

Original Paper

Utilizing Creativity for Adolescents' Recovery in Inpatient Psychiatric Hospital (IPH)

Yuko Taniguchi^{1*}, Sue Simon², Mason Schlieff³, Rebecca Houston³, Chidiogo Orakwue³, Andrea R. Collins^{4,6}, Samuel F. Ekstein⁴, Mikayla A. Schmidt³, Jered Bright¹, Corri VanderWoude² & Jarrod M. Leffler⁵

¹ Center for Learning Innovation, University of Minnesota Rochester, Rochester, Minnesota, United States

² Acute Care Inpatient Psychiatric Unit for Children & Adolescents, Mayo Clinic, Rochester, Minnesota, United States

³ University of Minnesota Rochester, Rochester, Minnesota, United States

⁴ Mayo Clinic Alix School of Medicine, Rochester, Minnesota, United States

⁵ College of Medicine, Division of Child and Adolescent Psychiatry and Psychology, Mayo Clinic, Rochester, Minnesota, United States

⁶ UCSF Fresno Department of Psychiatry, Fresno, California, United States

* Yuko Taniguchi, Center for Learning Innovation, University of Minnesota Rochester, Rochester, Minnesota, United States

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Abstract

The study aims to examine the impact of creative activities on adolescents, aged 12-18, hospitalized in an acute-care inpatient psychiatric hospital (IPH) setting. While research on the health impact of creative writing has been discussed with adults, research on adolescents hospitalized in acute inpatient psychiatric units (IPU) is limited. This study highlights how creative activities generate self-discovery and insights that are necessary for coping among adolescents in IPH. Seventy creative writing and origami sessions were embedded as a part of group education from March, 2018 until Feb. 2020. A curriculum that considered the interests of current teenagers and the IPH short length of stay (4-5 days) was designed and delivered by a professional writer and their team that consisted of health sciences students, medical students, and IPU nursing staff. After each session, a post-session survey was administered. The findings from 568 post-surveys suggest that the adolescents at the IPH expressed interest and engagement through creative activities. In addition, the findings suggest creative activities promote mood shifts, relaxation,

and self-awareness, all critical for adolescents during a mental health crisis. Further studies are needed to assess if these activities lead to long-term coping strategies for participants following their hospitalization.

Keywords

inpatient psychiatric hospitalization, adolescents, creative writing, origami, group therapy

1. Introduction

Providing effective intervention and education programming is a critical practice of healthcare professionals who serve adolescents in an acute-care inpatient psychiatric hospital (IPH) setting. The IPH setting for children and adolescents in the United States provides a space in which patients can receive care when their safety is at risk due to crisis, self-harm, or harm to others, with the goal of achieving stabilization (American Academy of Child and Adolescent Psychiatry, 1990; Balkin, 2006). Patients receive a mental health diagnosis from the Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-V; American Psychiatric Association, 2022) upon admission to help guide care. Over time, the length of stay in IPH for adolescents has decreased to approximately one week or less (Anderson, et al.; 2022; Blanz & Schmidt, 2000) impacting the overall amount of care one receives during their mental health crisis. In addition, hospitals have shifted the main focus of inpatient programs to patient stabilization rather than long-term treatment (Balkin, 2006; Nam et al., 2021). In 1990, the American Academy of Child and Adolescent Psychiatry proposed a model for minimum staffing in the child and adolescent acute inpatient psychiatric unit (IPU): hospitals offering treatment should include at a minimum one psychiatrist who provides progress notes every three days, one social worker for every ten patients, one psychiatric nurse for every twelve patients, and a child and adolescent psychiatric technician, with units ranging in census from 9 to 24 patients (American Academy of Child and Adolescent Psychiatry, 1990; Woodward et al., 2017). Group classes are generally offered in many acute adolescent psychiatric care facilities, yet there is a little discussion on the quality of group education, curriculum, and learning outcomes (Janssens et al., 2013; Thompson et al., 2021). Moreover, the intervention curriculums and assessment methods for group education for adolescents in IPH is rarely discussed or studied. As the average length of an IPH stay continues to decline, the incorporation of relevant education and coping skills through engaging methods with consideration for sustainability are critical (Gingerich, & Peterson, 2013; Thompson et al., 2021). Carefully designed programs and assessments that obtain feedback from the patients benefit both the patients through effective treatments and staff by improving morale (Pottick et al., 1993).

The purpose of this study was to examine if the creative activities curriculum designed and delivered by a professional writer and their team were an effective intervention for deepening adolescents' engagement in IPH with a potential to maximize the treatment gains during short-term stays. This study also examined if adolescents in IPH viewed creative activities as a potential long-term coping strategy

after participating in a creativity-based program.

1.1 Creative Process

Over the decades, the scientific research on creativity and the creative process has shown the function of navigating complex challenging thoughts (Abdulla Alabbasi et al., 2020; Furnham et al., 2008; Kaugman & Gregoir, 2016; Kaufman & Kaufman, 2009; Runco, 2014). Creative processes allow us to navigate complexity, contradictions, and multiple points of view (Barron, 1969). Creativity researchers explain that individuals engaging in creative processes become “more intimate with themselves”, by facing various aspects of themselves (Kaugman & Gregoir, 2016). The intention of including creative writing for IPH adolescents is to provide a container that allows them to capture all types of thoughts and feelings. Authentic expressions cultivated through creative activities lead to self-discovery, allowing us to recognize a part of the self that is creative (Richards, 2021). This kind of positive self-view benefits IPH adolescents’ recovery process.

1.2 Creative Activities

Our study incorporates two types of creative activity: creative writing and origami. The combination of these two mediums were used since this combination, especially origami, is likely to be novel to adolescents in the United States, and may allow open-mindedness and reduce resistance.

1.2.1 Creative Writing

For the purpose of this study, we define creativity as personal expression in the format of poetry, fiction, nonfiction, or any combination of these three formats.

