

# *The Effects of Fiber Arts on Mental Health: Happiness, Self-Esteem, and Emotional Regulation*

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Fiber arts have been shown to have positive effects on mental health and are utilized in different types of therapies with different populations. In the current study, a survey was created and distributed on Facebook via snowball sampling to explore the different levels or types of mental health benefits that may exist across a variety of factors. The scales utilized within the survey were the Rosenberg Self-Esteem Scale, the Emotional Regulation Scale for Artistic and Creative Activities Scale, and the Subjective Happiness Scale. It was hypothesized that increased ability level, the reason why individuals craft, group membership, and the type of craft would increase perceived mental health benefits; in addition, it was hypothesized that the age of the fiber artist would not have an impact. There were 97 total participants. The age of the participants was a potential moderating variable in the perceived mental health benefits across the factors, as the survey compared across age-groups and could not account for various life stage differences. Community membership increased self-happiness ratings, happiness and self-esteem both increased with experience level and frequency, amateurs utilized more emotional regulation strategies, needlework and stress-relief as a reason for learning were correlated with poor self-esteem, and quilting and sewing were correlated with higher emotional regulation. The present study added to literature by addressing the mental health benefits of fiber arts and suggesting future uses in art therapy.

*Keywords: Fiber Art, Mental Health, Happiness, Self-Esteem, Emotional Regulation, Art Therapy, Psychology*

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Arts and crafts have long had a connection to mental health and emotional wellbeing (Fancourt et al., 2019, 2020). Arts and crafts are broadly defined as “any visual art or craft practices which aim to produce tangible items regardless of the level of expertise” (Liddle et al., 2013). One specific genre of craft is fiber arts, or crafts that are made using fiber as the main medium. Some research has been conducted investigating the benefits of particular types of fiber arts on mental health, or with general arts and different age groups, but there is a lack of empirical investigations examining the interaction between various arts and demographic factors (e.g., age) and their combined effects on mental health.

## *Types of Fiber Arts*

As stated, there are a variety of specific crafts that fall under the larger umbrella of fiber arts. Discussed in this paper are crocheting, knitting, quilting/ sewing, and needlework/ cross-stitch. Crochet utilizes yarn, and one hook to interlock loops of yarn and create a textile. Textiles can be made with various types, colors, and sizes of natural and synthetic fibers, and different techniques can be used to create an

array of visual effects in the finished textile. Crochet contrasts with knitting, which, while still using yarn, uses two needles or a machine to weave a fabric. Quilting and sewing both involve either a small needle and thread, or a machine to connect materials to create a larger or different fabric. Needlework and cross-stitch also use small needles and thread but use small stitches to create visual effects on a fabric. Fiber arts are understood as both domestic tasks and something that is primarily undertaken by older generations (Burns & Van Der Meer, 2021), meaning that they are primarily done by women, and, until recently, older women. The traditional role of fiber arts is changing due to a growing media presence of different fiber arts (Burns & Van Der Meer, 2021), and more young women are starting fiber arts for a variety of reasons, including romanticization of the crafts, self-sufficiency, and feeling connected to the older generations (Riley et al., 2013).

## *Mental Health Markers*

There are many instruments and techniques used to quantify and measure the effects and benefits of different activities on mental health. Mental

wellbeing is defined broadly as a “state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (Burns & Van Der Meer, 2021), and includes general happiness and positive emotional states (Lamont & Ranaweera, 2020). There are many theories as to why all arts influence mental health, one being that there is a level of cortical arousal that the brain can experience as pleasure throughout the art-making process (Liddle et al., 2013). Others theorize that arts and crafts can increase wellbeing by promoting self-esteem, quality of life, and personal growth through craft participation (Kenning, 2015). Self-esteem involves an individual’s attitudes regarding themselves though self-acceptance and self-respect (Ching-Teng et al., 2019), and their ability to respond to daily life stressors and difficulties (Hartz & Thick, 2005). Low self-esteem is correlated with higher levels of depression and suicidal ideation, and higher self-esteem is correlated with feeling worthy of happiness (Hartz & Thick, 2005). Emotional regulation techniques can be built through arts and crafts activities (Fancourt et al., 2019; Fancourt et al., 2022). The ability to regulate one’s emotions is connected to overall happiness and wellbeing, helping individuals to manage emotions and adapt to daily life stressors (Fancourt et al., 2019; Fancourt et al.; 2022). There are three main types of regulatory strategies that are most often used in arts: 1) avoidance strategies (e.g., detachment, distraction, and emotional suppression), 2) approach strategies (e.g., acceptance and problem-solving), and 3) self-development strategies (e.g., improved agency, self-esteem, and self-identity) (Fancourt et al., 2019).

