Links Between the Creative Practice of Art and Empathy in Existing Literature

by

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Abstract

In the body of research investigating the connections between the creative practice of art and empathy there are quite a few individual studies, but a distinct lack of literature reviews or meta analyses. Literature reviews and meta analyses help to give a more clear picture of what the body of research on a topic indicates more than individual research studies and thus are an important tool for being able to answer larger questions regarding a topic such as the one posed by this paper. That is: What are the links between the creative practice of art and empathy? This review searched for existing peer reviewed empirical articles on the topic of artistic practices and empathy. Twenty five articles were found and analyzed for thematic similarities and findings. Overall, the literature shows some qualitative evidence in support of a correlation between various creative practices of art and empathy. The modalities of music, and visual and literary arts show the strongest findings in favor of a correlation between those modality and empathy. However, the body of research is lacking in experimental designs, contains many poorly designed studies, and has some drawbacks from the overreliance on qualitative data to support their hypotheses.

Keywords: Empathy, Art, Visual art, Art Therapy, Music, Combined Flow, Dance, Dance and Movement Therapy, Theatre, Playback Theatre, Literary arts, Poetry.

It is common knowledge that our emotions have close links to different art forms. Nearly everyone has a song that will make them cry, places of worship often decorate their walls with paintings that evoke awe, and everyone can remember tearing up as a child at the death of a

Links Between the Creative Practice of Art and Empathy in Existing Literature beloved storybook character. Art ties us together as human beings through these emotional links and relates to other more complex interpersonal phenomena such as empathy. This literature review examines the current body of research around creating art and empathy, in order to determine what can be concluded about the relationship between those two phenomena in general.

The final stages of this research were conducted under quarantine conditions due to the COVID-19 outbreak in early 2020. This situation as well as the social and political climate over the past decade have made clear the need for thoughtful and above all else empathetic policies to combat problems faced by humanity. One could point to any number of social problems from the mass shootings motivated by fringe right politics on the internet, to the global rise of fascism, to the quiet acceptance of deteriorating conditions in rural communities by elected officials, and to the rise in racist hate crimes in the wake of the COVID-19 outbreak all of which could be improved upon by encouraging empathy ¹. Many researchers have already started to draw on this thought process and have conducted research into different facets of empathy. However, despite the presence of individual research articles on different types of art and their relations to empathy, at the time of writing this there was no research looking at the bigger picture that these individual articles flesh out. That is what this review seeks to provide, a comprehensive look at the current research to determine the links between creating art and empathy.

On a related note, expressive art therapies ² have also been on the rise in recent years. As noted above, a wide variety of art forms are closely intertwined with our emotions. Different forms of art have been known for drawing people together and eliciting empathy for other individuals and populations. Some research indicates that there is a strong correlation between emotional intelligence and creativity (Geher, Betancourt & Jewell, 2017), which can be assumed

Links Between the Creative Practice of Art and Empathy in Existing Literature to be generalizable to creative expression. Drawing on this and other ideas from expressive therapies, many researchers have started looking into the relationships between artistic expression through different modes and empathetic connection to other individuals.

This project is a review of existing research that looks at the relationship between empathy and the creative practice of art, with the goal of establishing what can be said about the relationship between empathy and art in general. It should be noted that the term "creative practice" is used throughout this review to refer to the active participation within an artform; not all art forms are focused simply on the finished product as implied by "creation", some are more focused on the act of making, thus "creative practice" seeks to include both types of participation in artforms which come up under the purview of this research. This project also looks into empathy's relation to specific artistic modalities, indicating areas for future research in the field and identifying populations that the body of research indicates would be most helped by these findings. I also recognize that due to the topic of research in this project, the readership is likely a mix of people interested in the psychological phenomena outlined who might be interested in new research into this topic, but other readers may be coming to this research from the arts and be more interested in the practical applications of the various artforms in eliciting empathy. With this in mind I have included a glossary of terms in appendix A that will include terms used in the literature and this review that those unfamiliar with one discipline or another may not be familiar with. Additional care will be taken to outline how findings of the research covered here may be used not only for future research, but also by practitioners and instructors of the art forms themselves.

Given the amount of anecdotal evidence linking artistic creativity and empathy as well as the numerous studies looking to test this link through different means, it is my position that the Links Between the Creative Practice of Art and Empathy in Existing Literature body of research can be expected to find credible evidence in support of the links between artistic creativity and empathy.

Method

The sample of the articles collected for this literature review were found through a search of the database PsycINFO, as the primary lens this review is using is a psychological one. The results of the keyword search for "art" and "empathy" while filtering for peer reviewed empirical articles turned up 305 articles at the time of the initial search. Through reading the abstracts this number was reduced to 43 articles pertaining primarily to a form of creation or practice rather than consumption of art. This number was again reduced to 27 articles being analyzed in this review after further reading determined the others dealt with issues either outside of the scope of or not specific enough to the topic of this review.

Possible limitations to the collection of the articles will be discussed later in the limitations section. However, the reasoning behind the search parameters is as follows. "Art" rather than "arts" was used because the plural will often be associated with "fine arts," which may have excluded other modes often considered to be more craft or crafts than art but would still fit under the purview of this review. "Empathy" was the keyword used over similar but distinct terms like compassion, theory of mind, or sympathy because "empathy" is more related to the issue being looked at in this review, feeling what someone else is feeling. Empathy is related to theory of mind 3, knowing what someone is feeling, and sympathy 4, caring about what someone is feeling, but doesn't imply the potentially confounding variables inherent to other constructs like compassion 5 which often involves a desire to alleviate the suffering of others rather than simply understanding or feeling the same emotions, making compassion a trickier construct to operationalize and test.

