Mojo's program is to foster positive social, behavioral and cognitive development for children and adolescents whom have been identified as "at-risk," due to socioeconomic status, single-parent homes, and/or a history of truancy and disruptive classroom behavior at their schools. Youth development programs have been shown to improve quality of life of children and adolescents who are considered at-risk, and increase their chances of leading successful adolescence and adult lives (Sanders, Munford, Thimasaen-Anwar, Leibenberg, & Ungar, 2015). A developmental circus arts program is a creative and innovative way to address these issues and prevent risky behaviors such as underage drinking, tobacco use, sexual activity, and dropping out of school. They have also been shown to improve the likelihood of attending college, gaining employment, and becoming leaders amongst their peers. Circus Mojo intends to empower children and provide a positive environment that promotes healthy relationships and fosters self-efficacy.

The process of learning circus arts requires a high level of cooperation and teamwork. Respect and trust grow daily as youth work together learning new performance skills. As skill and confidence build, youth take pride in their accomplishments, developing both positive group and individual identity. For the majority of class time, participants are split into groups where they learn skills with qualified circus professionals at rotating stations: balance (stilts, tightrope, walking on a rolling ball, and balancing items on the hand and chin), acrobatics, juggling, and clowning (pantomime exercises used to create original routines). At these stations, instructors demonstrate principles, lend helpful advice, and spot participants as they experiment and learn a variety of skills.

### **Program Aims**

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Research has demonstrated that social circus can increase a child's overall mood, therefore reducing depressive symptomology and anger (Kinnunen et al., 2013). These elevations in mood can be due to several factors, including increasing exercise, increasing positive social interactions, and increasing self-esteem.

Research has demonstrated relationships between physical exercise involving team cooperation and increased social skills (Chaddock et al., 2010; Halperin et al., 2013; Kinnunen et al., 2013). Because social circus focuses on both cooperative teamwork and physical exercises, individuals participating in social circus should see an increase in social skills once the Circus Mojo program is complete.



To grow participants' personal and social development by bolstering their self-esteem and trust in others



To help participants acquire social skills through teamwork and cooperation



To reduce depressive symptomology through increasing self-esteem and good social interactions.



To reduce anger and frustration

## Evaluation Design

### Protocol Development

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Circus Mojo initially collaborated with Dr. Jenny O'Donnell from O'Donnell Consulting and Assessment when a judge ordered a group of individuals from the area to attend a social circus program. Circus Mojo provided the social circus program to the children by order of the local judge. During this program, Dr. O'Donnell created and conducted a program evaluation and provided the results to the judge. After that experience, Paul Miller from Circus Mojo introduced Dr. O'Donnell to Dr. Jenna Middlebrooks and they created an updated social circus evaluation protocol. That protocol was used in a pilot study in 2014 conducted by O'Donnell Consulting and Assessment. A main evaluation was conducted by C.A.R.E. Consultancy in the 2015-2016 academic year that was based on the pilot study which was run with 37 participants. Circus Mojo also used a survey created by The Effective Circus Group in Finland to indirectly measure the effectiveness of the social circus program on the at-risk youth by having parents, nurses, and group leaders complete the survey during the 2015-2016 academic year. Circus Mojo wants to utilize the data to demonstrate the mental health benefits of social circus and hopefully begin billing his services through Medicare.

### Participants

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#### Main Evaluation

Participants consisted of 125 children from grades Kindergarten through 12. Participant ages ranged from 5 to 17 with an average age of 12 years old. Parents, nursing staff, and group leaders also

completed surveys evaluating the perceived effects Circus Mojo had on the youth. The participants were surveyed from a variety of locations, including a children's residential facility, a Montessori school, a local community high school, and an inpatient hospital setting. All youth were surveyed in the Midwest. The majority of the youth surveyed are classified as "at-risk" based on the school or facility they attended (N = 105).

### **Indirect Evaluation**

Children participated in the Circus Mojo program through two local<sup>1</sup> schools, one local inpatient psychiatric hospital, and one residential home. Sixty surveys were collected and 48 adults completed the entire survey. Thirty-three of the surveys were completed by a staff member of the inpatient psychiatric hospital and three were completed by staff members at the residential home; the staff members completed one survey per group of children who participated. The children consisted of both boys and girls and ages ranged from 5 years to 17 years old.

### **Procedure**

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*Note: The procedure was the same for the indirect evaluation except the hospital staff administered the surveys for confidentiality purposes.*

### **Main Evaluation**

When a facility contacted Circus Mojo (CM) to participate in the program, the co-founders of C.A.R.E. Consultancy explained the evaluation portion of the program and contacted the participating school administrators to obtain institutional consent prior to the first CM visit. Once institutional consent was obtained, the evaluation team collaborated with administrators to collect parental/guardian consent for each participant. C.A.R.E. Consultancy then worked with CM to determine the best time to administer the pre- and post-visit surveys, ensuring the pre-survey would be administered before the start of the first class and the post-survey administered at the end of the last class.

Some schools required that the teachers administer the surveys to the students, in all other cases C.A.R.E. Consultancy staff, with assistance from Circus Mojo staff, administered the surveys to the students who participated in the Circus Mojo program. C.A.R.E. Consultancy then collected, entered, and analyzed all data.