#### *Art Therapy*

Art has a well-known connection with improvements in mental health. There are a variety of therapies, often in group formats, that utilize different artistic media, such as clay, paper, line work, colors, pictures, and symbols to increase levels of self-awareness and self-esteem, as well as develop other skills through the group format. (Ching-Teng et al., 2019). To my knowledge, fiber arts have not been explored as a potential art type for these treatments but could provide an effective craft for art therapies. Knitting has been shown to have therapeutic effects, as a natural side effect of

the knitting process is a calm, meditative-like state, achieved through the repetitive movement (Corkhill et al., 2014). The automatic movement of knitting and other fiber arts can help those who struggle with meditative mindsets to more effectively do so (Corkhill et al., 2014; Hartz & Thick, 2005). A study by Hartz & Thick (2005) noted that the choice of color, shapes, and patterns all emphasize technique and the participants’ own successes in their artistic choices. Within this therapeutic format, highlighting the effectiveness of artistic choice is crucial to achievement. Fiber arts, because of the potential for individual choice through self-identifying fiber art format, yarn type, colors, and patterns, would be an effective outlet for art therapy.

#### *Age, Ability, Craft Type, Group Membership, and Reason for Crafting on Mental Health*

The current study examined a variety of factors to determine whether these factors had an impact on mental health to provide support for current findings about fiber arts and mental health, as well as to find further correlations. The age of the fiber artist is hypothesized to have no impact on the perceived mental health benefit. Additionally, a hypothesis was made that ability level (i.e., experience with a given fiber art) and group membership, throughout both the process of learning and performing, will have an impact on mental health. The specific craft type and the reasons why an individual crafts were also hypothesized to have impacts on the perceived mental health benefits.

Different studies have investigated individual age groups and the effects of arts on mental health. The findings of one study revealed that in elderly individuals, arts promoted overall health, helped with issues of social isolation, and allowed participants to feel useful, creative, and capable (Liddle et al., 2013), while another study found that their self-esteem, self-confidence, and self-achievement were all increased, and rates of depression were decreased (Ching-Teng et al., 2019). These effects are also observed in a different study exploring the benefits of art therapy on teens, as they experienced reduced stress, heightened creativity, and higher self-esteem (Björling et al., 2019). Another study examined these therapies’ effects on young children, and found increased calm, focus, and social skills (Coholic & Eys, 2016). These similar effects across age led to the hypothesis that age will not affect mental health.

Ability level in crafting and time crafting is hypothesized to affect the specific mental health benefits and levels of the benefits. In one study, frequent knitting was correlated with higher levels of benefits, as well as perceived self-happiness and sense of calm (Kenning, 2015). Lamont and Ranaweera (2020) reported that amateur knitters experienced increased levels of frustration and annoyance due to their ability and mistakes. A strong balance between the perceived level of challenge and the ability level was identified as increasing sense of control and less frustration (Adey, 2018). The ability to choose a project with a sufficient challenge level increases with the ability level of the crafter, suggesting that more advanced crafters will feel a greater sense of control and less frustration. However, most fiber arts are relatively easy to learn, and the level of difficulty is highly personal and variable to the choices a crafter makes (Adey, 2018; Corkhill et al., 2014), which could suggest that the specific types of mental health benefits identified could change with skill level, as opposed to the number of benefits. In addition to the positive benefit relating experience and mental health, one study found that frequency of crafting and overall experience level increased the amount of emotional regulation strategies used, and that self-development strategies are used more by amateurs (Fancourt et al., 2020).