The filters placed on the search results of peer reviewed empirical articles were put in place to help limit the search results to research that would be most pertinent to this review, while also considering the time constraints in conducting this review. The articles that were chosen were peer reviewed to help maintain the academic standards for psychological studies, ensuring that the research included have been looked over and determined by the psychological community to be well conducted according to the scientific method and adhering to common ethical protocols. The emphasis on empirical articles is for a couple of reasons. One reason was that given the time constraints on the completion of the literature review, it was not going to be feasible to read several books each for a single line of research or series of studies. Additionally, it is typical that in psychological reporting on research, as the length of the report increases, the proportion of references to original information decreases and thus the chance of including information that isn't supported by data increases. Additionally, peer reviewed articles in psychology must be based on empirical findings while books written on similar subjects but not reviewed by the same process are often not held to that standard.

The filters and limitations on the articles collected means that this literature review is pulling from a sample of the research rather than a true census of the articles. The final scope of this review is much smaller than the original list of potential articles, however after reading through the potential articles these limited ones are those appropriate to the topic and scope of this review.

It should be noted that there were two studies that met the search criteria for the literature search, but upon further examination the articles did not fit thematically with the rest of the studies covered or the intention of this review. One looked at a study testing what kind of instructions and materials when given to children produced artwork with empathetic expression

Links Between the Creative Practice of Art and Empathy in Existing Literature among other things (Carr & Vandiver, 2003), the other at the life and work of Friedl Dicker-Brandeis one of the early influencers of the field of art therapy (Wix, L. 2009). Due to the fact that they did not fit in well with the rest of the literature gathered and because they did not easily match with the intention of this review they were removed and not discussed at length, but can be found in the bibliography if there is further interest in these articles.

The articles that were found in this literature search tended to be categorized as being focused primarily on quantitative ⁶ or qualitative ⁷ research. There are articles which utilize both types of data, and while not necessarily true for all of these mixed articles, there was a tendency for the quantitative data in these studies not supporting the researcher's hypothesis related to empathy while the qualitative data did. To organize the results of the different articles in this literature review, articles utilizing primarily quantitative data will be examined in each first subsection along with the main findings of articles which have both quantitative and qualitative data. Then a following subsection will discuss qualitative research and readdress the aspects of the mixed data articles which pertain to the qualitative findings.

Results

Visual Arts

The following articles discussed in this section look at the various connections between the creative practice of visual arts and empathy. Visual art is often the first thing that people think of when prompted by the word art. As a result, this art form receives a lot of attention in any question regarding "The Arts" and was found to have a comparatively large number of research articles which fell under the scope of this research. Due to this high volume, and the relative familiarity that people outside of "The Arts" tend to have with this art form compared to other forms it felt appropriate to discuss these articles first.

Researchers have found evidence in support of individuals participating in creative practices of visual art experiencing empathy towards a variety of different groups. In most of the studies discussed, the researchers asked the participants to make art while empathizing with a specified other (individual or group) in mind. Empathy was not always the wording used, but the idea across the studies was consistently asking participants to try to feel what the other is feeling.

Quantitative

In many of the studies looking at visual art and empathy there was often less emphasis put onto quantitative data. Looking at the 2017 Lee and Peng study as an example of this, mothers of children with special educational needs (SEN) in Hong Kong were invited to take part in a study that would look at the effects of art therapy on aspects of their relationship with their children with SEN. The lack of random assignment to the control prevents us from calling this an experimental study and introduces room for potential bias on the participant's part, however as a quasi-experimental study provides some useful information. The participants in the "experimental" group underwent group art therapy, and their pre and post test scores on selfreports about their relationships with their children were compared to those in the "control" who did not undergo this group art therapy. While the researchers did not find significant quantitative evidence from these scores, the interviews they conducted with the participants did indicate positive change as a result of the art therapy on the mothers understanding of and empathy for their children with SEN (Lee & Peng, 2017). This finding of qualitative data in support of the hypothesis and lack of quantitative findings in support of the hypothesis will be discussed in more detail in the limitations section, however it is interesting to note in this artistic mode how the qualitative and quantitative data indicated different levels of support for the hypothesis for increased empathy with the creative practice of visual art.

Multiple studies have supported the hypothesis that the experience of creating art is enhancing the participants' experience of empathy for people with differing abilities or aliments. For example, in two studies (Potash & Ho, 2011; Potash, Ho, Chick & Yeung, 2013) researchers asked 46 participants without diagnosed mental illness to view artwork created by individuals with diagnosed mental illnesses and to then create their own works in response to those original individuals. All participants and original artists were from Hong Kong where the studies took place. In addition to having no diagnosed mental illness themselves, the participants were selected by a purposive sample to have a variety of relationships to people with mental illness (ex.: professional relationships, personal relationships or no relationships) so that the sample would reflect the general population in regards to the variety of ways people who are presumed to be neurotypical already relate to people with diagnosed mental illness. They then gathered qualitative data from the participants in forms of recorded conversations regarding the original artwork, questionnaires filled out by the participants about their feelings towards the artists, and the response art itself. The questionnaires did not explicitly ask about empathy presumably to not tip off the participants as to the hypotheses, but rather broke empathy down into components regarding how they related to the feelings and situations of those who created the artwork. In both studies the artwork created by participants was found to often mirror visual elements from the artwork of the individuals with mental illnesses, and the qualitative data suggested that the experience of creating the art helped the participants to feel increased empathy towards those individuals (Potash & Ho, 2011; Potash et al., 2013).