### **Indirect Evaluation**

Circus Mojo received permission to utilize the survey created by the Effective Circus group in Finland to assess the effects of Circus Mojo utilizing data from parents, guardians, and staff members of the participating children. Circus Mojo collected data from parents, psychiatric hospital staff members, and staff members from a residential home who answered questions about child participation in a Circus Mojo program or class in order to indirectly evaluate the psychological, physical, and social effects of Circus Mojo on the children.

Children and adolescent participated in the Circus Mojo program through two local schools, one local inpatient psychiatric hospital, and one residential home. Circus Mojo has a standing contract with a local hospital to come to the hospital once a week and work with the children and adolescents in the inpatient facility. Hospital staff members were present during each session. Circus Mojo worked with the youth using their social circus program and after the program was complete, CM asked the staff members to complete the survey created by the Effective Circus group in Finland. In exchange for

completing the survey, each staff member received a \$5 gift card to Starbucks. Circus Mojo also had the parents and guardians of participants from the local schools complete the survey after the social circus program ended.

## Circus Mojo Program

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The children and adolescents who participated in the Circus Mojo program learned several different circus skills. One skill taught was juggling; juggling has been shown to help foster concentration and attention (Dessing et al., 2012). Participants also learned how to balance a large feather on their hands, which has been shown to increase mindfulness (Perepletchikova et al., 2011) and uses some of the concentration skills learned in juggling. As the children progressed, they learned to juggle with a partner, which promotes teamwork and cooperation. The children also learned to walk on a globe and use a Diablo, a specific circus tool. At the end of the program the children put on a circus show for the parents and teachers utilizing the skills they learned. The goal of the performance is for the children to work cooperatively in order to design and execute the show and face any performance anxiety they may have. Focus is an integral part of the end of program performance crucial to making sure the children perform their parts successfully.

## Measures

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### Depression

The Kutcher Adolescent Depression Scale (KADS; LeBlanc, Almudevar, Brooks, & Kutcher, 2002) is a self-report measure designed to identify adolescents who show symptoms of depression and monitor the severity of present symptoms over time. The KADS was developed to be a quickly administered and valid diagnostic and evaluative depression scale for individuals ages 12 to 18. The original KADS included 16 multiple-choice items that capture the core experiences of depression and used standard and colloquial terminology. The answers were formatted to capture the frequency of symptoms by having the individual endorse one of four options: hardly ever, much of the time, most of the time, or all of the time. LeBlanc et al. (2002) validated the KADS in a school-based sample of adolescents, ages 12 to 20, (seventh grade to twelfth). Over time, the researchers also created short versions of the KADS.

The researchers compared the diagnostic validity of the full-length KADS, short versions of the KADS, and the commonly used Beck Depression Inventory (BDI; Beck, Ward, & Mendelson, 1961) to the diagnostic criteria for major depressive episode. Results indicated that a six-item subscale of the KADS was as effective as the BDI to screen for major depressive episodes in school-based adolescents. Brooks, Krulewicz, and Kutcher (2003) followed this by developing the 11-item version using items specifically selected for sensitivity to change in depression symptom severity. In an eight-week study of the KADS, Brooks et al. (2003) found that all three versions of the KADS demonstrated good internal consistency ( $\alpha = .80-.84$ ). The 11-item KADS matched the performance of the full-length and six-item versions in terms of concurrent validity, when correlated with other observer-rated instruments, such as the Children's Depression Rating Scale-Revised (CDRS-R; Poznanski, Freeman, & Mokros, 1985;  $r = .50-.55$ ), which were significant, though not strong. The authors concluded that the KADS has the appropriate properties to operate as an effective evaluative scale in similar clinical samples. For the purpose of the present evaluation, the six-item version was used to keep the measure as brief and convenient as possible for the young participants without losing validity.

### Self-Efficacy

The Self-Efficacy Questionnaire for Children (SEQ-C; Muris, 2001) was developed to measure three domains of self-efficacy: social, academic, and emotional. The measure consists of 24 items (e.g., "How

well can you have a chat with an unfamiliar person?") scored on a five-point Likert scale ranging from 1 (*not at all*) to 5 (*very well*). Muris (2001) determined that the measure has sufficient internal consistency when comparing the total self-efficacy score ( $\alpha = .88$ ) to the .85-.88 for subscale scores ( $\alpha = .85 - .88$ ). The original measure was normed on a population of adolescents ages 14 to 17. Scores were correlated with a measure of depression ( $F(1, 32) = 33.1, p < .001$ ) in a theoretically meaningful way, where the lower the SEQ-C scores the higher the level of depression. For the purpose of the present evaluation, only the social self-efficacy subscale—the perceived capability to deal with social challenges and relationships with peers—was pertinent, and therefore administered.

### **Conflict Resolution**

The Individual Protective Factors Index (IPFI; Springer & Phillips, 1992) is a 71-item scale that was developed to assess protective factors that are conducive to resiliency on children ages 14 to 18 (eighth grade twelfth grade). The scale contains 10 subscales and has good overall internal consistency ( $\alpha = .93$ ). In the current study, only the conflict resolution scale was used. The conflict resolution subscale consists of 12-items split between two conflict resolution skills: cooperation and self-control. The two categories each contain six items answered on a four-point Likert scale ranging from *NO!* to *YES!*. The cooperation subscale ( $\alpha = .70$ ) measures the degree to which the child professes to enjoy helping others while the self-control subscale ( $\alpha = .68$ ) measures if the child handles his/her anger in an appropriate manner. The items are brief (e.g., "I get mad easily") and intended to be easily comprehensible for middle school and high school students, on whom it was validated. The IPFI has limited validity research as of yet. The full 12-item conflict resolution section was used in this evaluation.