1.2.2 Origami

Origami is the traditional art of paper folding established in 17th century Japan (Sanderson & Morin, 2017). As indicated in the name, *Ori* (folding) and *Gami* (paper) in Japanese, the activity involves folding a paper square to create a three-dimensional item. The ritual and the practice of folding origami has been practiced globally as a healing activity, especially during difficult times (Lockhart & Anania, 2011; “The art of healing”, 2018). Origami has been found to be useful in mindfulness practice and art therapy, as the activity involves focus, concentration, and engagement (Edwards & Hegerty, 2018). Enriched Origami Art Therapy (EOAT) identifies Origami as therapeutic by enhancing cognitive, social, creative and practical skills (Kobayashi, 2007).

While creative writing invites the participants to look within, origami is a physical activity that encourages interaction with other participants. This combination intends for the program to be enjoyable, playful, and fun.

2. Methods

2.1 Study Setting

The study was conducted at a hospital in the Midwest and received IRB approval. The team consisted of a professional writer, health science students, medical students, and nursing staff. This institution’s

model of care for the acute psychiatric treatment of children and adolescents is based on a short-term crisis intervention model providing a safe and nurturing therapeutic milieu. It is a closed unit with 18 beds, staffed by nurses, patient care assistants, psychiatrists, physician assistants, nurse practitioners, occupational therapists, child life therapists, chaplaincy, pet therapists, a music therapist, medical students, social workers, and specialty physicians. The average length of stay is 4-5 days. Each day is highly structured, including meals that are served family style (i.e., dining together with staff present), multidisciplinary treatment team rounds, daily goals group, education group, relaxation group, and various structured groups and individual interventions throughout the day and evening. This study was conducted in a group room located on the unit. Two to four health science undergraduate students also participated as learners, with the goal of adding socialization opportunities for the patients. To avoid developing an authoritative relationship, the undergraduate students were required to follow the same directions as the patients.

2.2 Participants

Study participants consisted of 568 adolescents aged between 11- and 18-years old (mean age of 15), hospitalized with parental/guardian consent for acute psychiatric care. All patients were diagnosed with a DSM-5 psychiatric disorder, were at imminent risk for suicide or homicide, or demonstrated an inability to fulfill age-appropriate responsibilities. Participation in the creativity group activity was based on the mental health assessment of the participant's assigned nurse. Patients were excluded from participating in the creative writing and origami sessions if the patients were considered unfit due to the level of distress they were experiencing related to their psychiatric symptoms (i.e., psychosis, acute anxiety, cognitive distortions, violence, etc.). Otherwise, all patients were invited and encouraged to attend. Participation was voluntary.

2.3 Session Procedure

The creative writing and origami program was offered as an hour-long group session in the afternoon once week. A total of 70 sessions were offered. All participants attended the session once during their hospitalization. The group room was prepared with colorful *Begin with Pieces* folders already placed on the table. The folders contain a guidebook, which provides brief instructions for creative writing and a poem entitled, "Begin with Pieces", a list of 15 creative writing topics in the form of stickers, a thoughts bubbles sheet on which patients can fill in words and draw, a list of quotes and poems that focus on personal empowerment and acceptance of self, and a journal notebook. The setting highlights the feel of a playful community gathering instead of a skill-based class in a hospital.

Facilitators consisted of a professional writer as well as medical students and health science students who were interested in Humanities in Medicine. Prior to each session, the group nurse provided an overview of the patients (i.e., patient handoff) to the facilitator(s) which included an overall assessment of the unit milieu and when present, potentially disruptive patient behavior(s). The group nurse communicated the level of patient acuity (i.e., potential for acting out verbally or physically, emotionally fragility/lability,

anxiety levels, etc.). The group nurse was available in case participants needed extra support during the session.

First, the facilitator read the poem, *Begin with Pieces*, to set a tone of reflection.

Begin with Pieces

What makes you, you?

How softly or strongly you sing

the songs you love, the way your shadow

persistently follows you, how

enormous the darkness feels

in your chest-

All the pieces you have touched

huddle inside your arms like birds

in the nest, ready

to fly. (Taniguchi, 2018).

This poem aims to communicate that we are made of many thoughts and feelings, leading up to the next step of reflection on the self holistically. Participants are invited to circle the words or phrases that resonated with them. A brief discussion and sharing of the words was conducted.

Then participants were guided to review the stickers and the list of creative writing topics (See appendix 1). They were invited to suggest two writing prompts to work on as a group. The facilitator aimed to receive at least two suggestions from the participants so that they could choose from the selected prompts. Once the participants determined the topic, they peeled off the corresponding sticker and placed it on the front page of the journal notebook. Five to ten minutes were provided for writing.

After writing, a facilitator invited participants to share their work by reading it out loud. If no one volunteered, the facilitator was prepared to read his/her own work. The facilitator repeated this process of selecting writing prompts, peeling off the stickers, writing, and sharing. The facilitator ended the writing portion of the session by encouraging participants to use the rest of their creative writing stickers on their own before they were discharged.

The last fifteen minutes were dedicated to origami. The origami project was usually a rose or heart, which required repeating the same folding technique several times. A wide range of decorative and colorful origami paper was passed around, and participants were encouraged to take several pieces that contained a design that resonated with them. Participants were instructed to make the first piece by following the instructions. Then, they were to repeat this process on their own. Once they made several origami flowers, they had the option of keeping the several pieces as they were or creating a collage. Everyone was required to donate at least one piece of origami to the community garden, which was a large piece of paper that hang on the wall. Before submitting their origami flower or heart for donation, participants are asked to write a brief message they wished to share with their community. The facilitator gathered the

donated origami flowers or hearts and taped them to a large sheet with the title, “Community Garden”. The sheet, filled with origami flowers and hearts with participants’ messages, was posted on the wall of the group therapy room. The purpose of conducting origami was to provide an alternative activity for those who may not enjoy writing, provoke curiosity by engaging in a cultural experience (Henderson & Gladding, 1998), and to end with an activity that promotes mindfulness (Kobayashi, 2007).