This of course is similar to the quantitative findings from Lee and Peng, that is to say that in both studies the participants tended to express that the intervention helped them to, broadly

Links Between the Creative Practice of Art and Empathy in Existing Literature speaking, feel more empathetic towards the people they were asked to emphasize with (Lee & Peng, 2017).

Additional qualitative data comes from a study that looked at four professional artists with frontotemporal dementia (FTD) showing evidence that you can see the lack of empathy for individuals through their artwork. Prior research indicates that FTD causes decreases in empathy towards other individuals in line with other emotional and interpersonal changes that occur with FTD due in large part to the damage being done to regions of the brain in the temporal lobes. This study observed the progression of artist's portraits of other individuals taking on a more "distorted, menacing, skeleton-like, or 'alien'" look as the FTD progressed. This suggests that the decreasing ability to feel empathy towards those depicted in their art was consistent with a decreased humanity displayed in the portraits of them (Mendez & Perryman, 2003), adding to the central hypothesis among many of these studies that one can observe individuals' empathy, or lack thereof, through their art.

It should be noted that in this study the findings related to the patients understanding what other people are feeling, but not feeling empathy for them, is neurological evidence for a tangible difference between theory of mind and empathy. The patients are still able to correctly identify what others are feeling, possessing theory of mind, but due to this particular type of dementia, are no longer able to feel the empathy that often follows in neurotypical people.

Finally in a study which while inclusive of both literary arts and visual arts fits better into the visual arts section, researchers found qualitative evidence in support of the idea that creating art helped children in Zimbabwe who are neither themselves diagnosed with nor close with others who are diagnosed with or otherwise affected by HIV/AIDS to empathize with children who are (either themselves or close loved ones diagnosed with HIV/AIDS). The participating

Links Between the Creative Practice of Art and Empathy in Existing Literature children were asked to draw a picture and create a story about a child who either has HIV/AIDS or has been affected by it in some other way (family members might have HIV/AIDS etc.). Although the researchers noted that the messages of empathy were clearer in the stories than in the visual art, and that the creative endeavors tended to fall into a certain stereotypical depiction of the characters, there was clear evidence of the participating children feeling empathy for the children affected by HIV/AIDS during this intervention (Campbell, Skovdal, Mupambireyi, & Gregson, 2010).

Overall, key themes run through the literature on empathy and visual art. There is supporting evidence that one can observe empathy through the mirrored artwork of the empathizer and those being empathized with. Research has also found supporting evidence of the hypothesis that creative practice of art helps to increase empathy towards individuals or groups in question. These findings are comparable to those found in studies relating empathy to other modes of art.

Music & Dance

The included studies of music related to empathy in this review are of particular interest due to the fact that music is treated in the brain as a primary reinforcer⁸ (Hariri, 2015), and thus serves as a significant area of interest in the relation towards any psychological phenomena, in this case empathy. On a similar note dance is of particular interest not only for its links to music, but because some researchers hypothesize that Dance and Movement Therapy ⁹ (DMT) should improve empathy due to the connections between the regions of the brain that are associated with creating movement and the limbic system that aids in the experience of emotion, and that by mirroring other movements in dance you could potentially be mirroring their emotions and evoke a feeling of empathy (Mcgarry, & Russo, 2011). The pairing of studies on music and dance is

Links Between the Creative Practice of Art and Empathy in Existing Literature due primarily to the conflation of music with dance in most dance related activities and therapies. It is rare to see dance on its own without music, thus it seemed appropriate to look at the two modes of art in close proximity, understanding that any effect related to empathy found in research on dance could be due to its interaction with music, either in addition to dance or in its entirety.

It is also interesting to note that this section has a comparatively high proportion of studies that focus either entirely or mostly on quantitative data collection.

Quantitative

In one study looking at a course in cross cultural understanding that music therapists underwent, participants report being better able to empathize with clients from other cultures in these sessions. This suggests that at least cross cultural empathy, if not empathy in general, is a learnable skill which can be improved on in the context of music therapy. The researchers discuss why cross cultural understanding and empathy is important, specifically in how it relates to music in music therapy. Different cultures have different types of music as most of us know, but what people might not think about is how music is used for different purposes in different cultures. Thus, in order for a music therapist to practice (which involves the creation and playing of music) effectively it is vital that they have a level of empathetic understanding of how music affects their client from that culture. In the study a group of around 80 responding music therapists in the United States or Australia filled out a survey including demographic information and a cross cultural empathy scale. Researchers found that when analyzing the scores from therapists who reported receiving cross cultural training, they showed higher levels of cross cultural empathy, implying that this is a learnable skill, a hypothesis that could potentially be expanded to empathy in general (Valentino, 2006).

The research on cross cultural empathy implies that empathy is a learnable skill, but other researchers see it through a different lens, as more of a personality trait that some people are more prone towards displaying than others, though with the potential to be changed slightly over time. Along these lines there has been research looking into if musical ability is connected to general tendency towards being empathetic, and other personality traits. One study that looked at this found that while musical ability in ensemble performance was correlated with some aspects of personality from the Japanese Big Five Scale personality measure, it was not significantly correlated with empathy, although some sub scales of empathy as a personality trait were slightly positively correlated with solo performance ability for the music majors being tested. The study involved about 70 female music majors in Japan. Participants filled out questionnaires evaluating their personality traits as well as levels of empathy, their preferences for solo versus ensemble performances, and how commonly they played or practiced music in a variety of settings and with different intents. They also answered questionnaires regarding how others evaluate their playing, both solo and ensemble performances. As aforementioned, the researcher found that while musical performance was linked to some personality traits as measured, it was not significantly correlated to empathy as a whole (Kawase, 2015).