### **Optimism**

The Life Orientation Test-Revised (LOT-R; Scheier, Carver, & Bridges, 1994) was developed to evaluate differences in perceived generalized optimism (positive outcomes) versus pessimism (negative outcomes). The measure was originally studied with college-aged populations and adult cardiac patients. The LOT-R is a 10-item measure consisting of brief questions such as "In uncertain times, I usually expect the best." The items are answered on a five-point Likert scale ranging from I agree a lot to I disagree a lot. According to the research conducted by Scheier et. al (1994), the LOT-R possesses acceptable internal consistency ( $\alpha = .78$ ) and convergent and discriminant validity ( $r = .48$  to  $.50$  on similar measures and  $-.36$  to  $-.53$  on measures of neuroticism and anxiety), is brief, and easy to administer. For the purpose of the present evaluation, only the four items most relevant to determining optimism versus pessimism were retained to keep the assessment brief and more easily understood by younger participants. The items retained are "In uncertain times, I usually expect the best," "I rarely count on good things happening to me," "I'm always optimistic about my future," and "I hardly ever expect things to go my way." The scale was also changed to a four-point scale ranging from *strongly disagree* to *strongly agree* for clarity and to be consistent with other measures administered.

### **Perceived Social Support**

The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988) was designed to assess the perceived adequacy of social support from family, friends, and significant others. It is a brief self-report measure that consists of 12 items (e.g., "I can talk about my problems with my family") that are rated on a seven-point Likert scale ranging from *very strongly disagree* to *very strongly agree*. The items are added up and averaged to obtain a mean score. Zimet et al. (1988) found the instrument to be psychometrically sound ( $\alpha = .88$ ) in both its initial study and over a two to three month follow-up period. Zimet, Powell, Farley, Werkman, & Berkoff, (1990) conducted additional

research with three participant groups including pregnant women, adolescents, and pediatric residents revealed that the MSPSS was found to have high internal reliability across groups in multiple studies, strong factorial validity for the three-subcales, and strong support for the validity of both the Family and the Significant Other subscales. For this evaluation, four questions were used (“There is someone who is around when I am in need,” “There is someone with whom I can share my joys and sorrows,” “I have someone who is a real source of comfort to me,” and “There is someone in my life who cares about my feelings”) and the scale was changed to a five-point Likert scale, ranging from *Rarely or Never* to *Always*.

### **Self-Esteem**

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a 10-item, self-report measure of current feelings of self-esteem. The items (e.g., “I take a positive attitude toward myself”) are rated on a four-point Likert scale, ranging from *strongly agree* to *strongly disagree*, with a higher score denoting higher levels of self-esteem. The scale was originally normed with a large sample of high-school juniors and seniors from schools in New York State. The Rosenberg Self-Esteem Scale is a commonly used measure of self-esteem and has been found to be both a reliable and valid ( $\alpha = .90$ ) global measure of self-esteem (Blascovich & Tomaka, 1991). The full 10-item scale was used in this evaluation.

### **Effective Circus Survey (Indirect Evaluation only)**

The survey used was created for the Effective Circus Group evaluation and assessed a variety of areas, including the psychological, physical, and social effects of the circus program. Additionally, it assessed the circus instructor, the views from the parents, and overall improvements in child care<sup>2</sup>. Each answer to the questions on the survey was presented on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The surveys were then broken down into six categories: psychological effects, physical effects, social effects, circus instruction, the views of the parents, and parent/staff to child interactions.

## **Data Analysis**

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All quantitative analyses were performed using SPSS. Qualitative data were used to gather a summative view of student satisfaction and engagement with the program and program content.

Analyses were run to determine whether or not there were changes in the participants’ scores from the beginning of the Circus Mojo program to the end of the program. A series of *t*-tests were run to determine changes in pre- and post-program self-report scores on measures listed above.

## Evaluation Findings

### Results

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#### Main Evaluation

Depression, social self-efficacy, conflict resolution, perceived social support, self-esteem, and optimism were all measured using pre- and post-program surveys. The changes in the scores from before the start of the program to the end of the program were analyzed and the results are explained below.

#### Statistically Significant Results

##### *Peer Social Support*

The Multidimensional Scale of Perceived Social Support was used to assess the perceived social support from family, friends, and significant others. From pre- to post- survey, the average score on the social self-efficacy content questions decreased from 17.23 to 16.41. A lower post-program score on the Multidimensional Scale of Perceived Social Support indicates higher levels of social self-efficacy at the end of the Circus Mojo program than at the beginning ( $t(60) = 2.04, p < .05$ ).

##### *Self-Esteem*

The Rosenberg Self Esteem Scale was used to measure current levels of self-esteem prior to the start of the Circus Mojo program and again at the end of the program. The average score on the self-esteem content questions decreased from 30.56 at the start of the Circus Mojo program to 28.22 at the end of the program. A lower post-program score on the Rosenberg Self-Esteem Scale indicated lower levels of self-esteem. This result indicates that feelings of self-esteem decreased at the end of the program when compared to the beginning of the program ( $t(49) = 3.75, p < .001$ ).