2.4 Data Collection and Analysis

The post survey (Appendix 2) was administered by the nursing staff after each session without the facilitator’s presence. The survey responses were collected and organized into a spreadsheet. The responses to the open-ended question were transcribed, reviewed, and the codes were developed to gather qualitative data. These codes were grouped into categories, which were further analyzed to extract themes that respond to our research questions regarding the creativity-based activities as an effective method for group education for IPH adolescents.

The data was analyzed through the Strength Perspective theoretical framework of (Lyons et al., 2000). This theory operates from the theoretical framework that individuals hold the ability and capability to navigate challenges. The focus is to find the strength that already exists inside them. The emphasis is, therefore, guiding individuals to become aware of their own strengths and to identify how they construct their own coping strategies (Coholic & Eys, 2016). This perspective empowers individuals to be the experts of their own lives, thus their responsibility to their own healing is also implied (Tyson & Baffour, 2004; Tyson et al., 2010). This perspective is relevant for program development for adolescents in IPH. Walking into a creative writing session, participants are treated as writers/artists and are encouraged and required to step up to this role; this approach empowers them, especially adolescents, as they have great aspirations for their future. This framework allows a facilitator to ask participants to be responsible for engaging in the work of expression, reflection, and exploration (King, Neilsen, & White, 2013).

The data was also analyzed through the Geneplore model which is often used to analyze the process of creative writing (Ward & Lawson, 2009; Ward, 2001). This model indicates that the process of creative writing involves generative processes (putting down thoughts and ideas and exploring how the pieces fit together) and exploratory processes (evaluating and analyzing each piece to refine the original ideas) (Lubart, 2009).

3. Results

A total of 568 post-session surveys were collected from 70 creative activity sessions.

3.1 Self-reported Reasons for Being Hospitalized

Table 1 shows the self-reported reasons for IPH admission. Categories were organized based on the frequency of responses. “Other” refers to comments that included personal reasons other than identified categories.

Table 1. Self-reported Reason for Inpatient Admission

Reason	Percentage (n=568)
Suicidal Thoughts	32.9%
Suicide Attempt	22.4%
Attempted Overdose	9.3%
Depression	9.9%
Self-Harm	7.1%
Anger	2.2%
Anxiety	3.4%
Other	18.0%

3.2 Self-reported Symptom Severity during the Creative Writing and Origami Session

Based on the following categorization of severity: 0-3 as mild, 4-6 as moderate, 7-9 as severe, and 10 as extreme, 45% of participants (n=568) report that their psychiatric symptoms ranged from severe to extreme during the creative writing and origami session, as indicated in Figure 1.

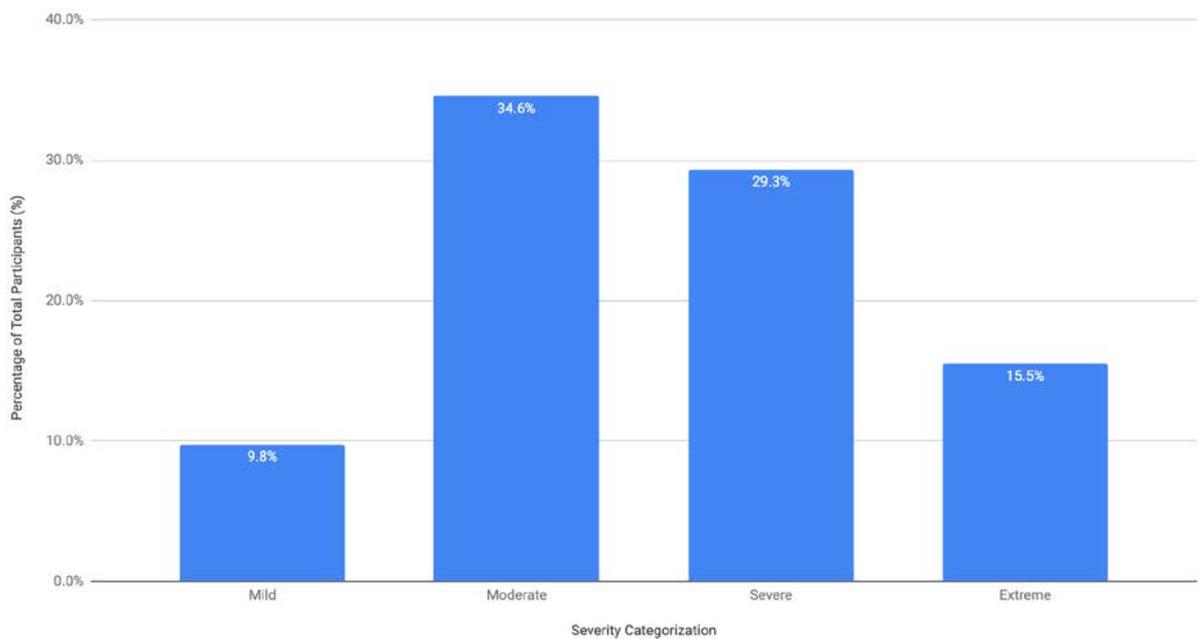


Figure 1. Symptom Severity during Group

3.2.1 Previous Experience of Using Art

52% responded that before coming to the hospital, they used writing or drawing for coping, indicating

that the majority of adolescents arrived in IPH with experience in creativity-based activities.

3.2.2 The Level of Interest In the Creative Writing and Origami Session

Figure 2 shows participant's self-reported (n=568) level of interest in the creative writing session on a 0-10 point rating scale (10 being the best). We define a participant who expressed interest as those who marked 5 and higher. The findings show that 82% of participants expressed interest in the creativity-based activity.

