

Creativity and Coping: A Measure of Self-Motivated Creation and Coping Mechanisms

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Abstract

As expectations for the success and job security of undergraduate college students rise as do the social pressures, which accompany this notion. The current research aimed to understand the relationship between hours spent in creative activities and the ability to use positive coping styles as a tool for this demographic. According to Aselton (2012) “16% of all college students suffer from depression at some point in their college years (p. 119),” leading the use of creativity to appear more useful and important. One hundred and one college students at a midwestern university were surveyed in the current research with questions pertaining to how many hours they spend in creative activities and self-reported Brief COPE answers about their ability to handle daily stressors. The hypothesis stated: increased participation in the creative arts allows for a higher perceived ability to use positive coping styles in undergraduate college students was ultimately supported.

History has created the stereotype of the creative mind as an occupied mind where all aspects of artistic thought cloud the mind to portray images such as the ‘troubled musician.’ Often times the potential for creativity as a way to heal and impact the mind positively are ignored for the necessity of continuing a hold on generalizations. However, coping in itself may contain aspects of creativity that have the potential to be beneficial to all types of people, artist or not. The definition of coping as provided by Guerreiro, Figueira, Cruz, & Sampaio (2015) stated “(coping is) constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 31). A focus in this definition and this research was the behavioral aspect that pertained to manners of coping with stress in daily life. College students were faced with more stress than generations past due to greater generational expectations and a competitive job market. Mahmoud, Staten, Hall, & Lennie (2012) focused their research of depression, anxiety, stress, life satisfaction, and coping styles specifically on the demographic of emerging adults. This group ranges in ages from 18-24 years and “requires developing skills for maintaining the independence and self-sufficiency an individual gains through adolescents and for managing new tasks with regard to developing and maintaining intimate relationships...” (Mahmoud et. al, 2012, p. 149). Of the students they surveyed males and females had equal depression scores but females had more instances of anxiety. Also, the use of negative or maladaptive coping strategies such as self-blaming, denial, and giving up were main predictors of depression as well as anxiety and stress. (Mahmoud et. al, 2012). The importance of this data was its usefulness in evaluating positive coping styles with the happiness and well-being of college students in this emerging

adulthood age group. If these individuals were equipped with the tools to successfully handle their stress levels of depression would theoretically decrease.

According to Aselton (2012) “16% of all college students suffer from depression at some point in their college years (p. 119),” which had the potential for great impact on coping styles as well. In a 2012 study of college students who lived with previously diagnosed depression, thirteen New England individuals reported all mechanisms they use for coping with stress in their daily colligate lives such as: academic problems, financial concerns, family pressure, and roommate issues. Activities listed that helped those with depression relieve stress pertained to: talking to others, attending talk therapy, physical activities such as running and playing hockey, self-talk, deep breathing, journaling, use of marijuana, and listing to music (Aselton). Several of the mechanisms listed above included interaction with others as a tool in relieving stress and of the coping styles that exist there were two types: functional and dysfunctional.

Chao (2012) reported the necessity of social support in handling stress with emerging adults and referred to it as a potential, “buffer to moderate association between stress and well being, and those with low social support would lack the buffer against stress (p. 6-7).” Chao continued to discuss the importance of social support to a generation that had become focused on technology, and the crisis of a greater need for social support in a time where it was becoming more scarce (2012). One theory of coping strategies for future college students was the idea of preliminary stress management to decrease first-year student anxiety and increase population retention rates. Earnest and Dwyer (2010) created a study where current college students wrote up scenarios and stories of situations that occurred to them in their time as undergraduates that were particularly stressful. The focuses of the stories were not just the stress but also the manner in which the stress was dealt with (or adapted to) and what the students benefited from or would