In another study conducted in Japan, research indicates that there is the possibility that more empathetic people self-select into music lessons. This study looked at empathy in about 270 Japanese children with different ages of onset of musical lessons. The findings indicated that while the students who start music lessons at a very early age have higher levels of empathy than those who start just a little later in life, there is also an increase of empathy as a trait measure in children who start even later. The participants were ages 4-5 and 6-7 and had to have attended regular musical training at the Yamaha Music School's group sessions. Parents or

Links Between the Creative Practice of Art and Empathy in Existing Literature caregivers filled out a questionnaire regarding the onset age of musical training. The parents or caregivers also rated their children on questionnaires regarding a variety of topics including empathy. The results regarding empathy were such that those who were in the very early starters had higher empathy scores as a group, and after a fall in that empathy score for early starters there is a subsequent rise for the late starters. Researchers suggest that the first spike in empathy in the very early starters may be indicative that music lessons can help enhance empathy and that starting younger is better. The later spike in children that start later in music lessons could be the result of children at that point being old enough to self-select into those activities, and that people with higher levels of empathy are drawn to music (Kawase, Ogawa, Obata & Hirano, 2018) It should also be noted with the self-selection bias theorized in this paper that with the participants being so young that any involvement in the music classes may also be due to a selection bias of parents who would like their children to be musically inclined presenting similar problems as the self-selection bias.

Moving for a moment to look at some primarily quantitative studies on dance, multiple studies looking for links between aspects of dance with empathy have failed to produce evidence of such. One study that looked at correlations between dancer's responsiveness to the tempo of music in their dance found links between the responsiveness and other personality measures, but not empathetic tendencies. The 30 participants were college students of 15 different nationalities with a variety of dance and musical experience, education, and continued practice. The researchers had the participants dance individually to songs with different tempos, imagining that they were in a dance club, while wearing devices to record their movements on different points on the body while they were videotaped. The researchers instructed the participants to try to stay synchronized with the music but aside from that they were allowed to dance however they

Links Between the Creative Practice of Art and Empathy in Existing Literature wanted. The participants then filled out questionnaires which included scales to measure personality traits and empathy. As stated above the findings showed correlations between responsiveness to tempo and certain personality traits, but not with empathy. The researchers suggest that this might have been due to the measure they used for the empathy scores rather than a lack of correlation of the constructs themselves (Carlson, Burger, London, Thompson & Toiviainen, 2016).

In another study looking to see if a series of dance therapy sessions could improve among other things, empathy for participants with autism spectrum disorder, they found no significant improvement compared to the control group on this front. The participants were 31 individuals diagnosed with ASD with varying levels of severity. Quantitative data collection included a selfreport questionnaire that researchers gave the participants as a pretest and again as a posttest after undergoing seven sessions of the Dance Movement Therapy (DMT) These questionnaires included a measure of empathy. The DMT consisted of several types of movement conducted by a leading therapist and aided by psychology students trained in this method. During the last part of each session there was time allotted for the participants to discuss the DMT session from that week as a group with the leading therapist. Another group serving as a control did not receive the DMT but was also given the questionnaires at the same points as the group receiving the DMT. Additional qualitative data was collected via observations of the sessions and through an option that was given to participants to submit a painting, picture, or poem about their experience in the DMT. Although there were some statistically significant results in the DMT group compared to the control, there was no significant change in empathy for the DMT group after the sessions compared to the control (Koch, Mehl, Sobanski, Sieber & Fuchs, 2014).

Another study with mixed data collection was Gilboa & Ben-Shetrit's 2009 study where researchers looked at compassion rather than empathy and made the case for compassion having the same root as empathy, in addition to building off of it. They define compassion as having the added component of not only feeling what someone else feels but wanting to make them feel better. The participants were groups of children that underwent group music therapy sessions as an integrated group, with some of the participants being developmentally "normal" children and others with developmental disabilities. Researchers wanted to see if the integrated music therapy would increase the compassion of the developmentally "normal" children towards those with the developmental disabilities. They found that in a music therapy setting there was qualitative and quantitative evidence in support of increased compassion from the developmentally "normal" children towards those with developmental disabilities shown through the analysis of the recorded sessions and notes taken by the music therapist (Gilboa & Ben-Shetrit, 2009). One can assume that as compassion encompasses most definitions of empathy, and that this could be extended to support the hypothesis that these sorts of integrated music therapy sessions could improve upon empathy as well for participants.

Qualitative

Multiple studies have found evidence in support of practicing music increasing the practitioner's empathy, particularly for fellow musicians during group playing sessions. In a comparative study looking at communication between members of a string quartet compared to those of a jazz sextet, researchers found qualitative evidence in support of the musicians increasing their empathy for one another during playing sessions with verbal and nonverbal collaborative communication. In this study they compared data gathered from an Italian string quartet to the data gathered in a previous study from the student jazz sextet. They videotaped the

Links Between the Creative Practice of Art and Empathy in Existing Literature pre-concert rehearsals as well as the concert itself. The researchers then coded the transcripts of these rehearsals for when the musicians were seen communicating amongst themselves. The different modes of communication were broken down by the distinctions of verbal vs nonverbal, and by if they were instructive, cooperative or collaborative. They found that in nonverbal collaborative communication the musicians were engaging in an "empathetic attunement" or "empathetic creativity" which might also be described as "group flow". The researchers also interviewed the individual musicians after compiling their data to discuss it with them and gain supplemental data that served to fill in the perspectives of the musicians and what they experienced during each of the different forms of communication. Researchers found that both of the musical groups were able to achieve "empathic attunement" and this would result in improvisation in both the jazz and string groups (Seddon & Biasutti, 2009).