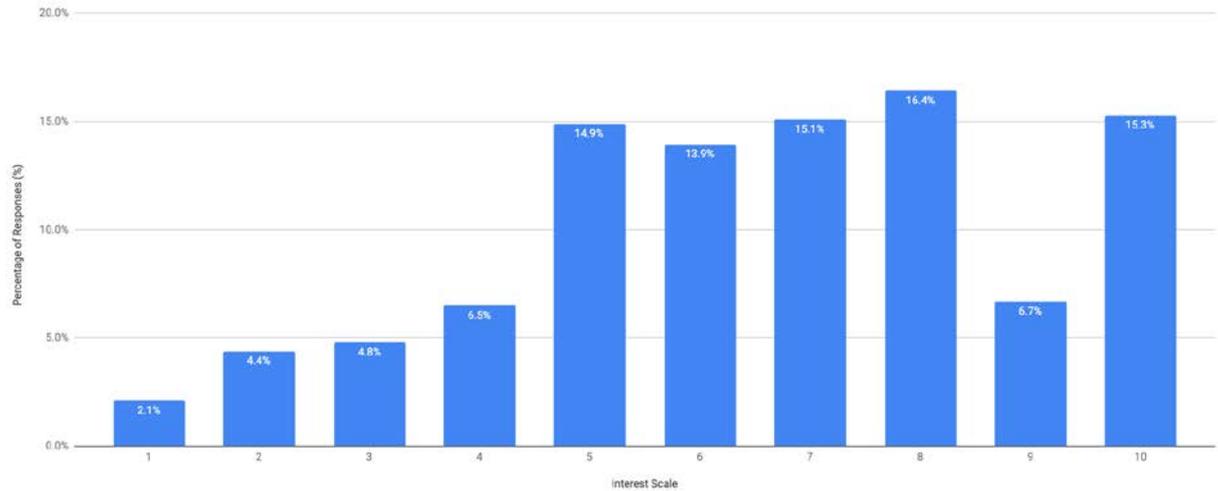


Figure 2. Level of Interest in Group

3.3 Participants' Experience during the Creative Writing and Origami Session

Participants were asked to identify (n=568) their experience in the creative writing and origami session. Figure 3 shows the descriptions participants used to label their experience. "Calming" (59.9%), "Relaxing" (43.3%), "Fun" (44.7%), and "Break from life" (31%) are the most frequently selected.

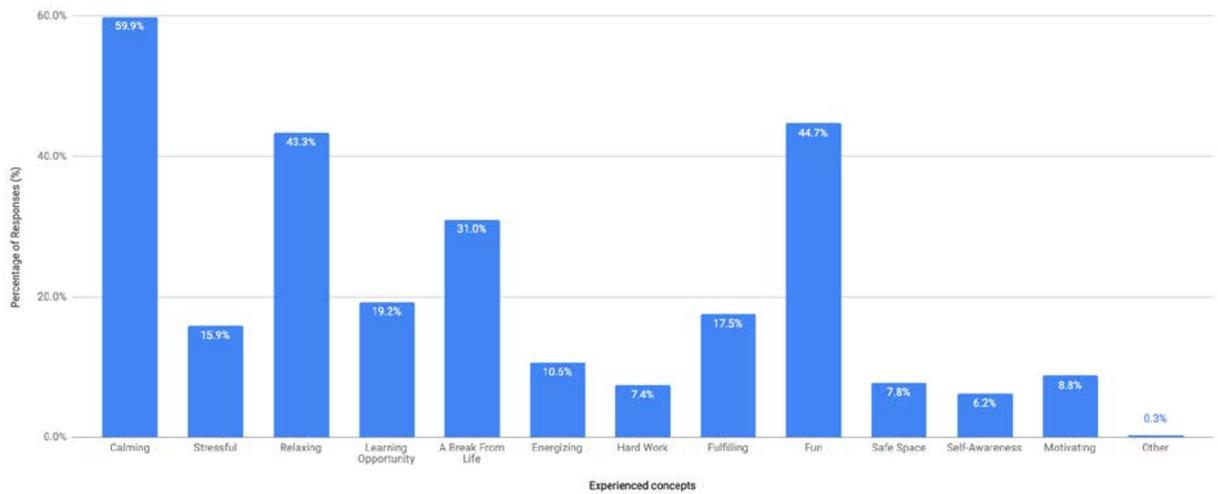


Figure 3. Experience during Creative Group

3.4 Participants’ Reaction to their Own Creative Work

Participants’ responses (n=568) to how they felt about the writing and origami they created is presented in figure 3. “Creative” (51.4%), “Unique” (33.3%), “Proud” (35.6%), and “Inspired” (23.1%) were the top four most frequently selected terms.