##### *Conflict Resolution*

The Individual Protective Factors Index Scale was used to measure conflict-resolution skills, namely changes in cooperation and self-control scores.

###### *Cooperation*

A higher score on the scale indicates a higher level of participants desire to help/cooperate with those around them. The average pre-test score was 20.30, and the post-test score average was 21.19. A paired-samples  $t$ -test comparing paired scores from the pre- and post-surveys was significant for positive change ( $t(60) = -2.46, p < 0.05$ ). The children and adolescents' desire to help those around them increased significantly over the course of the program.

#### Non-Statistically Significant Results

##### *Depression*

The Kutcher Adolescent Depression Scale (KADS) was used to measure change in depression scores in participants prior to the start of the Circus Mojo program to the end of the program. A higher score on the KADS at the conclusion of the program indicates a lower depression score. The KADS scores were higher at the conclusion of the program ( $M = 21.15$ ) than at the beginning of the program ( $M = 20.42$ ). Paired-samples  $t$ -tests were used to analyze the difference between pre- and post-evaluation results. The measure of depression was not statistically significant ( $t(51) = -0.89, p = 0.38$ ) from pre-program to post-program but the score did increase from pre-program to post-program. This means that although the severity of symptoms of depression was not significantly reduced at the end of the Circus Mojo program compared with prior to the start of the program the severity of depression symptoms decreased.

### ***Social Self-Efficacy***

From pre- to post- survey, the average score on the social self-efficacy content questions increased from 29.63 to 30.36. A higher score on the Self-Efficacy Questionnaire for Children indicates higher levels of social self-efficacy. The participants' quality of relationships with their peers and their ability to deal with social challenges were better at the end of the program than at the beginning ( $t(60) = -0.86, p = 0.39$ ), though this change was not statistically significant.

### ***Conflict Resolution***

The Individual Protective Factors Index Scale was used to measure conflict-resolution skills, namely changes in cooperation and self-control scores.

#### ***Self-Control***

A lower score on the scale indicates a higher level of adaptive conflict resolution skills. The pre-test score average was 11.56 and the post-test average was 11.48. The self-control category of the conflict resolution subscale was not statistically significant ( $t(61) = 0.17, p = 0.86$ ). Children and adolescents were only slightly better able to manage their anger and aggression in a healthy and appropriate manner at the end of the program when compared to the beginning of the program.

### ***Optimism***

The Life Orientation Test-Revised was used to evaluate differences in perceived positive outcomes versus negative outcomes. Levels of optimism were relatively unchanged from pre-program ( $M = 11.67$ ) to post-program ( $M = 11.64$ ) indicating that there was not a statistically significant change in perceived positive versus negative outcomes from pre-program to post-program ( $t(60) = 0.10, p = 0.92$ ).

### ***Suicidality***

Question 6 on the KADS was used to assess changed in suicidal thoughts from the beginning of the Circus Mojo program to the end of the Circus Mojo program. Suicidal thoughts decreased slightly at the end of the program ( $M = 3.79$ ) when compared to the beginning of the program ( $M = 3.88$ ). The change was not significant ( $t(51) = 1.04, p = 0.38$ ) however, it should be noted that suicidal thoughts were only present in one of the participants at the beginning and end of the program.

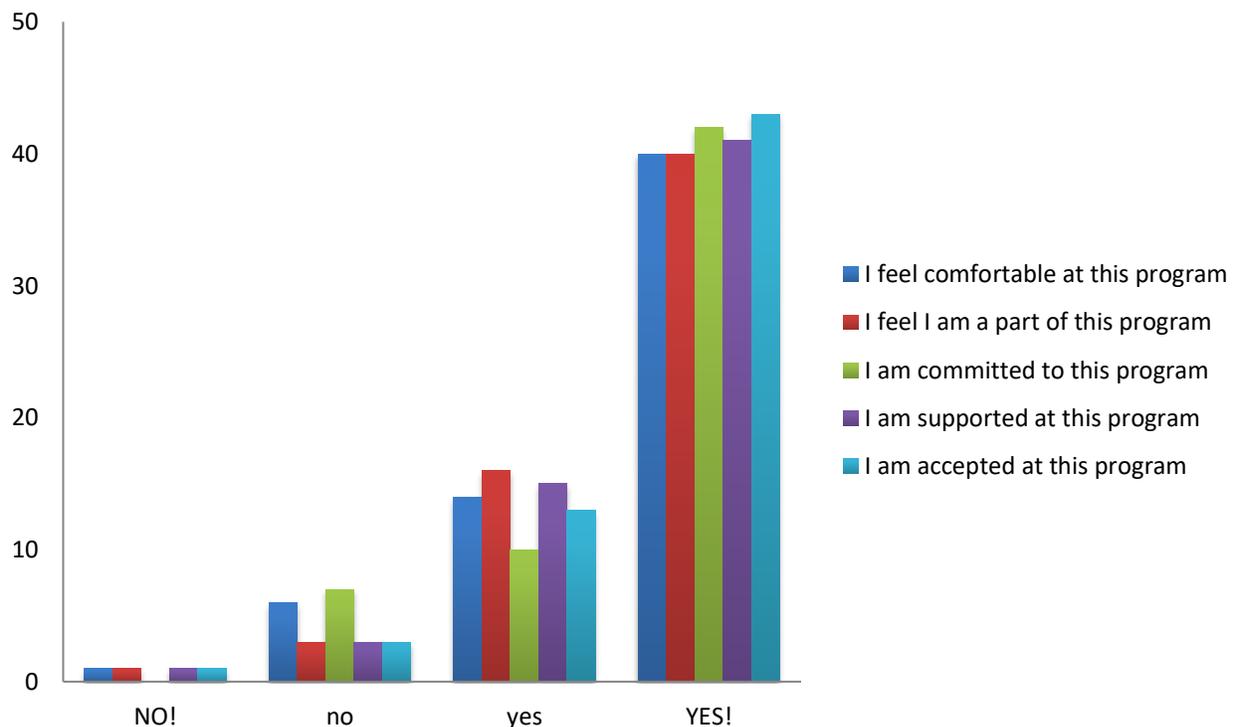
## **Circus Mojo Program Satisfaction Results**