The supplemental data collected in interviews at the end of the Seddon and Biasutti study sounds like a more successful version of the optional qualitative data collection that Koch et. al. talked about and tried to implement in their study included in the quantitative section. This intervention was where they invited participants to submit artistic pieces describing how they felt about the DMT intervention. Perhaps if they had carried out the qualitative data to supplement the quantitative findings in a manner similar to the interviews in this research they would have addressed qualitative support for their findings missed by the quantitative data collection, as is the case in several studies in this literature review. How it currently stands however, we have to assume that there was no supporting evidence for that hypothesis as was indicated by the data collected.

Similar to the research looking at "empathetic attunement", in research about combined flow 10 during musical jam sessions researchers found qualitative evidence that during sessions

Links Between the Creative Practice of Art and Empathy in Existing Literature when combined flow is achieved the musicians report many attributes of enhanced empathy for the other members of their playing group. The participants were 6 college aged, experienced musicians, who played regularly in group jam settings. Interviews with each participant were conducted, transcribed and coded for further analysis. One theme that emerged from these interviews was a developing sense of empathy for other members in the jam sessions, as well as relaxation amongst the group and fewer negative feelings towards other members (Hart & Di Blasi, 2013).

Overall, there is more, and more substantive research and evidence for the connection between the creative practice of music and empathy than there currently is for dance and empathy. It could be that other forms of dance which were not featured as often in these research articles, such as partnered dance, would have more salient evidence towards increasing empathy through this art form. This discrepancy between evidence for dance and music and empathy could also be because there is simply more research done on music rather than dance, but it is important to remember how closely tied the two forms are within the practice of dance.

Theatre

The inclusion of theatre as an art form in this study is because, though it is not what most people think of first when they think of "art," it by nature requires putting oneself in someone else' shoes. Therefore, this mode of art would be assumed to have potentially significant links to empathy.

Quantitative

A 2012 study conducted by Goldstein and Winner looked at empathy and theory of mind across groups of elementary and high school students taking drama classes compared to students taking other art classes by gathering primarily quantitative data. The 75 participants were

Links Between the Creative Practice of Art and Empathy in Existing Literature students, most of whom were already enrolled in afterschool arts or acting classes, though some were recruited and joined these classes specifically for this study. The researchers administered measures to the participants for empathy among a series of other tests looking at theory of mind. The participants were seen by the researchers for the questionnaires in the beginning of the study and again after 10 months of the after school classes. The researchers found increases in empathy from pre to post tests in the drama students higher than those of the students in the other arts classes (Goldstein & Winner, 2012). It should be noted that this is a quasi-experimental study due to the lack of random assignment to a true control.

Multiple studies have used quasi experimental designs and found that students in drama classes have shown increased levels of empathy towards others compared to students in other types of art classes. In one study, researchers looked to compare students in a drama class to those in a visual arts class and a music class using pre and posttests of theory of mind, emotional regulation, and empathy. The roughly 50 participants were students at a high school for the arts. The non-acting students were treated as a control group compared to the acting students. All participants were given measures to address their emotional regulation, empathy and theory of mind as a pretest prior to the 10 months of the school year during which time they participated in their classes. The participants completed these measures again as a post test. The researchers found that students in the drama class started with higher scores than those in the other types of classes suggesting a self-selection bias. Additionally, according to the post tests the students in the drama class scores of empathy and theory of mind had also increased, higher than those of the students in the other types of class (Goldstein, 2011).

There were a couple of studies within theatrical arts that came up as a significant subgroup of the studies looking at Playback Theater. Playback Theater is a group activity is

Links Between the Creative Practice of Art and Empathy in Existing Literature theatre while also possibly crossing over into the realm of group therapy. It consists of a group of participants, often a musician and a group of improvisational actors. The participants take turns relaying a story from their life for the entire group, and then the musician and the actors act this story out for the group of participants, then the next participant tells a story from their life, often inspired by the previous story. Empathy is built between participants for one another after hearing and watching the stories, but also from the actors towards the participants. This type of theatre is included in our study even though it could be argued that the actors in this art form are the ones who primarily create/practice the form rather than the participants who act as a participating audience. The reasoning for keeping these studies is because the research participants are also actively helping to create the experience by giving their scenarios to be acted out by the actors and thus can be considered to be co-creators rather than simply fulfilling the role of consumer that audiences often fill. Additionally, in this group activity it could be argued that the participants are also active members in the creation process as they draw on each other's stories to organize a session of the whole group's stories which draw from and build on the themes and emotions of the other participant's individual stories (Ng & Graydon, 2016).

In one study looking to see if playback theater could increase feelings of empathy and acceptability of violence in teenagers compared to a control, the qualitative data, while sparse, in support of this hypothesis was not matched by quantitative data. In the study there were almost 50 participants between the ages of 10 and 15 who attend school in New York City. They were given a scenario describing a fight and then a brief description of the US criminal justice system. The participants were then given several questionnaires to record comprehension of the scenario, their views on aggression and their empathy. Participants were then divided into experimental and control groups. Both groups were given pretests of the aforementioned questionnaires, and

Links Between the Creative Practice of Art and Empathy in Existing Literature then the control watched a video and the experimental group participated in a session of playback theatre which focused on empathy and the acceptability of aggression. After this, both groups were given the questionnaires again as a post test. A final Playback Theatre session was attended by all participants and qualitative data was gathered from all the participants based on their conversations and other participation recorded by the researchers. The quantitative data from the questionnaires did not indicate that empathy was impacted for the experimental group based on the Playback Theatre from pretest to the post test. Researchers suggest this could have been due to a design flaw in the way their survey measured perspective taking as a component of empathy (Bornmann & Crossman, 2011).