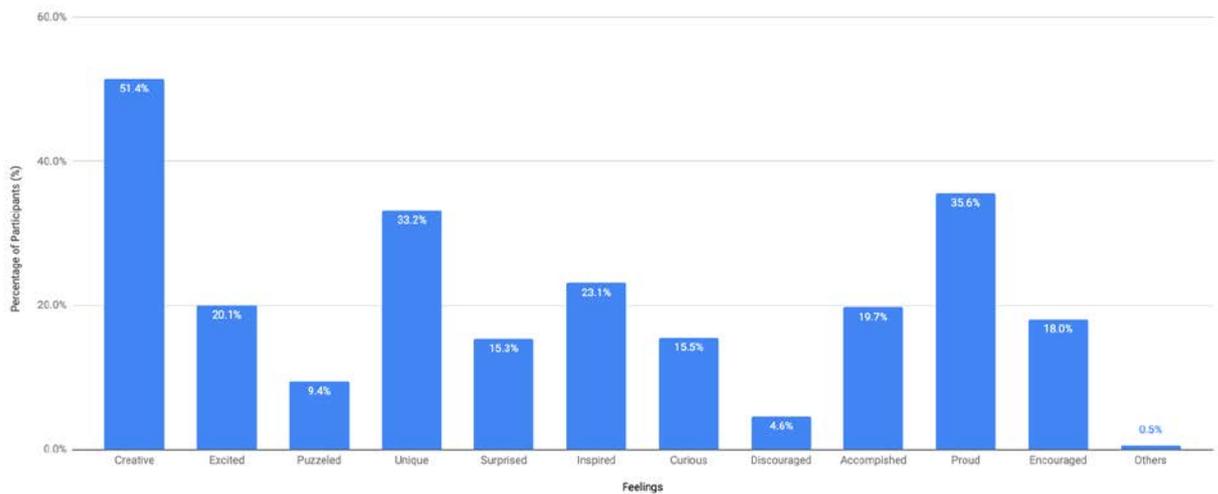


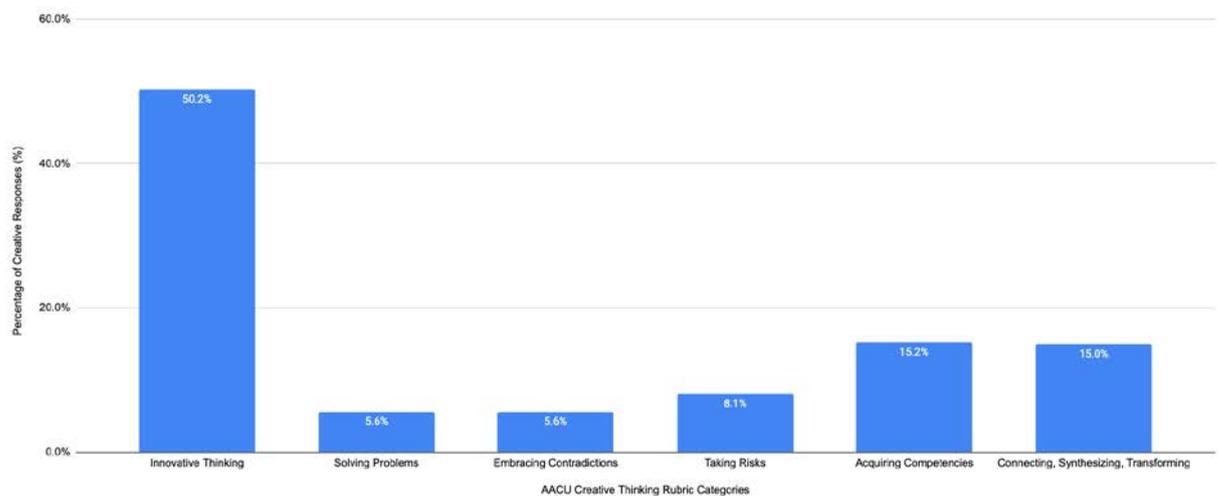
Figure 4. Self-reported appraisal of work in creative group

3.5 Evaluation of Creative Thinking

408 participants (72 %) responded to the open-ended survey question, “What did you discover that you enjoy or like?” and 160 participants (28%) left it blank. The responses to open survey questions (n=408)

were analyzed by using Association of American Colleges and Universities Creative Thinking Rubric (Appendix 3). 84% of the participants' responses were considered as demonstrating creative thinking, and 16% of the participants' responses were not considered as demonstrating creative thinking. Regarding the specific types of creative thinking, 52% of the participants' discovery was related to their innovative thinking (novelty or uniqueness of ideas, claims, questions, forms, etc.). From this group, 43% of the participants specifically reported "origami" as the source of a new enjoyable activity. 15% of the participants' discovery was associated with connecting, synthesizing, and transforming, 15% of the participants' discovery was related to acquiring competencies such as strategies and skills, 8% of the participants' discovery was connected to taking risks (such as navigating failure, setbacks, discouragement, fear, and embarrassment), 5.6% of the participants' discovery was connected to solving problems, and 5.6% of the participants' discovery was related to embracing contradictions.

Table 2. Self-reported Discovery



3.6 Creativity-Based Activities as Long-Term Coping Skills

356 surveys incorporated new questions that invited participants to imagine if creativity-based activity could be used as a long-term coping skill. 78% of the participants responded "yes", and 28% of the participants responded, "no". Of the 78% who responded "yes", Figure 5 shows the situations when they indicated that they can imagine conducting creativity-based activities.