### ***Satisfaction with the Circus Mojo Program***

On a scale of one (*NO!*) to four (*YES!*), participants were asked to rank their satisfaction with the Circus Mojo program. Sixty-one students responded to the questions. The participants' answers are depicted in the table and graph below.

*Note: Some participants did not answer every satisfaction question.*

Questions	Mean	Percent who answered "Yes" or "YES!"
<b>I feel comfortable at this program</b>	3.52	88.6%
<b>I feel I am a part of this program</b>	3.58	93.4%
<b>I am committed to this program</b>	3.59	88.1%
<b>I am supported at this program</b>	3.60	93.3%
<b>I am accepted at this program</b>	3.63	93.4%



Overall, participants who responded were satisfied or very satisfied with the Circus Mojo program and felt comfortable, committed, supported, accepted, and a part of the Circus Mojo program.

### Indirect Evaluation

The results of each section are outlined below. An average/mean score (depicted  $M$ ) of 4.50 to 5.00 indicates that the parent or staff **strongly agreed** with the statement as it referred to the child. A mean score of 3.50 to 4.49 indicates that the parent or staff **agreed** with the statement as it referred to the child. It is important to note that, on average, no parent or staff member rated **neutral**, **disagree**, or **strongly disagree** with any of the statements.

#### ***Psychological Effects***

The measures of psychological effects assessed the child's emotional state and excitement about being involved in the circus, as well as the child's self-expression and his/her ability to concentrate. The responses (based on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*]) indicated:

- The child enjoys him/herself in the circus ( $M = 4.75$ )
- Circus is uplifting ( $M = 4.60$ )
- The child is excited about the circus ( $M = 4.50$ )
- Circus has encouraged the child to express himself/herself ( $M = 4.34$ )
- Circus has strengthened the child's ability to concentrate ( $M = 4.08$ )

#### ***Physical Effects***

The survey assessed the physical effects of the circus program including the child's physical activity and body control. The results (based on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*]) indicated:

- The child has learned new skills in circus ( $M = 4.56$ )
- Circus has increased the child's physical activity ( $M = 4.19$ )
- The child's body control has improved ( $M = 4.00$ )

### **Social Effects**

The survey measured the social effects of the program, mainly focusing on group dynamics and cooperation. The results, rated on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*], indicated:

- The child receives good feedback in circus ( $M = 4.66$ )
- The child receives attention in the circus group ( $M = 4.53$ )
- The child fits in well with his/her circus group ( $M = 4.54$ )
- The circus group has a good time together in the circus ( $M = 4.49$ )
- The child has a good relationship with the other members in his/her group ( $M = 4.32$ )

### **The Views from the Parents**

The parents answered surveys related to how the child's participation in the circus has affected the entire family dynamic. The results, rated on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*], indicated:

- In my opinion, circus is a good hobby for a child/young person ( $M = 4.58$ )
- Our family thinks that the circus is a great thing ( $M = 4.48$ )
- Our family is interested in the child's circus activity ( $M = 4.42$ )
- Circus has increased the time we spend together as a family ( $M = 3.95$ )

### **Parent/Staff to Child Interaction**

Parents and staff members rated three statements regarding their sense of interacting with the child. The results, rated on a 5-point Likert scale [1 = strongly disagree and 5 = *strongly agree*], indicated:

- I have a better idea of the child's abilities due to circus ( $M = 4.04$ )
- I find that child care has gotten easier due to the circus activity ( $M = 3.80$ )
- I have gotten great ideas for things I can do with the child ( $M = 3.94$ )

### **Circus Instructor**

When asked to rate the circus instructor on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*], all adults strongly agreed that:

- The circus instructor is a good leader for the group ( $M = 4.72$ )
- The circus instructor gives clear directions ( $M = 4.69$ )
- The cooperation with the circus instructor has been effortless ( $M = 4.37$ )

See Appendix A for full results.