like to have done differently to cope with anxiety emotions. One hundred and eighty-two students viewed the website where the stories were posted and provided feedback on the usability, likeability, and perceived usefulness of the website and the materials. The hypothesis of this research was to assist students about to enter into the college atmosphere with the knowledge of situations that might have been stressful and taught coping styles in a real world example (Earnest & Dwyer, 2010). The overall feedback of the website was positive allowing for future expansion of preventative stress management techniques with new college students who used a support network to ease college stress. In research presented by Guerreiro et. al adolescents who self harm defined as “intentional self-poisoning or self-injury irrespective of the type of motive or the extent of suicidal intent” (2015, p. 31). After 1,726 surveys were collected evaluating self-harm behavior, anxiety, depression, and coping styles the data showed that the coping style of seeking social support had a significant impact on a reduced probability of self-harming in adolescents. The problem found, however, showed that those who already self-harmed had minimal social support to begin with particularly in the area of male adolescents (Guerreiro et. al, 2015). The importance of positive coping styles cannot be overstated for the demographic of emerging adults, specifically those in college settings. Whether students enter higher education possessing emotional irregularities, before or during, the ability to cope with stressful aspects of daily life was imperative and those specific skills come in a variety of modalities.

Music as a form of creation, participation, or an experience was not a new concept as the ability to share sound became popular, however, the concept of music as a form of therapy began to grow. Gao, O’Callaghan, Magill, Lin, Zhang, Zhang, Yu, & Shi (2013) presented research on music therapy students who visited Sichuan Province, China after a devastating earthquake in

May of 2011 and played music for residents of the area. The idea was to bring art back into the lives of those possibly suffering from post-traumatic stress from the natural disaster as a method of coping and expressing emotions. Students began simply playing music in public areas to allow music to be heard in general then several weeks after seeing the positive results of children interacting with the music in public the events were taken into classrooms. After educators shared that children who experienced the earthquake were less interactive in class and had issues with other children the music therapy students began teaching the troubled children how to play instruments (Gao et. al, 2013). Reports of the children becoming more interactive in class after spending time with music and instrumentalization were combined with reduced reports of incidents between children themselves. According to Gao et. al (2013) the children were able to focus on “stabilization and not trauma re-exposure (p. 116),” when playing music and discussing their feelings rather than reliving the earthquake itself. Allowing children to cope with their emotions through sound showed the importance of music in stress and post-traumatic stress recovery and the future of this data was bright of all manners of stress instances.

In patients who suffered from acute psychotic episodes music was been investigated as a potential aid to “improve emotional disturbance, increase communication and social interaction, and lessen paranoid agitation of delusional thought processes,” (Morgan, Bartrop, Telfer, & Tennant, 2011, p. 364). The research completed by Morgan et. al (2011) looked at 60 patients who suffered from psychotic episodes and placed them in a music therapy group or a control group to observe the effects of active or passive expression on the conditions. Those in the active music therapy group played improvisationally or wrote songs while the passive (control) group sat with a therapist while “listening to a prerecorded CD playing relaxing nature sounds” (Morgan et. al, 2011, p. 365). The treatment group was given the opportunity to express

emotions in a non-threatening environment as well as develop interpersonal and interactive communication skills as they learned about playing the instruments provided. Allowing for expression and distraction from psychotic elements had the most impact on patients (Morgan et. al, 2011). Another area of research was music's impact on those in different states of consciousness as measured by the Music Therapy Assessment Tool for Awareness in Disorders of Consciousness (O'Kelly & Magee, 2013). Although the tool was far from finished, the published research suggested that the impact sound had on those in altered states of consciousness on brain activity had potential for communication with those who were unable to respond (O'Kelly & Magee, 2013). The significance of the data showed that music can have a positive impact on those less than conscious which had vast correlations to the differences music makes on the conscious brain.