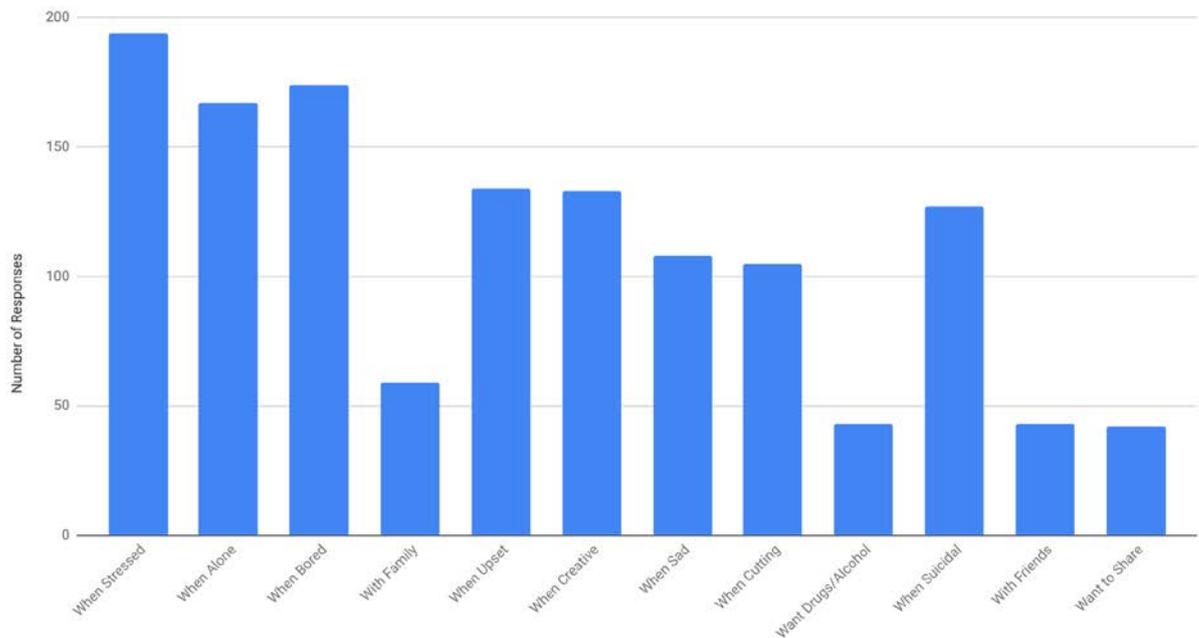


Figure 5. Use of Creative Writing and Origami

4. Discussion

The results suggest that creative-based activities (creative writing and origami) are an effective approach to gaining the engagement of adolescents in IPH. The results also suggest that creativity-based activities prompt important attributes such as reflection, self-awareness, and enjoyment, which play an important role for coping and self-care. Considered through the strength perspective, adolescents expressed interest in creativity-based activities because they identify their own creativity as strength through playful self-exploration. Moreover, creativity-based activities may be fitting for the adolescents in IPH. Engaging in creative processes means becoming “more intimate with themselves”, by facing all aspects of themselves (Kaugman & Gregoir, 2016). The situations and reasons that led adolescents to be hospitalized are complex; they are, no doubt, navigating the difficult and challenging process of understanding their emotional crisis. Therefore, this act of engaging in the creative process may be perceived as fitting by the adolescents in IPH. Furthermore, it is likely that many adolescents in IPH have managed their crisis successfully in the past without getting to the point of IPH (Tyson & Baffour, 2004). This means that many adolescents have already experienced thinking creatively in response to their challenges. 52% of adolescents reported that they have already used writing or drawing to feel better before the IPH. This means that they have already found writing and drawing to be a tool to comfort them. The participant’s 82% interest rate may not mean that the adolescents have discovered new interests. Rather, it is likely that they were able to rekindle a processing strategy that made sense to them and helped them feel better in the past. The activities of creative writing and origami may have been new, but

engaging in the creative process may have felt familiar.

The strength perspective (Lyons et al., 2000) assumes that individuals hold the abilities and capabilities to navigate challenges. From this perspective, it can be assumed that the creative writing and origami sessions did not necessarily teach adolescents to think creatively, but rather, this tool allowed them to recognize the strengths and skills they already possessed. A participant's comment, "I knew I liked to write but not this much. I also didn't realize how good of a coping skill it could be", shows that this participant gained new insight into a tool he or she had already used and was reminded of the power of writing. The role of the creative writing and origami sessions may be to help adolescents realize their own capabilities.

The claim, engaging in creative processes allows participants to face all aspects of themselves, explains why adolescents with moderate to the extreme levels of psychiatric symptoms still expressed interest in these activities. 90% of participants reported that they felt moderately to extremely distressed by their psychiatric symptoms. The severity of symptoms may suggest processing their complex situations is actually "relaxing" as 43 % of the participants reported. Despite their struggling psychological state, this response suggests that they lean toward engaging in a creative process that allows them to process their complex thoughts which leads to feeling relaxed.

4.1 The Impact of Creative Writing

We have identified the Geneplore model of creative process as a theory to further analyze the participants' responses to creative writing. The theory indicates that creativity involves two stages of processing: generative processes (putting down thoughts and ideas, and exploring and synthesizing how the pieces work together) and exploratory processes (evaluating and examining the work, and refining the ideas). Examined through the Geneplore model, freewriting can be considered as a generative process, and sharing and listening to each other's work as an exploratory process.

4.1.1 Generative Process

The participants were encouraged to write down or draw anything that comes to mind. They were instructed to not worry about grammar, spelling, or coherence. Once participants have written down their thoughts and ideas, they have a physical, concrete format for their thoughts. Creative writing functions as a container to hold the seemingly uncontainable. Once the thoughts and ideas are captured externally on paper, the participants can literally see their thoughts. The act of putting down their thoughts and emotions through writing may have generated the response, "Calming" (60%) and "Relaxing" (43%). In a study of writing (King, 2002; Pennebaker, 1993) explains that unexpressed emotions are detrimental to physical health, and emotional release benefits physical and emotional health. While some may experience difficulty writing, it is possible that a majority of the participants felt that it was calming to externalize their thoughts by putting them on paper. Writing our thoughts creates intellectual distance, and we begin to see our thoughts from a larger perspective. Such a space is called self-distancing as writers take a step back from their own perspective (Ayduk & Kross, 2010, 2017). The writers can

physically see the shape and the quantity of their own thoughts, feelings, and imagination. The novelist, John Gardner (1999), describes this space: “in some apparently inexplicable way the mind opens up; one steps out of the world. One knows one was away because of the words one finds on the page when one comes back, a scene or a few lines more vivid and curious than anything one is capable of writing” (p. 57).

In the generative process, writers are retrieving ideas from within, and what is placed on the page often surprises them. The comment by a participant, “I learned what my words can be like”, captures the self-distancing view of seeing their words externally and how the words are communicated. It is during this process that participants might have felt that their creation was “Creative” (51%) and “Unique” (33%). Another participant’s comment, “I can use journal prompts to express my feelings when I need to cope with my thoughts”, shows the recognition of how they can use their interest and ability to cope with their negative thoughts. 78% of the participants said “yes” to recognizing creative activities as the potential coping skill when they encounter difficult situations (indicated in Figure 5). These responses suggest that they view themselves as someone who generates creative and unique work. Recognizing the self as the creator of creative and unique work, participants often feel “Proud” (36%) and perhaps “Accomplished” (20%). This recognition of their strength and ability is crucial in building their self-worth.

