"It's not perfect - I need to start again!"

Exploring the relationship between Self-compassion and Creativity in a high school art environment

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Abstract:

This action research study examines the relationship between self-compassion and creativity amongst high school art students in order to determine if self-compassion plays a positive or negative role in the creative process. This inquiry was undertaken to inform and enrich the researcher's teaching practice and to lay the foundation for future research. The study took place in the researcher's classroom with her art students volunteering as subjects.

Relying on multiple sources of evidence, this study was designed with a mixed methods approach to capture both quantitative and qualitative data in order to generate significant and accurate results. This researcher had a strong interest in learning how creativity could be measured amongst individuals and to what extent that number could be influenced by levels of self-compassion. This researcher was also interested in hearing the voices of her students to discover if their perceptions and ideas on creativity and self-compassion correlated with the statistical data.

Forty five (twenty-seven female and eighteen male) students, aged fifteen to eighteen, volunteered to participate in this inquiry by taking the Torrance Test of Creative Thinking (Thinking Creatively with Pictures), the Kristen Neff Self-Compassion Scale: short form and by answering two closed and four open-ended interview questions. These tests were administered in the classroom during class time. Data were collected from both tests along with the students' perception of their own level of perfectionism and level of frustration, and the data were analysed using statistical tools including the Pearson Correlation Analysis, and Minitab Scatterplots. These two statistical tools were chosen to represent the findings from a number of different viewpoints and to answer the two questions that guide this study: do lower levels of self-compassion inhibit creativity in the art making process amongst high school art students?

and do higher levels of self-compassion facilitate creativity in the art making process amongst high school art students?

While the study was limited to a small number of participants, the results strongly suggest there is a correlation between self-compassion and creativity. Students who suffer from low self-compassion exhibited low creativity scores and students with higher levels of self-compassion exhibited higher creativity scores. If self-compassion is understood to be an important component of the creative process, ultimately its nurture should alleviate self-critical tendencies and promote a free approach to creative expression. This research study may contribute insight into this compelling subject in which to date there has been little formal research. It may also provide a starting point for further research into possible interventions that would aid self-compassion amongst art students, thus encouraging creativity to flourish.

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Dedication

This research project is dedicated to Tim and Robert Two amazing individuals

Chapter One: Introduction

Introduction to the study

My interest in teaching art to children began purely by accident. I hadn't considered teaching as a profession when I graduated from Queen's University with a Bachelor of Fine Arts Degree in 1986. It wasn't until 1994, when asked by a friend to tutor her daughter in still life drawing, that I was introduced to the rewards of teaching. My student was keen and I was more than happy to share my knowledge. As word travelled in the community that art classes were available, my art school started to grow from a few students per week to thirty-six. Eventually, I moved my studio from my home to a larger working space in in a nearby elementary school in order to provide my students with more space in which to be creative. Additionally, the new space permitted the installation of a printing press, a pottery wheel and floor mounted easels. I was enthusiastic about teaching these students because they had passion for creating visual imagery. For the most part students would arrive eager to see what they could create that day. They were open to new methodologies that I would introduce and they were keen to experiment with the materials provided. I endeavoured to provide a non-judgemental environment which allowed students the freedom to make mistakes and learn from them. As my art school grew I divided my classes into three levels: beginner, intermediate and advanced with equal numbers of elementary and high school aged students.

In 1997, I started teaching visual art at a local high school where I continue to teach today. As the only art teacher in the school I am responsible for delivering all the visual arts courses, grades 8 to 12. I work with approximately one hundred students a day.

In the past eighteen years I have worked with over six thousand students, helping to nurture their creativity in varying forms. I have also had the opportunity to observe their individual creative processes, the unique way they approach their design problems and their overall behaviour towards creating visual art.

One observation I found compelling was the emergence of perfectionist tendencies some of my students showed during the creative process. Where ten years ago I may have had one or two such students in a population of one hundred, today I have twelve. It is yet to be determined why this number appears to be growing but there is some speculation that the problem stems from a parent-child dynamic where the child receives little approval, or conditional approval from their parents (Hamachek, 1978). Through my own observations, it is without doubt that these students are usually highly creative thinkers with an abundance of ideas and a passion for learning. They strive to be creative in an art making process yet they invariably run into difficulty shortly after starting a project. With as little as one line on the paper they complain that their first attempt was unsuccessful. Often several attempts are made before the student feels his or her work is adequate enough to continue. At this juncture, some students refuse to continue thus abandoning their project altogether.