Qualitative

In the Bornmann and Crossman study discussed in the quantitative subsection, the qualitative data suggests a small amount of support for the intervention increasing perspective taking as a component of empathy. This finding, however, was not matched by the quantitative data collected (Bornmann & Crossman, 2011).

There is qualitative evidence from the participants that playback theatre inclines them towards feelings of empathy for other participants. This study conducted in Hong Kong consisted of 8 high school aged participants. They were trained in Playback Theatre before the start of this study. The researchers videotaped the session of the playback theater and transcribed the video, but also considered the nonverbal signs of communication and empathy such as body language. The participants also talked about the experience at the end of the session and filled out an open ended survey to help identify empathy in the participants' experience. As suggested above, the researchers found that there was significant qualitative evidence of empathy from the participants for each other after this experience of playback theatre (Ng & Graydon, 2016).

While the literature reflects the hypothesis that participating in theatre can have positive effects on empathy, there are some lingering issues around study design with the majority of these studies being correlational, and lacking randomized control groups which may shed doubt on some findings, their external validity, or obscure the presence of connections one would expect to find.

Literary Arts

The following articles are included because of the purported links between the literary arts and empathy. A 2012 article in particular delves into the literary device of metaphor, and the ability of the literary arts using this device to help bridge the connection between the "individual" and the "universal", the basis of empathy (Roberts, 2012). The majority of the articles are based around the creative practice of writing, either literature in general or poetry, but at least one of them was more focused on verbal storytelling than the act of writing it down.

Poetry is included in this section because of the nesting aspect of poetry within the writing discipline. Though the argument could be made that poetry is also closely linked to music and that sorting these articles on poetry with that discipline would have merits. However, due to the fact that not all of the poetry studies involved either spoken word or the use of musical instruments, it made more sense to include them with writing where the entirety of the poetry selection would neatly fit.

Quantitative

In this section there were no studies that looked entirely at quantitative data, but rather both of the studies included in this subsection are a mix of both quantitative and qualitative data collection. Some studies within the literary discipline that branch into the topic of empathy did not do so by design, but rather the qualitative data suggested a link between storytelling and

Links Between the Creative Practice of Art and Empathy in Existing Literature empathy when analyzed after quantitative data had been collected looking into other phenomena such as medical student's anxiety around working with certain populations. In one such study researchers looked at a group storytelling intervention aimed at helping medical students to decrease anticipation and negative affect towards dementia patients with whom they worked. There were 22 medical students who were the studied participants, they worked with 20 dementia patients. They broke up into groups of medical students and patients to use a storytelling intervention where the students prompted patients with photos and the group created a story together based on this photo. The medical students were given pre and posttests of their attitudes towards the dementia patients. They also filled out open ended questionnaires about their feelings towards the patients. Researchers found qualitative evidence in interviews with the medical students that they experienced what could be called empathy towards the patients, though the researchers referred to it as "humanistic patient centered care" (George, Stuckey & Whitehead, 2012).

More concrete and intentioned evidence in support of the links between the literary arts and empathy was found in research aimed at fiction writers who experience the "illusion of independent agency" (IIA) for their characters, meaning that they feel the characters have a mind of their own and often drive the plot rather than the writer deciding how the plot of a story will go, and therefore what the characters will do. The 50 participants were recruited from the public through a variety of means, asking for fiction writers who had been writing for at least 5 years, not mentioning IIA anywhere in the recruitment. There was a wide variety of professional experience of the writers, though the racial and gender composition of the group skewed towards white men. The participants completed a few questionnaires about their background and about experiences of dissociation which helped to give a frame of reference for their experience of IIA

Links Between the Creative Practice of Art and Empathy in Existing Literature which could be considered a mild type of dissociation. They then participated in written interviews about their writing and IIA. The research aimed to see what sort of writers engage in IIA more, but the researchers experienced a ceiling effect in their research as they discovered that most fiction writers experience this to some extent. What they did find was that writers who experience IIA consistently do score higher on some sub measures of empathy (Taylor, Hodges & Kohányi, 2003).

Qualitative

The research on poetry within the literary arts as it relates to empathy seems to be most focused on incorporating empathy by ways of its assumed interaction with poetry into schools' curriculum. In one study looking at empathy and poetry, the researcher did find substantial qualitative data in support of links between the two themes, however these results are potentially complicated by confounding variables, bias, and by the fact that the participants are not blind to the intentions of the research. In part because of all this the research is open to much criticism in its methodology. In the study a psychology teacher gave her students an assignment to write a poem about any topic related to mental illness and evaluated the poems for evidence of empathy towards those with mental illnesses (Connor-Greene & Murdoch, 2005). Though she does not give the students in this study instructions to write with an empathetic lens, she does give them examples from previous semesters that she believed to have been good examples of what she wanted from the students in this project, which likely primed them towards including empathetic themes. Examples that the researcher would consider effective poems, that show empathy for those with mental illness, would be thought to reliably include themes of empathy for those with mental illness. Though the evidence in this article does support links between empathy and the discipline of poetry writing, it cannot be said to be evidence for causality due to the lack of a

Links Between the Creative Practice of Art and Empathy in Existing Literature control group and random selection, nor were the students completely blind to the objective of the research, and in fact due to the grading of this project, were motivated to give results that would increase support for this hypothesis.