O'Callaghan, McDermott, Hudson, & Zalcborg (2013) researched caregivers of those with advanced cancer in the bereavement process to see what impact music therapy would had on their ability to cope with the loss of a loved one. The goal of their research was to assist eight people in maintaining the bonds of kinship with the deceased to ease pain of loss through several methods: used new music to cope with reliving memories of the loved one, associated new meaning to music related to the loved one, or found new music to communicate to the loved one (O'Callaghan et. al, 2013). Results showed that individuals can "use music for self care" (O'Callaghan, 2013, p. 120) and made a case for the use of music therapy in bereavement and mourning processes for all types of people for the purpose of coping with the stressful emotions of loss.

In university settings across the country it was not uncommon for schools to require at least one form of fine arts education for all types of students for exposure purposes. However, schools

were also giving students the opportunity to express themselves in new forms and art specifically was be extremely useful in this area. In a book review Bertman (2010) stated that the most important aspects of art therapy specifically were: being a witness to someone else's life as well as the process of a therapy session possessing more importance than the product of creation itself. Granted, in a school setting an art course was less of a therapy session specifically, but the important part outside of therapy was giving students the knowledge they need to create on their own. A study compiled by Geue, Richter, Buttstadt, Brahler, & Singer (2013) evaluated the use of art therapy on cancer patients that received outpatient care and found that the therapy had no long-term impact on levels of psychological distress in participants after the therapy sessions were terminated. The important idea that stemmed from this finding was the notion that art therapy was not a one-time-cure-all for any individual and potentially those in the study would have benefited more from continued session during their care. This idea was essential to the development of art therapy programs in universities because students needed several attempts at art and creation to understand its importance in a creative coping process. Finn (2003) found that five children between the ages of 11 and 13, who were placed in expressive art therapy sessions to cope with different types of loss, felt that they were better able to express their feelings and no longer possessed a sense of isolation. The newfound communication felt by the children in the research took place over nine weeks and all children had positive remarks to share about their experience in the sessions (Finn, 2003), which showed substantial evidence for the importance of art in coping mechanisms. Also pertaining to children, half of Uganda's population was under the age of 15 years and 14% of those children were orphans (Ojiambo & Bratton, 2014). In the population of orphaned children the majority exhibited behavioral problems in classroom settings as reported by their teachers. In research compiled by Ojiambo, 60 children were placed

in safe art and play therapy session settings where they were allowed to do anything except “hurt themselves, the items in the room, or the therapist,” (2014, p. 359). After several weeks of free play sessions the children’s behavior was positively altered as reported by “teachers and housemothers” (Ojiambo, 2014, p. 361), which was another example of the positive benefits of art as a form of expression for young people.

Similar to an art therapy session, those who participated in dance therapy were allowed to express their emotions but, as predicted, the form of therapy was vastly different. As Boris (2001) revealed in writing about experiences under a famous dance therapist, Marian Chase, a group only sat and discussed topic after dancing together. An example of a preliminary session began with Chase entering the room and turning on music then she invited a group of young females and several adult assistants to join together in dance where they held hands and mirrored actions of Chase to classical music (Boris, 2001). Once all members began exuding an air of comfort the discussion portion of the session would begin because the focus ignited physical connection then transitioned to the forms of emotion that are expressible through words (Boris, 2001). According to Boris, the ideas behind physical connection were mirroring neurons in the brain and once imitation occurs an instant connection were felt between the two (or more) people (2001). A similar study was conducted in Korea with adolescents suffering from mild depression; Jeong, Lee, & Park (2005) measured the chemical compositions of hormones in the brains of teens participating in an experiment which compared dance therapy to a control group that received no dance therapy. Results showed that negative physiological symptoms were improved after 12 weeks in the dance therapy group as well as “increased plasma serotonin concentration suggesting possible therapeutic effects on depression in the DMT (dance movement therapy) group,” (Jeong, Lee, & Park, 2005, p. 1717). Because this study found that

dance changed the release of chemicals in the brain impacted depression levels the case for dance therapy was ever improved.