## **Limitations**

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Self-report measures are not the most reliable method of obtaining information from participants. Although a member of the Circus Mojo staff or the C.A.R.E. Consultancy team helped administer the majority of the surveys to assist when a participant had difficulties understanding survey content, there is no guarantee that children answered the questions in the appropriate manner. Additionally, children may be more hesitant to answer honestly in the presence of an adult staff member. We tried to prevent

hesitancy in responding by ensuring all participants that the surveys were anonymous and that neither Circus Mojo staff nor teachers would know which responses belonged to which child. It was necessary to have staff present to assist in understanding survey content due to the various age groups of the participants. Namely, the kindergarteners and first-graders needed more assistance in understanding survey content and circling their chosen answers. Despite the problems that arise with self-report measures, these measures are the best in obtaining valuable information on the child's view of his/her social skills and depression levels, and for this reason, self-report measures were utilized. Additionally, self-report measures are able to be distributed to large amounts of participants relatively quickly which allowed for valuable collection of data without taking away from valuable program time.

Another limitation is the structure of the Circus Mojo program. Circus Mojo is dedicated to ensuring all participants enjoy their time with the circus and learn new skills, regardless of their abilities when starting the program. This means that no standardized program protocol was administered to each group of participants. This approach to programming is the best way to engage all participants, and therefore was not altered to be standardized for the program evaluation.

Some students had already participated in Circus Mojo camps before participating in the classes that coincided with the program evaluation. This would have influenced the programming provided by the Circus Mojo staff since they would have been able to teach more advanced skills to the students with prior circus exposure. The students also would have already had exposure to some skills, such as balancing a feather, and that could have influenced their scores on the self-report measures administered as part of the evaluation.

For the indirect evaluation, having someone other than the respondent complete the survey makes it hard to understand the child's view. However, having someone else complete the survey eliminates the chance of bias reporting and the desire to look good to others that exists in self-reporting. This was the only option of data administration due to the confidentiality of the patients and therefore was the one utilized.

Finally, this program took place over the course of several weeks. This adds in the potential for confounding variables to influence students' scores on the survey. The change, or lack thereof, in scores from before Circus Mojo to after could be influenced by factors outside of the one-hour Circus Mojo program.

### **Successful Aspects of the Circus Mojo Programs**

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1. Based on the results, Circus Mojo's program appears to be successful at increasing, peer support, team cooperation, and boosting participants' physical, psychological, and emotional effects. Additionally, although the results were not statistically significant, it should be noted that depression decreased slightly from the beginning to the end of the program.
2. Circus Mojo's programs are effective in different populations and across different environments. Circus Mojo was effective when conducted in local schools, after school programs, and inpatient units and with participants of varying ages and grades.
3. Parents, caregivers, and staff members thought the Circus Mojo instructors were inclusive, knowledgeable, friendly, and enjoyable to work with.
4. Parent, caregivers, and staff members thought that parent to child interactions were better as a result of Circus Mojo's program.

### **Issues to Consider for Continual Improvement of the Circus Mojo Social Circus Program**

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1. Having a standardized program, including not letting children pick their station each class, can help ensure each participant is receiving the full benefits of the social circus program. Many of the children went back to the same stations each time therefore, instead of receiving a well-rounded set of skills, they only sharpened one particular set. There are benefits to all of the different skills and stations. Incorporating structured classes while keeping a couple free form classes where children choose their stations will be beneficial to the overall development of skills in the participants.
2. Self-esteem scores decreased from the beginning to the end of the program, efforts to boost self-esteem can sometimes be counterproductive (Baumeister, Campbell, Krueger, & Vohs, 2003). Although it is assumed that high self-esteem leads to success in many aspects, it could be that success boosts levels of self-esteem. By focusing on the children's successes in the Circus Mojo class and the successes in performing certain acts and skills, self-esteem is likely to improve significantly.
3. Having the same instructors each class for the duration of a program would potentially eliminate instructor variability during the evaluation. Staffing is dependent on instructor availability and Circus Mojo funds throughout each program.
4. The involvement of caregivers during the programs is important to foster the social circus skills learned in the Circus Mojo program so these skills can be continued in a supervised fashion outside of class.

### **Issues to Consider for the Program Evaluation and Maintenance**

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1. Include a control group to serve as a comparison; for example, a group of children who do not receive the circus class but play on their own, supervised but without circus skills or staff interaction. This would allow for more robust data collection using a randomized evaluation design.
2. Include more classes; the number of classes included is dependent on the number of clients Circus Mojo obtains and how many of those clients agree to participate in the evaluation.
3. Revise the protocol to ensure participants in a range of age groups can answer the questions in a standardized manner.
4. Have the same instructors each class for the duration of a program. This eliminates instructor variability during the evaluation. Staffing is dependent on instructor availability and Circus Mojo funds throughout each program.

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## Appendix A



**C.A.R.E. Consultancy**  
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### Circus Mojo Inpatient Survey Results Summary

#### Demographics

Between April 2014 and February 2016, Circus Mojo collected data from parents, psychiatric hospital staff members, and staff members from a residential home who answered questions about child participation in a Circus Mojo program or class in order to indirectly evaluate the psychological, physical, and social effects of Circus Mojo on the children. Children participated in the Circus Mojo program through two local<sup>3</sup> schools, one local inpatient psychiatric hospital, and one residential home. Of these first 60 surveys collected, 14 were completed by the parent of a child with a learning disability and 10 were completed by parents from a second school. Both schools participated in Circus Mojo as part of an after school program. Thirty-three of the surveys were completed by a staff member of the inpatient psychiatric hospital and three were completed by staff members at the residential home; the staff members completed one survey per group of children who participated. The children consisted of both boys and girls and ages ranged from 5 years to 17 years old. The children from the schools and residential home participated in several Circus Mojo sessions, while the children from the inpatient hospital typically participated in only one Circus Mojo session.