4.1.2 Exploratory Processes

Participants are invited to read their work and talk about their writing experience. Most of the time, participants were willing to share. Sharing one’s own writing can present as a vulnerable experience. Even if there were ground rules of listening and appreciating among the audience, sharing can feel risky. But those who shared their writing experienced being recognized and practicing courage. They witnessed how their stories were also meaningful to others. This space becomes an opportunity to rethink, reframe, and refine their ideas by recognizing various elements included in their creative expressions (Kaufman & Kaufman, 2009; Mcardle & Byrt, 2001). By interacting with others through creative work, the participants gain multiple perspectives which could help soften their rigid negative self-view. It is in this space that they begin challenging their own self-view while also feeling “Encouraged” (18%) and “Inspired” (23%).

Eight percent of participants expressed that “interaction with others” was what they discovered that they enjoyed or liked (Table 2). Listening to other stories that are creatively expressed generally does not provoke a judgment of being good or bad simply because a story truly belongs to the writer. The focus is how differently each person interpreted the prompt. Writing is recognized as a collaborative act that requires community support (Chandler & Schneider, 2009). Through listening, the participants generate new ideas of their own.

In summary, the participants’ responses indicate that creative writing provided participants more insights about themselves. These insights may be the wisdom that participants would have not realized had it been

introduced through a more conventional approach such as a more skill-based educational program. Hunt (1998, 2000) defined finding voice as about the connection between inner self and words on the page. This newly realized voice, that they can generate creative and unique products, is different from their old self-talk of inadequacy. Their own writing becomes the physical evidence of their new voice. When they are caught by the single view of inadequacy, this physical form may function as a reminder that they hold multiple voices. The comment from a participant, “I am stronger than I thought”, shows an increase in confidence, reflecting a recognition of the participant’s own strength, indicating a change in perspective of themselves. Creative writing requires self-distancing, holistic evaluation of the self, and reconnecting or finding one’s inner voice. All these are critical qualities for the adolescents’ healing.

4.2 Impact of Origami

Perhaps the most interesting response was found by the adolescents’ engagement in origami. Of 75% of participants who listed specific activities they discovered that they enjoy or like, 43% of the participants reported “origami”. We analyzed each step of this origami activity considering the participants’ experience (Figure 3).

4.2.1 Folding Paper

Participants selected two to three pieces of paper. This process generates excitement and conversation. Touching the origami paper is a grounding experience, according to Enriched Origami Art Therapy (EOAT) (Kobayashi, 2007). Participants are in control of this paper. The practice of gaining this type of responsibility and control requires a willingness to learn. The origami artist, Samuel Tsang, describes this as the “calm frame of mind”, which is also a learning mode where the entire focus is on the piece of paper (p. 16). Participants’ responses, “Calming” (60%), and “Break from Life” (31%) may be connected to this process of working with a simple physical tool with the mindset to learn. In addition, working with a physical material may feel novel to the adolescents as Generation’s Z’s time has been heavily consumed by social media. Thus, introducing the sensation of working with an art material may lead to future usage.

4.2.2 Following Instructions

Specific instructions are provided for each origami model. The instructions of the folding order provide structure. Initial learning requires focus and concentration, and this conscious effort naturally allows focus. The creative process is at the heart of origami since a passive mode is activated by following the instructions while an active mode is generated by physically folding the paper (Kobayashi, 2007). EOAT suggests that processing new information through physical activities in a structured environment allows problem solving (Kobayashi, 2007). The facilitators provide a structured learning environment while still offering the flexibility to accommodate the speed of an individual’s ability to follow. The ground rule is that the participants look around and make sure that everyone is on the same page. Origami allows participants to help and encourage each other. This component of building relationships is identified as rebuilding trust by making positive relationships (Kobayashi, 2007).

4.2.3 Repeating

Repeating the act of folding is the main process of origami. The two models we introduce first are a rose and a heart. Through simple repetition of three to four techniques, complex creations can be developed. This act of repetition releases concentration from learning, yet the mind is still focused on the hands moving. Tsang describes this stage as meditative; when he is able to fold without following instructions, he begins contemplating on the theme of the origami he is creating (Tsang, p.16) Participants' responses, "Calming" (60%), "Relaxing" (43%), and "Break from life" (31%) may be the associated with this action.

4.2.4 Completing

A model is made by following the instructions. Staying in this creative process produces a model. This activity is process-driven. The goal of competition is definitely there, but the real goal is to sustain the process. Seeing the final product may be a "Fun" (44%) experience. This comment by a participant reflects the process-driven component of this activity: "Folding the paper in different ways can make cool shapes". The physical model is evidence and a reminder of how they navigated this creative process. In summary, through writing, participants experienced gaining self-awareness through creative expression. Through origami, adolescents practice calming the mind, passive and active modes of learning, sustaining in the creative process, and experiencing enjoyment. All of this serves to build resilience. Achieving the completion is not without "H Work" (7%) and can also be "Stressful" (16%). At times, participants felt "Discouraged" (5%). This program considers empowerment which does not exclude challenges. 19% of the participants indicated that this program was a "Learning Opportunity". These results overall reflect that the participants are motivated to learn, grow, and explore if the environment and program content are fitting and inviting to them.

4.3 Limitations

Limits of external validity and generalizability exist given there is no control group to assess the differing impact of creative writing and expressive writing implementation. The patients' reasons for being admitted into the hospital are a self-report and not a clinical diagnosis. The process of self-reporting is a limitation since data on a 10-point scale is highly individualized/non-standard.