Similar research was conducted on six children with behavioral issues who specifically received dance movement therapy; specific behavioral goals were set for each child to achieve as a result of their therapy and all but one was able to attain them (Meekums, 2008). Children were allowed to use the movement therapist as a “prop” in their session to analyze mirroring activity and this allowed for connection and evaluation of emotional literacy in the children (Meekums, 2008). Meekums reported, as previously mentioned, all six children were able to reach the behavior goals set for them to achieve outside of therapy as a result of participating aside from one child with a physical impairment (2008). In women suffering from advanced stages of cancer, yoga and dance therapy was evaluated by Selman, Williams, & Simms (2012) for an impact on the well-being of the participants. Overall well-being score of the women in both classes improved (Selman, Williams & Simms, 2012) which showed the impact that both yoga and dance therapy possessed in the form of healthy stimulation for cancer patients to cope with the trauma of advanced illnesses.

The culmination of the impact that music, art, and dance have on society can be summarized in one phrase: created connections. Music shared sound, art shared sight and dance shared motion and together they allowed for humans to connect to one another outside of just speaking. One issue in the area of creativity was the controversy over a specific definition of the term, Miller (2014) evaluated a new way to test individuals on their creativity in six areas: brainstorming, metaphorical thinking, perspective taking, imagery, incubation, and flow. Results showed that “the newly created (test) scale is a psychometrically sound and factorially stable measure that represents multiple creative processes” (Miller, 2014, p. 213). Miller’s new test was

titled *Cognitive Processes Associated with Creativity* and had the ability to measure creativity in self-report and researchers had the opportunity to measure mental capacity in several areas which contributed to all aspects of the study of creativity. For students that studied design in a university setting the idea of creative achievement (the sum of individual creative products during a period of time) (Luh & Lu, 2012) had a significant importance. Passion, as well, had an impact on the quality design products, Luh & Lu (2012) found that “only students with harmonious passion can be encouraged to continue learning and creating in design school” (p. 287). This information showed that not only do students have to enjoy what they are learning about, but how much they feel connected to their work had an impact on the quality of the work as well. In an alternative study, Messick (1979) focused on finding an evaluation of the uses of noncognitive measurement in educational systems. Messick’s research centered around the variables: “background experiential factors, affects, attitudes and beliefs, interests, motives and needs, curiosity, temperament, social sensitivity coping strategies, cognitive styles, creativity, and values” (1979, p. 281). Almost 40 years ago Messick (1979) presented a case for looking beyond traditional cognitive measures in American educational systems. Since the research was conducted there have been developments in the use of gifted education programs with emphasis in areas of artistic development around the country.

Creativity and coping styles in a specific population of college students, or emerging adults, has several angles of measurement but the present research aims to find a connection stating: increased participation in the creative arts allows for a higher perceived ability to cope in undergraduate college students. The purpose of this research study was to evaluate the relationship stating that: increased participation in the creative arts allows for a higher perceived ability to use positive coping styles in undergraduate college students.

Method

Participants

Ninety-seven undergraduate students from a private Midwestern university participated in the current study. Their mean age was 20 years and 8 months old, with a range of 18 to 40 years. Females composed 71% of the sample and males 29%. Six percent were freshman, 32% were sophomores, 34% were juniors, 24% were seniors, and 4% were reported fifth-year seniors. At least 30% percent of students reported involvement in a sport, club or activity with 38% of those also possessing leadership positions in previously mentioned extracurriculars.

Materials

The survey itself contained three major sections: demographic information, questions pertaining to the number of hours students spent in creative activities such as writing in a journal or painting, and finally the Brief COPE survey. Demographic questions included: age, gender, year in school, participation in clubs, activities, or sports, and if the student possessed a leadership role in their extracurriculars. Each participant listed the name of the activity, club, or sport they participated in but all data was converted to yes/no answers in analysis. The creative hours inquiries pertained to: writing in a journal about your day, writing in a journal about your feelings, listening to music, playing an instrument, dancing, performing dance, singing, drawing, reflecting on the course of the day, meditating, yoga, reading for pleasure, writing poetry, and taking photographs (see attached survey).