There is a large variety of fiber arts that individuals can participate in. One study found that in a comparison between knitting and crocheting, those who crochet experienced more benefits in creativity and accomplishment, while more knitters experienced increased relaxation (Burns & Van Der Meer, 2021). Quilting and knitting are both correlated with relaxation, stress relief, creativity, happiness levels, and higher levels of cognitive functioning (Lamont & Ranaweera, 2020). These findings led to the hypothesis that direct comparison of mental health benefits across a variety of craft types will result in different levels of and types of mental health benefits.

Individual reasons for crafting could influence the type of benefits and number of benefits experienced. Throughout the literature, there are many different motivations for crafting, including stress-relief (Adey, 2018; Björling et al., 2019; Corkhill et al., 2014; Kenning, 2015; Lamont & Ranaweera, 2020; Riley et al., 2013), social benefits and community (Björling

et al., 2019; Burns & Van Der Meer, 2021; Corkhill et al., 2014; Hartz & Thick, 2005; Jou et al., 2021; Kenning, 2015; Lamont & Ranaweera, 2020; Riley et al., 2013), family connection (Riley et al., 2013), and practical skills and the end-product (Adey, 2018; Corkhill et al., 2014; Kenning, 2015; Riley et al., 2013). Learning from others, learning new skills, and exploring the relationship between product and process (i.e., achieving the final product after struggling with the pattern, or getting complimented on something hand-created) can increase feelings of pride (Kenning, 2015). Stress relief, as a reason for learning, is a clear mental health benefit within itself (Adey, 2018; Björling et al., 2019; Corkhill et al., 2014; Riley et al., 2013). Different reasons for crafting should have an effect of both the types of regulatory strategies used as well as the amounts.

Whether or not the fiber artist is in a group for their craft should also influence the perceived benefits. Reported benefits of group participation in multiple studies were found to be lower levels of loneliness, higher levels of happiness, increased amounts of friends, and increased self-esteem (Adey, 2018; Björling et al., 2019; Burns & Van Der Meer, 2021; Corkhill et al., 2014; Hartz & Thick, 2005; Jou et al., 2021; Kenning, 2015; Lamont & Ranaweera, 2020; Riley et al., 2013).

## **Method**

### *Study design*

The study was created using Google forms and compiled a set of demographic questions, social/group factors/benefits, individual factors/benefits, why the individual began the craft, an open-ended opinion box, as well as the time spent crafting per week and years that they have been crafting. The survey tool also utilized the Rosenberg Self-Esteem Scale (RSE) (Rosenburg, 1979), the Emotional Regulation Scale for Artistic and Creative Activities Scale (ERS-ACA) (Fancourt et al., 2019), and the Subjective Happiness Scale (SHS) (Lyubomirsky & Lepper, 1999).

The survey was distributed utilizing snowball sampling online. Crafting groups and individuals were asked to participate through Facebook and email and asked to share the survey. The survey was made live in June of 2022, and closed in October of 2022, running for approximately five months.

Survey Instrument

Three pre-established full instruments were included in the survey: the Rosenberg Self-Esteem Scale (Rosenburg, 1979), the ERS-ACA (Fancourt et al., 2019), and the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999). The Rosenberg Self-Esteem Scale is a 10-item scale and was used with a wide, general population to measure self-esteem; participants answer on a 1-4 scale, from strongly agree (1) to strongly disagree (4) (Rosenburg, 1979). The Subjective Happiness Scale is a 4-item scale that explored happiness in comparison to others, internally, and whether they relate to statements concerning happiness and contentment, in which participants answer on a 1-7 scale (Lyubomirsky & Lepper, 1999). The last scale used was the ERS-ACA (Fancourt et al., 2019). The ERS-ACA is 18 questions long and investigates strategies used in emotional regulation while crafting and calculates an overall score as well as scores on three sub-scales: avoidance, approach strategies, and self-development strategies (Fancourt et al., 2019).