4.4 Conclusion & Future Direction

Our study found that creativity-based activities gained the interest and engagement of the adolescents in IPH and that these activities are a promising tool for group education in an IPH setting. We also found that creativity-based activities prompt reflection, realization of strengths, enjoyment, and self-awareness. These skills are critically important to the development of coping strategies that allow the adolescents to manage their stressors by changing their thought processes and/or behaviors (Gill et al., 2016; Lazarus & Flokman, 1984; Spandler et al., 2007). Specific techniques identified for effective intervention include incorporating creative processes, physical activities, a structured environment, and flexibility.

The impact of creative collaboration on staff, especially psychiatric nurses who work closely with

patients, may be another important factor to study. Successful collaboration requires a facilitator or collaborator who understands the culture and language of medicine and the discipline to be implemented. Collaboration in itself is perceived as a creative process which requires navigating the various views and needs of the involved individuals. The art of facilitating collaboration may also be studied.

As for the impact on patients, whether or not the experience of creativity-based activities at IPH can lead to long-term coping strategies will be an important point of assessment. Patients were intentionally allowed to keep their *Begin with Pieces* folder in hopes that they would continue to use the material throughout the remainder of their stay and beyond. A longitudinal study which includes following up with the adolescents who participated in the creativity-based activities may be considered along with applications in other IPUs to assist with generalizability of the intervention.

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Appendices

Appendix 1

Creative Writing Prompt

X	← Mark it as you respond to the prompts below!
	1. What or who means the world to you?
	2. When was the last time you felt as though you have been heard and understood? Describe the conversation and feeling of "being heard."
	3. What are you learning today?
	4. If you could describe your favorite color to someone who is blind, how would you describe it? (What does the color feel like, look like, sound like, or taste like?)
	5. How will you use what you have learned when you leave?
	6. You wake up one day to discover your greatest weakness is now your superpower. Who are you?
	7. What is your favorite song? How does it make you feel?
	8. If you could go anywhere in the world, where would you go? Write a short story with future-you as a protagonist traveling.
	9. Write about things that are hard for you to talk about but wish that you could talk more with others.
	10. What is your strength <i>like</i> ? (Example: "My strength is my humor. It's like the bright sun making everyone open their windows".)
	11. Smoke, Fog, and Haze: Write about not being able to see ahead of you. How does it make you feel? What do you do to keep going?
	12. After many months of hard work, you finally finished creating your own boat. What does your boat look like? Where are you going? How does sailing make you feel?
	13. A long time ago, a person could become a power animal, and a power animal could become a human being. Sometimes, they were people, and sometimes, animals. There was no difference.

	Which power animal are you? Write a story.
	14. What is your favorite food? Describe everything about this food so that others can see and taste it!
	15. A dog has arrived at your house on a cold rainy day. The dog has the power to communicate. It is here to stay with you. Who is this dog? Why is it here?

Appendix 2

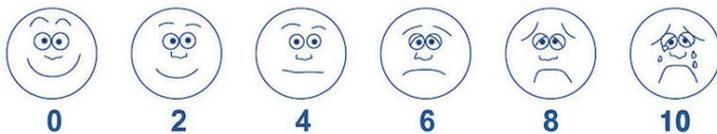
Creative Writing and Origami Group Post-Questions

THANK YOU for attending the Creative Writing & Origami session! Please complete this survey to help us understand what you thought about this intervention! Your answers are confidential.

1. What is your age? _____

2. What was the primary reason you came into the hospital?

3. On a scale of 0-10 with 10 being the worst,
how much do your symptoms bother you? _____



4. Before coming to the hospital, did you use writing or drawing to help you feel better?

YES _____ No _____ Maybe _____

5. What was your experience of writing and making origami today? Select the term(s) that are true to you!

Calming a break from life Fulfilling
 Stressful Energizing Fun
 Relaxing Hard work Safe space Learning opportunity Other:

6. On a scale of 0-10 with 10 being the best, how would you rate your interest in the origami and Creative Writing: _____



7. How do you feel about the writing and origami you created today? Select the term(s) that are true to you!

Creative Unique Curious Proud
 Excited Surprised Discouraged Encouraged
 Puzzled Inspired Accomplished Other_____

8. Do you think writing and origami can be a break from life for you? If so, when do you think you can use it? Select the term(s) that are true to you!

___ No, I don't think this activity is for me.

___ Yes, I can do this activity when.....

I am stressed I am alone I am bored
 I am with my family I am upset I feel creative I feel sad
 I feel like cutting I want to use drugs or alcohol
 I have suicidal thoughts I am with my friends
 I want to share new ideas with others Other_____

9. What did you discover today?

Appendix 3

Creative Thinking VALUE Rubric

Definition: Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone	Milestones		Benchmark
	4	3	2	1
<p>Acquiring Competencies <i>This step refers to acquiring strategies and skills within a particular domain.</i></p>	Reflect: Evaluates creative process and product using domain-appropriate criteria.	Create: Creates an entirely new object, solution, or idea that is appropriate to the domain.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.	Model: Successfully reproduces an appropriate exemplar.
<p>Taking Risks <i>May include personal risk (fear of embarrassment or rejection) or risk of failure in successfully completing assignment (i.e., going beyond original parameters of assignment, introducing new materials and forms,</i></p>	Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.	Incorporates new directions or approaches to the assignment in the final product.	Considers new directions or approaches without going beyond the guidelines of the assignment.	Stays strictly within the guidelines of the assignment.

<i>tackling controversial topics, advocating unpopular ideas or solutions).</i>				
Solving Problems	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.
Embracing Contradictions	Integrates alternate, divergent, or contradictory perspectives or ideas fully.	Incorporates alternate, divergent, or contradictory perspectives or ideas in an exploratory way.	Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.	Acknowledges (mentions in passing) alternate, divergent, or contradictory perspectives or ideas.
Innovative Thinking <i>Novelty or uniqueness (of idea, claim, question, form, etc.)</i>	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.	Reformulates a collection of available ideas.
Connecting, Synthesizing, Transforming	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole.	Connects ideas or solutions in novel ways.	Recognizes existing connections among ideas or solutions.