In a 2012 article, researchers detail the thought process behind the program *Drums and Poems*. Due to the emphasis on testing among other limits in the educational system, teachers realize that there is little opportunity within the traditional school curriculum to teach vital interpersonal skills such as empathy. They found a way to combine it with a literacy program, *Drums and Poems*, which would teach children about poetry while learning empathetic skills directed towards their fellow classmates (Sassen, 2012). While this article went into detail about the process of the program and examples of where it has been implemented, it was very light on any data, even qualitative or anecdotal, collected from these programs to support its efficacy or lack thereof.

Though the research is messy at times, there is some support in existing research, and much opportunity for more research into the links between the literary arts, and the phenomena of empathy.

Discussion

The body of research connecting the creative practice of different art forms and empathy consists of many potentially confounding variables at play in each of these studies that could have complicated or entirely obscured the findings. A meta-analysis of the studies in this review could possibly find something of a trend in the findings of these studies, but from this overview, there are so many studies with small effect sizes, or results that either internally conflict or conflict with the rest of the literature, it is hard to see any but the broadest of trends. That being said, a meta-analysis may not be feasible given that the literature on this topic; so many of the

Links Between the Creative Practice of Art and Empathy in Existing Literature studies rely heavily on qualitative data which would be difficult to analyze in this way, in addition to the lack of a consistent methodology across the studies adding to this impracticality in using a meta-analysis. Given the difficulties of conducting a meta-analysis on this literature it seems that it is most practical to rely on literature review like this one which can more easily organize findings that are as mixed as those found in the literature here. These mixed findings are due to many factors including but not limited to the lack of a universal definition of empathy in the qualitative data throughout the literature, the overall absence of true experimental data, the reliance on primarily qualitative data, and a lack of consistency in the groups with whom the participants empathized.

There have been comparatively few research designs in the literature that would fall into even a quasi-experimental design, and none that could be seriously considered true experiments with random assignment to controls and participants blind to the intent of the treatment. This is likely due to a variety of reasons, not least of which could be the lack of funding for experimental research on this topic. Many researchers were able to perform quasi-experimental research on this topic, but due to logistics of not being able to randomly assign participants to treatments they were unable to live up to the ideal study design for determining causal links between the creative practice of art and empathy. That is a major critique of the current literature, that without true experimental data, one cannot conclude any sort of causal relationship. Future research should endeavor to follow a design that would shed light onto this question.

Another major critique of this body of research is the lack of a unifying definition of empathy across studies. While in the quantitative data collection many researchers are relying on measures which have presumably been tested to be reliable before the use in the studies, the same cannot always be said of the findings of empathy in the qualitative data collection. When

Links Between the Creative Practice of Art and Empathy in Existing Literature the participants refer to different elements of empathy or say that they empathize with someone or group explicitly this may still present issues around the operationalization of the construct. Individual participants may mean something different when they speak of empathy than other participants in the same study, or from participants in different studies, and the researchers may be interpreting what they are saying as something different than what they mean when they refer to the concept of empathy. "Empathy" is such a ubiquitous term that researchers often assume they know what it means and do not think to define its terms in the research or ask the participants to clarify exactly what they mean if they refer to the construct. Presumably researchers who looked at quantitative data had a solid idea of the construct when they established measures. Additionally, research that relied more on qualitative data rarely included what they determined to be empathy in their analysis. Empathy could often be conflated with similar and related constructs such as sympathy, theory of mind, and compassion. Some research made a distinction between these constructs and empathy, but others did not, and without a solid idea of what the individual researchers or participants had in mind when they were working with this construct it would be difficult to say that they didn't conflate multiple constructs, and makes comparing the research findings in a meaningful way very difficult.

As mentioned above, there was some variety in the literature regarding the use of quantitative and qualitative data, with the majority of research relying mainly if not solely on qualitative research in the links of art creation to empathy. There is nuance in when one of the two types of data collection are most appropriate. Many of the research findings only included empathy in a study otherwise about the creative practice of an art form and other constructs because it came up in the qualitative data gathered in interviews with the participants who experienced empathy in the study. Qualitative data allows for richer, more nuanced findings to

Links Between the Creative Practice of Art and Empathy in Existing Literature come forward from the research. However, in part due to this nuance, it is much more difficult to compare research utilizing qualitative rather than quantitative data. Additionally, collecting and analyzing qualitative data can be more demanding of resources from researchers which might dissuade its use. Future research might want to use both in order to capture subtle information from research, as well as being able to compare data with another research.

That being said, there does seem to be preliminary evidence in support of the idea that the creative practice of art with the intended purpose of empathizing with a select individual or group does increase empathy in the art creator. There is room for future research on this, however. From these findings it is difficult to say if this increase in empathy is limited to the specific group or individual in question that the participant was asked to empathize with in the study, or if the increase in empathy is on more of a trait level leading to the ability to empathize more broadly with others outside of the group or individuals in the research. Research into other areas such as cognitive psychology suggests that if empathy is more of a learnable skill as some of this literature points towards the likelihood of this improvement in empathy in a limited setting is not likely to be generalizable to a larger group. In cognitive research that looks at people's ability to complete tasks like brain teasers it has often been found that while their cognitive process improves for this specific skill, that improvement does not translate to improved cognitive processing overall. That being said, the scope of people that the different articles in this review ask their participants to empathize with, spanning a range of differences and similarities to the participants themselves (someone without HIV/AIDS empathizing with someone with that diagnosis; someone without diagnosed mental illness with someone with one; one member of a musical group with another member; mothers with their children) indicates that it might also be very possible that the improvement in one's ability to empathize with a specific

Links Between the Creative Practice of Art and Empathy in Existing Literature person or group is generalizable towards one's ability to empathize with any other group or individual person. This question of external validity in the increase of empathy should be tested further as the external validity of findings greatly influences how meaningful they are.