Results

Study Participants

Table 1. Demographics of Study Participants

Demographics	n	%
<b>Age</b>		
16-27	18	18.6%
28-39	11	11.3%
40-51	26	26.8%
52-63	29	29.9%
64+	12	12.4%
<b>Fiber Art</b>		
Crochet	36	37.1%
Knit	31	32.0%
Needlework/Cross-stitch	6	6.2%
Quilt/Sew	17	17.5%
Other	7	7.2%
<b>Gender Identity</b>		
Female	88	90.7%
Male	5	5.2%
Non-Binary	3	3.1%
Agender	1	1.0%
<b>Highest Level of Education</b>		
Some High School	1	1.0%
High School Diploma	3	3.1%
Some College	35	36.1%
Bachelor's Degree	30	4.0%
Graduate School	27	27.8%

Age Effects

There were some effects between age and community participation; 15.5% of those in the 40-51 age range and 16.5% of those in the 52-63 age range responded that they were in a community or learned because of some communal influence. The communal effects were also found in the fiber art type, as 21.7% of those who crochet were in a community or learned because of some communal influence, 18.6% of those who knit were in a community or learned because of some communal influence, and 52.6%, or the majority of the respondents, were in a community or learned because of some communal influence.

There were also some effects between age and fiber art type. In the 16-27 age range, 50.0% did needlework/cross-stitch, and 27.8% crocheted, as opposed to only 6.5% who responded with knitting as their primary craft. Those in the older age group reported higher levels of knitting, 38.7% for those aged 40-51, and 35.5% for those aged 52-63. Those who were 64+ preferred quilting and sewing (25.5%).

Table 2. Age Groups and Primary Fiber Art

Age Ranges	Preferred Fiber Art					Grand Total
	Crochet	Knit	Needlework/Cross-stitch	Other	Quilt/Sew	
16-27	27.8%	6.5%	50.0%	0.0%	17.7%	18.6%
28-39	16.7%	6.5%	16.7%	0.0%	11.8%	11.3%
40-51	19.4%	38.7%	16.7%	28.6%	23.5%	26.8%
52-63	27.8%	35.5%	16.7%	42.9%	23.5%	29.9%
n/a	0.0%	3.2%	0.0%	0.0%	0.0%	1.0%
64+	8.3%	9.7%	0.0%	28.6%	23.5%	12.4%
<b>Grand Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Effects by Reason to Learn

There were no statistically significant correlations between self-identified group membership and mental health benefits. However, there was a main effect of reasons for learning, such that self-happiness scores were higher for community when compared to the other reasons to learn. Follow-up t-tests revealed a significant difference in self-happiness scores between community as a reason to learn and the other reasons to learn [t(91)=2.39, p=.02]. There was also a main effect of reasons for learning, such that self-happiness scores were lower for stress-relief than the other reasons to learn. Follow-up t-tests revealed a significant difference between stress-relief as a reason for learning and the other reasons to learn [t(90)=2.72, p=.008].

Experience Effects

There was also a primary effect of total years crafting and hours/week crafting such that self-happiness scores were higher for those who crafted

for greater than ten years, lower for those who had crafted for less than one year, and higher for those who crafted for greater than 4 hours/week when compared to other hours/week and total years crafting categories. Follow-up t-tests showed a significant difference between crafting for greater than ten years and crafting for less than ten years [ $t(95)=3.03, p=.003$ ], less than 1 year and greater than one year [ $t(95)=2.79, p=.006$ ], and greater than 4 hours/week and less than four hours/week [ $t(94)=2.21, p=.03$ ].

Similar trends were identified with self-esteem. There was a main effect of total years crafting and hours/week crafting, such that self-esteem ratings were higher for those who crafted for greater than ten years, lower for those who had crafted for less than one year, and higher for those who crafted for greater than 4 hours/week. Follow-up t-tests showed a significant difference between crafting for greater than ten years and crafting for less than ten years [ $t(94)=2.50, p=.01$ ], less than 1 year and greater than one year [ $t(94)=3.35, p=.001$ ], and greater than 4 hours/week and less than four hours/week [ $t(93)=2.80, p=.006$ ].

In addition to these relationships, there was a main effect of total years crafting and hours/week crafting, such that ERS self-development strategy sub-scores were higher for those who crafted for less than an hour/week and lower for those who had been crafting for 1-5 years, as opposed to greater than an hour/week and less than one or greater than 5 years, respectively. Follow-up t-tests showed that there was a significant difference between crafting for less than an hour a week and more than an hour a week [ $t(94)=2.06, p=.04$ ], and between crafting for 1-5 years and less than one or greater than 5 years [ $t(95)=2.19, p=.03$ ].