Brief COPE Inventory. The Brief COPE published by C.S. Carver in 1997 and again in 2013 is the shortened 60-question version of the original COPE inventory published in 1982. Brief COPE asks individuals to “indicate what you usually do when you experience a stressful event in your daily life,” on a Likert scale of 1 (*I usually don't do this at all*) to 7 (*I always do this*).

Originally the survey was presented on a Likert scale of 1 (*I usually don't do this at all*) to 4 (*I always do this*) with the two median values representing *I usually do this a little bit* (2) and *I usually do this a medium amount* (3). The inventory presents potential reactions to stressful life events and is used to find which coping strategy individuals use in stressful situations. For the purpose of surveying college students without stigma the four questions pertaining to drug and alcohol use were removed from the experimenter's design making the survey 56-questions.

Procedure

The experimenter explained that the questions asked of each individual were for completion of research in the course Research Methods 496W, all collection was anonymous, and that the survey should take no more than ten minutes but more time may be taken if necessary. In each classroom after the informed consent was signed the experimenter handed out the six page survey to all students who filled the criteria for consenting over the age of eighteen. All surveys were given in classroom settings to prevent outside noises from distracting students from questions. As individuals completed the questions they were brought to the front of the classroom and placed upside down in a large envelope to maintain anonymity. After all surveys were completed and turned in the experimenter debriefed the class providing information about the purpose of the study.

Results

A Pearson's correlation found a significant correlation, $r(99) = .412$, between positive coping styles and increased hours of creativity ($p < .001$). This information supports the hypothesis that increased participation in the creative arts allows for a higher perceived ability to use positive coping styles in undergraduate college students. Additional information found stated that females ($M = 16.75$, $SD = 10.15$) have significantly higher creativity hours than males ($M = 10.44$, $SD =$

7.39) surveyed, $t(70) = -3.463$, $p < .001$. Additionally, no significant difference was found between male ($M = 153.14$, $SD = 26.67$) and female ($M = 159.77$, $SD = 28.4$) students use of positive coping styles, $t(97) = -1.076$, $p = .285$. Finally, significance was found comparing females ($M = 50.09$, $SD = 13.42$) and males ($M = 42.76$, $SD = 11.17$) use of negative coping styles $t(97) = -2.591$, $p = .005$.

Discussion

The purpose of this research study was to evaluate the relationship stating that: increased participation in the creative arts allows for a higher perceived ability to use positive coping styles in undergraduate college students. According to surveyed research the hypothesis that increased participation in the creative arts allows for a higher perceived ability to use positive coping styles in undergraduate college students is supported. Further information found interesting gender differences between males and females in the data collection. Specifically and aside from the general analysis, females had a tendency to spend more time in creative activities than males as well as a stronger tendency toward negative coping styles. This data showed an interesting connection toward participation in creativity and the potential negative uses that have the opportunity to be turned into positive changes. In addition, the finding that males and females spend a equal instances of negative coping styles leads to the point females tend to use both negative and positive coping styles to handle personal times of stress.

Potential issues with the study may have included time constraints, due to the fact that the survey had over fifty questions it was quite possible that students became tired of answering. Also, there is always a chance that students responded dishonestly in order to appear to have a better handle on their coping mechanisms. This issue may present itself in any survey, however, and faith must be exercised to collect data in any scenario. Changes that would be beneficial in

the future would include allowing the questions pertaining to drug and alcohol use to remain in the study for a complete view of negative coping styles to be analyzed. This data is important information due to the prevalence of drug and alcohol use on college campuses. Additionally, future research would benefit from collecting male data to balance the demographic pool of participants as well as an increased number of first-year students. Having a greater school year spread will make the data easier to generalize to a university population rather than a demographic of primarily twenty-year-olds.

The most effective way to ensure that the present data is supported is through further research looking at the link between creativity and positive coping styles in undergraduate student and beyond.

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