Artistic disciplines such as musical, visual and literary arts seem to show the most promise of further supporting evidence of the disciplines investigated in this research in part because some of the research findings seem to indicate that there would be more likelihood of external validity. That is of course in addition to the proportion of articles within each of these disciplines relative to the others that show positive correlations between the creative practice of those artforms and empathy. It should be noted that in the fields that seem to hold the most promise for this topic of research, particularly those of music and literary arts some of the most compelling data comes from studies that utilize participants who are are either professionals within the art form being practiced, or have a long history of working in this area. This may have influenced the results of this data to have stronger support than in a study of students who more casually engage in the art form or have only been practicing for a limited period of time.

As can be seen in the variety of categories and circumstances of individuals and groups with whom the participants of the different studies empathized, there are ample areas in which the creative practice of art can be used to help increase empathy. In many studies that showed evidence for an increase in empathy, those with whom the participants empathized were in some way related to the participants (e.g. part of their musical ensemble), while in other studies the other was more distant from the participant (e.g. another child affected by HIV/AIDS). This rich variety is also shown not only in the inclusion of ingroup and outgroup members as the empathized with other, but in other areas of difference from the participant pool, such as being diagnosed with a mental illness, having some type of special educational needs etc.. The fact that

Links Between the Creative Practice of Art and Empathy in Existing Literature the research covering such a diverse cross section of groups indicates that the creative practice of art increasing empathy is something that would be largely generalizable despite the weak nature of the supportive evidence in many of these findings. Provided that the findings on increased empathy have external validity this research could conceivably be applied to areas where one would want to consciously increase empathy, in areas where it might otherwise lag or be lacking, such as in the medical professions, when deradicalizing members of hate groups, or with individuals with Autism Spectrum Disorder just to name a few.

Limitations

The limitations of this literature review stem mostly from the reduced time frame. Due to the time limits for completing this research, its scope was limited in several ways during the initial search for articles. This likely has some bearing on what sort of articles were uncovered and reviewed in the summary, which will be discussed further below. This partial sampling thus includes certain groups of participants, people being empathized with, and genres of art more so than others, which may limit the generalizations proposed in the discussion section accordingly. Further literature reviews into this topic could aim to focus on these areas which were unfortunately excluded from this research in order to remedy this.

When the initial search was conducted as detailed in the methods section, I only looked into a single combined search of the terms "empathy" and "art," which could have excluded articles which would fall under the scope of interest for this study but may have used different terms for the phenomena of empathy mentioned in the discussion section. On the other hand, articles that did not come up even though they could have fallen into the scope of the research would be different genres of art which are often classified under "crafts" or "craft", such as ceramics, quilting, or fiber arts. This goes to the issues around what types of art are called art by

Links Between the Creative Practice of Art and Empathy in Existing Literature the authors of these studies, and relates to the hierarchy within the art world which often excludes people who work in these and other media, often women, people of color, and other minorities. If there is a body of research looking into links between the creative practice of these art forms and empathy, they likely did not come up in the literature search for this research because they were not traditionally thought of or referred to as "Art".

Conclusion

Although there were some common problems in how the body of research was conducted, populations and types of art covered, limited study designs, as well as poorly defined variables, the overall message from this research is a positive one. Preliminary research suggests that empathy is a learnable skill which is linked to the creative practices of a large variety of art forms. There is ample room for further research, both in the surveying of current research as well as expanding off of the findings in the research thus far. Future research should try to find a more universal definition of empathy for research purposes, to include modes of art not covered in this research which may also have excluded the populations who create those types of art, and to conduct research that is experimental to try to establish if there are causal links between the creative practice of art and empathy. The timing for research into empathy is ideal given current and recent circumstances in the world and if the current body of research is to be believed, we can expect future results to have a positive impact that cannot come soon enough.

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Appendixes

Appendix A: Glossary of terms

term	meaning
1. Empathy	"[The] understanding [of] another person's experience by imagining oneself in that other person's situation: One understands the other person's experience as if it were being experienced by the self" (Hodges & Myer, 2007).
2. Expressive art therapies	Therapy that utilizes "the visual arts, movement, drama, music, writing and other creative processes to foster deep personal growth and community development" (About us, 2020).
3. Theory of Mind	The thought process that allows people to understand why people act the way they do and understand how they will likely act in the

^{*}Appears in the "Music & Dance" section in results

	future (Kloo et al., 2010).
4. Sympathy	The sensing and comprehension of what others are feeling (Tear & Michalska, 2010).
5. Compassion	"[T]he ability to perceive the "other" as he or she is, from an equal-valued perspective, to be with them when they are sad and to share their happiness when they are glad" (Gilboa & Ben-Shetrit, 2009).
6. Quantitative	Data or research that is empirically based and at its core numerical (Creswell, 2009).
7. Qualitative	Data or research that is empirically based and not numerical (Punch, 1998).
8. Primary Reinforcer	"A stimulus that is inherently rewarding because it satisfies basic needs like hunger, thirst, and sex" (Hariri, 2015).
9. Dance and movement therapy	"A form of therapy which focuses on movement behavior as it emerges in the therapeutic relationship, in order to promote emotional, cognitive, physical, and social functioning" (Mcgarry & Russo, 2011).
10. Combined Flow	The state of flow which is the deep engagement in a task or activity with enhanced focus and loss of time experienced as a group engaged in a shared activity (Hart & Di Blasi, 2013).