#### *Effect of Fiber Art Type*

There was a main effect of fiber art, such that self-esteem ratings were lower for needlework/cross-stitch than the other craft types. Follow-up t-tests resulted in a significant difference between needlework/cross-stitch and the other crafting types [ $t(94)=2.35, p=.02$ ]. There were also primary effects of fiber arts, such that the general Emotional Regulation Scale (ERS) score and self-development sub-score were higher for quilting/sewing and

lower for needlework and crochet. Follow-up t-tests resulted in a significant difference between quilting and the other art types for both general score and self-development sub-score [ $t(95)=2.44, p=.02$ ;  $t(95)=2.15, p=.03$ ]. A main effect of quilting was also found, such that the approach strategy sub-score was higher for quilting/sewing than the other fiber arts. Follow-up t-tests revealed a significant difference between quilting and the other fiber arts on approach strategies [ $t(95)=2.07, p=.04$ ].

#### **Discussion**

Overall, the current study confirmed and added to the body of data supporting the hypothesis that there are significant benefits between all facets of fiber arts on mental health. More specifically, the present study added strongly to the findings of others (Adey, 2018; Corkhill et al., 2014; Fancourt et al., 2020; Kenning, 2015; Lamont & Ranaweera, 2020) that ability level has a clear impact on the benefit. The present study found that the frequency of crafting was important in self-esteem and in happiness, as the correlations with those who crafted for more than 4 hours a week show. There was also a finding that there were strong benefits for experienced crafters (10+ years) in happiness and self-esteem, and a negative relationship with crafting for less than a year and both happiness and self-esteem. These findings and correlations establish further support for the hypothesis that ability level plays a role in mental health effects. The hypothesis that ability level plays a role in mental health effects could be affected by the age of the participants in the study. Most of the 10+ years' experience group were older than 40 (87.7%). The happiness ratings and self-esteem ratings could have been because of their life experiences rather than the act of the fiber art—children, grandchildren, retirement, etc. Those in the >4 hours/week (over 40--80.0%; under 40--10.8%) also suggest that those who are over 40 may have more time available during the week to spend on their craft, which would affect the available benefits to them. In addition, those who have been crafting for less than a year were all between the ages of 16-27, and that age group is known to have a lower self-esteem and higher levels of stress (Björling et al., 2019; Hartz & Thick, 2005), and potentially happiness.

Increases in experience was not found to be significantly correlated with increases in the use of self-regulation strategies, in contrast to research by Fancourt et al. (2019, 2021). However, there was a significant finding that amateurs were more likely to use self-regulation strategies than other groups, and a significant correlation was found in the <1 hour/week group. Fifty percent of the less than one hour/week group was in the 10+ years of experience group. The connection between the less than one hour/week group and the 10+ years' experience group suggests that being an "amateur" has more to do with the frequency of crafting than the years crafting. The finding that being an "amateur" has more to do with the frequency of crafting than the years crafting would be interesting to replicate with a larger, more diverse participant pool. In addition to the "amateur" finding, there was a negative correlation with self-development strategies in the 1-5 years crafting group. The negative correlation between self-development strategies and the 1-5 years group may be significant, as within the crafted for 1-5-year group, 61.5% were between 16-27. The 16-27-year-olds as the majority of the 1-5 group in this study may suggest that self-development strategies are more dependent on age than the crafter's experience. The role of age in the development and use of self-development emotional regulation strategies may warrant further exploration. In addition, there was also a negative relationship between learning for stress relief and self-esteem. The negative relationship between learning for stress relief and self-esteem suggests that those who are learning to create a stress relief outlet for themselves are more likely to have a lower self-esteem. The relationship between low self-esteem and reasons why people learn to craft may be a result of outside factors, as opposed to related to the craft; taking a self-esteem rating before and after a trial of learning a fiber art to see if there are differences would be interesting.