Of the 48 adults who completed the entire survey, 94% believe that their child should continue with the circus because their child enjoys it and positive effects are visibly apparent in both the child's behavior and mood. No respondent stated the child he or she was discussing should not continue with the Circus Mojo program or class, though 6% were undecided as to whether or not the child should continue with the circus.

#### Surveys

The survey used was created for the Effective Circus Group evaluation and assessed a variety of areas, including the psychological, physical, and social effects of the circus program. Additionally, it assessed the circus instructor, the views from the parents, and overall improvements in child care<sup>4</sup>. Each answer to the questions on the survey was presented on a five-point Likert scale (1 = *strongly disagree* and 5 = *strongly agree*). The surveys were then broken down into six categories: psychological effects, physical effects, social effects, circus instruction, the views of the parents, and parent/staff to child interactions.

#### Results

The results of each section are outlined below. An average/mean score (depicted with *M* = mean score) of 4.50 to 5.00 indicates that the parent or staff **strongly agreed** with the statement as it referred to the child. A mean score of 3.50 to 4.49 indicates that the parent or staff **agreed** with the statement as it referred to the child. It is important to note that, on average, no parent or staff member rated neutral, disagree, or strongly disagree with any of the statements.

#### *Psychological Effects*

<sup>3</sup> Local refers to the Greater Cincinnati (Ohio) and Northern Kentucky area.

<sup>4</sup> *Child care* is the terminology used in the survey to delineate the interactions between the parent or staff members and the child participant. For the purposes of this summary, child care will be referred to hereinafter as "parent/staff to child interactions".

The measures of psychological effects included in the survey assessed the child's emotional state and excitement about being involved in the circus, as well as the child's self-expression and his/her ability to concentrate. The responses (based on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*]) indicated:

- The child enjoys him/herself in the circus ( $M = 4.75$ )
- Circus is uplifting ( $M = 4.60$ )
- The child is excited about the circus ( $M = 4.50$ )
- Circus has encouraged the child to express himself/herself ( $M = 4.34$ )
- Circus has strengthened the child's ability to concentrate ( $M = 4.08$ )

Identifying activities where the child can truly enjoy himself/herself and that aim to improve the child's mood, especially in at-risk children, can help alleviate mental health symptoms. Mental health treatment adherence is a prevalent issue that can lead to relapse and poor health outcomes (Kauppi, Hätönen, Adams, & Välimäki, 2015). Finding a program like social circus that has a positive impact on the child's mood, while also engaging that child so that he or she has a desire to participate, can be a vital aspect of his/her treatment plan. Further, through circus skill teaching programs, the child will learn tasks that he or she can do independently or in a group that likewise bring him or her satisfaction and a sense of involvement. This type of program also teaches the child a potential new vocational skill or hobby (such as juggling) that he or she can continue on his or her own, outside of the program.

### ***Physical Effects***

The survey assessed the physical effects of the circus program including the child's physical activity and body control. The results (based on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*]) indicated:

- The child has learned new skills in circus ( $M = 4.56$ )
- Circus has given the child many experiences of success ( $M = 4.41$ )
- Circus has increased the child's physical activity ( $M = 4.19$ )
- Circus has strengthened the child's life skills ( $M = 4.09$ )
- The child's body control has improved ( $M = 4.00$ )

Sedentary behavior has been linked to exacerbation of poor mental health symptoms including depression and anxiety (Biddle & Asare, 2012). Routine physical activity has been associated with increased cognitive functioning (including increased academic performance), improvements in self-esteem, reduced anxiety, and reduced depression. Daily physical activity in children has also been positively correlated with a variety of physical health benefits, including better bone density, lower obesity rates, and healthy blood pressure levels than in children who did not exercise daily (Janssen & Leblanc, 2010).

Social circus is a way to incorporate physical activity in an environment that may not have exercise equipment or sufficient space to get cardio activity such as running. Circus Mojo brings equipment, such as a tight-rope and large globe, to the site, and provides additional equipment, such as juggling balls, for the child to utilize at home. Social circus not only improves children's moods and amounts of exercise but it also promotes an enthusiasm in children to participate in activities without prompting from adults or without the need for organized activities. For these reasons, this type of program is important to incorporate as an intervention into treatment plans that aim to decrease mental health symptom severity and foster well-child coping mechanisms for anxiety and depression.

### ***Social Effects***

The survey measured the social effects of the program, mainly focusing on group dynamics and cooperation. The results, rated on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*], indicated:

- The child receives good feedback in circus ( $M = 4.66$ )
- The child receives attention in the circus group ( $M = 4.53$ )
- The child fits in well with his/her circus group ( $M = 4.54$ )
- The circus group has a good time together in the circus ( $M = 4.49$ )
- The child has been able to have a say in what skills he or she will learn more about in circus ( $M = 4.38$ )
- The child has a good relationship with the other members in his/her group ( $M = 4.32$ )

Children who are at-risk or who have a disability can have issues participating in group activities. An important part of improving mental health, as well as developing pro-social skills, is social interaction. The respondents indicated that the social circus exposure not only gave children positive attention, which can help a child garner a sense of achievement and worth, but also helped improve group interactions and the desire to interact with others.

Identifying problems that are a hindrance to children's success can be beneficial; however, research reveals that motivation and positive feedback are more successful tactics as they instill hope in children (Pedrotti, Edwards, & Lopez, 2008). Instilling hope in children, through encouragement and positive feedback, can help them realize their full potentials and has been linked to many positive benefits. Among these benefits are increased academic success, better athletic performance, improved physical health, and positive psychological adjustment. Positive psychological adjustment can assist children in feeling more comfortable in social settings and thus promote social interactions.

### ***The Views from the Parents***

The parents answered surveys related to how the child's participation in the circus has affected the entire family dynamic. The results, rated on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*], indicated:

- In my opinion, circus is a good hobby for a child/young person ( $M = 4.58$ )
- Our family thinks that the circus is a great thing ( $M = 4.48$ )
- Our family is interested in the child's circus activity ( $M = 4.42$ )
- Circus has increased the time we spend together as a family ( $M = 3.95$ )

A child's family plays an integral role in the success of a treatment plan through their role in teaching skills such as perseverance and motivation (Heckman & Masterov, 2004). Children from disadvantaged environments often lack the promotion of these crucial skills. Programs that target children from these environments can help teach children and caretakers/families these skills that they can later utilize at home. Teaching children these important coping skills has been linked to success later in life, including reduced involvement in crime and improved labor market outcomes. By developing and practicing skills such as perseverance and self-motivation outside of, but also in conjunction with a clinical or school setting, children can feel comfortable utilizing these skills in a variety of settings on their own.

### ***Parent/Staff to Child Interaction***

Parents and staff members rated three statements regarding their sense of interacting with the child. The results, rated on a 5-point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*], indicated:

- I have a better idea of the child's abilities due to circus ( $M = 4.04$ )
- I find that child care has gotten easier due to the circus activity ( $M = 3.80$ )
- I have gotten great ideas for things I can do with the child ( $M = 3.94$ )

Parents and staff members both encounter struggles when working with children with disabilities. They balance attending to the child's individual needs while helping him/her learn social skills and daily living activities. A program that can give parents and staff members a better idea of a child's interests and abilities can help the adults introduce new activities that are likely to engage the child. By successfully engaging children, parents and staff members are better able to balance the power struggles inherent to those relationships when caring for the child.

### ***Circus Instructor***

When asked to rate the circus instructor on a 5 point Likert scale [1 = *strongly disagree* and 5 = *strongly agree*], all adults strongly agreed that:

- The circus instructor is a good leader for the group ( $M = 4.72$ )
- The circus instructor gives clear directions ( $M = 4.69$ )
- The circus group practices tricks that are appropriately difficult ( $M = 4.61$ )
- The circus group concentrates well ( $M = 4.57$ )
- The cooperation with the circus instructor has been effortless ( $M = 4.37$ )

When deciding whether or not to enroll a child in a program, knowing that the program's instructor is capable of leading the class in a competent manner that will best facilitate the benefits of the program is very important. The parents and staff members agree that Paul Miller and the Circus Mojo staff are good leaders and capable instructors who give clear direction and practice skills that are appropriate for the participants both in the skill level and the challenge they pose.

### **Respondent Comments**

Several inpatient staff members and parents commented that the circus had a positive effect on the children. They stated that the children were willing to participate in new activities, which was encouraging to see and, sometimes, surprising because many of the children were often reluctant to participate in any activities previously offered. The respondents also commented that they noticed improvements in the children's hand-eye coordination and concentration. One inpatient staff member said that the children, who were typically resistant to treatment, became more open to participating in activities while the circus was present. One parent said his/her child was usually loud and silly, and the circus offered positive ways in which to express that energy, allowing the child to see that there are appropriate ways to behave in certain situations. Parents and staff members stated that having positive peer interactions was helpful to the child and that the children's self-confidence improved as they tried new, and sometimes difficult, tasks and experienced the satisfaction of success in so doing. Results also revealed that the children not only learned new skills, but they were also excited to do so. Additionally, as a result of the circus program, children were described as better able to follow instructions. All in all, the circus was considered a positive experience for children, parents/guardians, and staff members.

### **Summary**

Social circus is an innovative program designed to promote positive physical and mental well-being of at-risk children. Similar programs have been evaluated in several countries, including Finland, Israel and Germany, for instance. Circus Mojo is involved in a long-term evaluation program to replicate these findings in the Northern Kentucky and Greater Cincinnati area. As part of the evaluation program, 60 respondents completed a survey evaluating the psychological, physical, and social effects of the social circus program on child participants, as well as the circus instructor, parent/staff to child

interactions, and the views of the parents. Of the respondents, 24 were parents of children from local schools, 29 were staff members of an inpatient psychiatric unit or residential home, and seven left the respondent field blank. The results indicated that the respondents either agreed or strongly agreed that the Circus Mojo program had beneficial effects on the child's psychological, social, and physical well-being. The respondents also agreed that the social circus program had positive effects on the child's family dynamics and parent/staff to child interactions. According to the respondents, Circus Mojo provided good instruction during the program, ensuring that the children worked together cohesively and performed appropriately difficult tasks by building skills over the course of the program. Having a trained and knowledgeable instructor/team is important to ensuring the effectiveness of the program. Overall, parents and staff members agree that social circus provides a myriad of positive outcomes and that the Circus Mojo staff played an integral role in ensuring that the children experienced these positive outcomes.

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