Throughout the mental health factors, there were interesting relationships with different fiber arts. There was a negative relationship between self-esteem and needlework/cross stitch, although the relationship could again be a result of the small sample size, as 50% of the needlework/cross stitch group was aged between 16-27, and the 16-27 age group has a low self-esteem (Björling et al., 2019, Hartz & Thick, 2005). In addition, while all the different fiber arts

were associated with fairly high general scores and sub-scores (see table 3), quilting/sewing was shown to be correlated significantly with a high general ERS score, approach sub-score, and self-development sub-score. The finding that quilting/sewing was associated with a high general ERS score, approach sub-score, and self-development sub-score added to the findings of Fancourt et al. (2019, 2021), as they did not compare across different types of fiber arts in their initial study of the ERS-ACA scales or the follow-up. While the impact of quilting on ERS scores is an interesting finding, more research needs to be done to determine whether some parts of quilting or sewing are associated with higher levels of emotional regulation, or whether the relationship was specific to the current study's subset of participants.

Table 3. Emotional Regulation Scores and Type of Fiber Art

Fiber Art Type	Average of ERS General Score (where 5 is higher use)	Average of ERS avoidance strategy	Average of ERS approach strategies	Average of ERS Self-development strategies
Crochet	3.8	4.0	3.6	3.8
Knit	3.9	4.1	3.6	4.0
Needlework/ Cross-stitch	3.6	3.6	3.6	3.5
Other	4.0	4.0	3.9	4.2
Quilt/Sew	4.2	4.3	4.0	4.3
<b>Grand Total</b>	<b>3.9</b>	<b>4.1</b>	<b>3.7</b>	<b>4.0</b>

Lastly, there was a positive relationship between happiness and belonging to a community. The relationship between happiness and belonging to a community was an interesting finding, as there were no significant findings utilizing the actual question "Are you a member of a community for your fiber art?" However, when answers for "why you learned your fiber art" were recoded, there was a large communal theme, suggesting that if someone learned through a community, then they are indirectly part of a community, even if they are not currently active in a "real" fiber arts group. The findings regarding the importance of the communal theme suggests that in future studies the question should be rewritten to including communal and familial influences in addition to "true" group membership, and that community can play a large role in happiness, especially within fiber arts.

### Limitations

There were two main limitations of the current study. One of these was the sample size. The sample size was limiting because of its effect on the sub-groups. For example, the needlework/cross stitch sub-group (n=6), 64+ sub-group (n=12), and the

non-female gender identities (see Table 1), were too small to draw some conclusions with a high degree of confidence. Another limitation of this study was the sampling method. The data was collected on Facebook, using snowball sampling methods and utilizing pre-existing groups of crafters. The use of a snowball sampling method means that there could have been an overrepresentation of certain types of crafts, age groups, or community membership, which could have influenced the data.

#### *Future Directions*

One future direction is the implementation of fiber arts in art therapy. One study investigating a fiber arts group in Japan after an earthquake found improved mental health benefits because of long-term participation in the group (Jou et al., 2021), which provides support for the idea that fiber arts could be an effective tool for art therapy. The conclusion of improved benefits as a result of long-term participation in the group found by Jou et al. (2021) agrees with the findings of the present study that longer term and frequent participation in fiber arts helps raise self-esteem and happiness. Fiber-arts have a self-soothing effect, and as such, could help those who struggle with social activities, especially in groups, to feel more comfortable (Corkhill et al., 2014), which would also help in art therapy. The self-soothing effects found by Corkhill et al. (2014) agrees with the findings of the current study about community and happiness. In addition, the findings of the present study observing relatively high scores for emotional regulation across all types of fiber arts shows a great versatility and variety that, in addition to choosing fiber art type, yarn type, colors, and patterns (Hartz & Thick, 2005), would be effective in art therapy. Future research should be completed to further investigate the potentially significant relationship between fiber arts and art therapy. Research in the relationship between fiber arts and art therapy would allow for a potentially wider range of arts that could be utilized in art therapy. Another future application of the current research is the modification of the survey tool used to explore different arts, larger populations, and other surveying techniques. Utilizing the present research in other ways could create a better empirical understanding of the depth and variety in why people may choose specific fiber arts over others,

the emotional pathways developed and impacted by fiber arts, or the relationships between fiber arts communities and well-being.

#### **References**

- Adey, K. L. (2018). Understanding why women knit: Finding creativity and “flow.” *Textile*, 16(1), 84-97. <https://doi.org/10.1080/14759756.2017.1362748>
- Björling, E. A., Stevens, C., & Singh, N. B. (2019). Participatory pilot of an art-based mindfulness intervention for adolescent girls with headache. *Art Therapy*, 36(2), 86-92. <https://doi.org/10.1080/07421656.2019.1609325>
- Burns P., Van Der Meer R. (2021). Happy hookers: Findings from an international study exploring the effects of crochet on wellbeing. *Perspectives in Public Health*, 141(3), 149-157. <https://doi.org/10.1177/1757913920911961>
- Ching-Teng, Y., Ya-Ping, Y., & Yu-Chia, C. (2019). Positive effects of art therapy on depression and self-esteem of older adults in nursing homes. *Social Work in Health Care*, 58(3), 324-338. <https://doi.org/10.1080/00981389.2018.1564108>
- Coholic, D.A. & Eys, M. (2016). Benefits of an arts-based mindfulness group intervention for vulnerable children. *Child and Adolescent Social Work Journal*, 33, 1-13. <https://doi.org/10.1007/s10560-015-0431-3>
- Corkhill, B., Hemmings, J., Maddock, A., & Riley, J. (2014). *Knitting and well-being*. *Textile*, 12(1), 34-57. <https://doi.org/10.2752/175183514x13916051793433>
- Fancourt, D., Garnett, C., Spiro, N., West, R., & Müllensiefen, D. (2019). How do artistic creative activities regulate our emotions? Validation of the emotion regulation strategies for artistic creative activities scale (ERS-ACA). *PLoS ONE*, 14(2), 1-22. <https://doi.org/10.1371/journal.pone.0211362>
- Fancourt, D., Garnett, C., & Müllensiefen, D. (2020). The relationship between demographics,

- behavioral and experiential engagement factors, and the use of artistic creative activities to regulate emotions. *Psychology of Aesthetics, Creativity, and the Arts*. Advance online publication. <http://dx.doi.org/10.1037/aca0000296>
- Hartz, L., & Thick, L. (2005). Art therapy strategies to raise self-esteem in female juvenile offenders: A comparison of art psychotherapy and art as therapy approaches. *Art Therapy, 22*(2), 70-80. <https://doi.org/10.1080/07421656.2005.10129440>
- Jou, Y., Miura, I., Nagamori, Y., Khankeh, H., Ward, K., Vázquez-Mena, A., Lee, M., & Chiu de Vázquez, C. (2021). Posttraumatic growth, health-related quality of life and subjective happiness among Great East Japan Earthquake survivors attending a community knitting program to perform acts of kindness. *Community Psychology in Global Perspective, 7*(2), 39-59. <https://doi.org/10.1285/i24212113v7i2p39>
- Kenning, G. (2015). "Fiddling with threads": Craft-based textile activities and positive well-being. *Textile, 13*(1), 50-65. <https://www.tandfonline.com/doi/abs/10.2752/175183515x14235680035304>
- Lamont, A. & Ranaweera, N.A. (2020). Knit one, play one: Comparing the effects of amateur knitting and amateur music participation on happiness and wellbeing. *Applied Research in Quality of Life, 15*, 1353-1374. <https://doi.org/10.1007/s11482-019-09734-z>
- Liddle, J. L. M., Parkinson, L., & Sibbritt, D. W. (2013). Purpose and pleasure in late life: Conceptualizing older women's participation in art and craft activities. *Journal of Aging Studies, 27*(4), 330-338. <https://doi.org/10.1016/j.jaging.2013.08.002>.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46*, 137-155. <https://doi.org/10.1023/A:1006824100041>
- Riley J., Corkhill, B., Morris, C. (2013). The benefits of knitting for personal and social wellbeing in adulthood: Findings from an international survey. *British Journal of Occupational Therapy, 76*(2), 50-57. <https://doi.org/10.4276/030802213X13603244419077>
- Rosenberg, M. (1979). *Conceiving the Self*. New York: Basic Books.