Although these students are individuals, I have observed that they do share some common characteristics. They are very self-critical, telling themselves and others, through actions or words, that what they have created is inadequate. They spend hours agonizing over where they went wrong, voicing their frustration over their failure. Typically, they lack self-compassion, a construct defined by Dr. Kirsten Neff as, being kind to oneself in instances of failure, perceiving one's experiences as part of the larger human experience, and holding painful feelings in mindful awareness (2003, p.85). These students often acknowledge they are highly self-critical and talk openly about the fear of making mistakes. Some talk about their artwork, aware before they start that they have set exceptionally high standards; others feel they are

unable to acquire the skills necessary to complete the project to their expectations. Their inner critic does not allow for experimentation as unwanted mistakes could easily occur. They are unsure of the causal reasons of why they are so self-critical but they do recognize that their lack of self-compassion inhibits their creativity and stops them from moving forward with a particular project. As a result, it appears their ability to create is stifled, which in turn causes them to feelings of inadequacy and frustration.

Recent studies have linked such lack of self-compassion directly to dimensions of perfectionism and the inhibition of creativity (Neff & Vonk, 2009; Leary, Tate, Adams & Hancock, 2007). In support of this study, one other research paper has suggested that healthy levels of self-compassion tend to alleviate the self-critical tendencies that undermine creative expression (Zablina & Robinson, 2010). Beyond this, there is little formal research on the interactions between self-compassion and creativity. However, this compelling subject is gaining more attention from creativity researchers particularly in the United States, United Kingdom and Australia. One possible reason for this surge in interest is the significant amount of research now being done on the concept of self-compassion itself. Neff, a researcher and professor of Educational Psychology at the University of Texas, has further defined the concept of selfcompassion in greater detail making it easier for researchers to position their findings. In the context of this study, I have used Neff's definition of self-compassion to guide my research. Neff expands on the above definition to clarify the three elements that contribute to self-compassion.

- *Self-kindness* being kind and understanding toward oneself in instances of pain or failure rather than being harshly self-critical.
- *Common Humanity* perceiving one's experiences as part of the larger human experience rather than seeing them as separating and isolating.

• *Mindfulness* – holding painful thoughts and feelings in awareness rather than over-identifying with them (2003).

The definition of creativity itself is decidedly more complex. Research into the subject has been underway since the early 1950s and still to date there is no one globally accepted definition. While researching this study, over one hundred and seventy-five different definitions were considered. Many of them were rejected as they were written in the context of a business environment. Other definitions were too short and inadequately descriptive while others did not relate to creativity in a high school art environment. Eventually, I settled on the definition proposed by creativity researcher Paul Torrance, who defines creativity as: "a process of sensing difficulties, problems, gaps in information, missing elements, something askew; making guesses and hypotheses about a solution of these deficiencies; evaluating and testing these hypotheses; possibly revising and restating them; and finally communicating the result" (Torrance, 1962, p.24).

Although this definition has been used by many researchers worldwide and is most commonly used in a general sense (Kim, 2006), it can also be used in a specific context of the creative process in a high school art room. What makes this definition significantly relevant is its reference to the understanding and processing of a problem, in this case a design problem the student might have been assigned. Analysing and predicting how the problem might be solved and then attempting to solve it with openness to experimentation are also important elements, along with the understanding that the process may take several attempts before satisfaction is achieved. In addition, this particular definition of creativity provides consistency throughout the study as it aligns with the ideology behind the creation, and implementation of the Torrance Test of Creative Thinking, one of the four measures used in this study to collect data. More information on the Torrance Creativity Test will be provided in subsequent chapters.

Purpose of the research

The main purpose of this research is to examine the relationship between self-compassion and creativity amongst high school art students in order to determine if self-compassion plays a positive or negative role in the creative process. This inquiry was undertaken to inform and enrich the researcher's teaching practice and to improve the learning environment for those students who exhibit self-critical tendencies. If self-compassion is understood and accepted as an important component of the creative process, its nurturance would ultimately alleviate the selfcritical tendencies and promote less constrained creative expression.

This study will also provide data to be used in the future to develop an effective intervention designed to promote self-compassion amongst art students, stimulating creativity to prosper. This research study contributes insight into a compelling subject in which there has been minimal formal research.

The research questions guiding this study

The research questions that guide this study are:

- Do lower levels of self-compassion inhibit creativity in the art making process amongst high school art students?
- Do higher levels of self-compassion facilitate creativity in the art making process amongst high school art students?

Significance of the research

In general, there seems to be interest amongst researchers, educators and business people to promote a stronger sense of creativity in schools and in the workplace (Alenizi, 2008; Beghetto, 2006; Kim & VanTassel-Baska, 2010). Robinson suggests that children are not given enough opportunities to think creatively in school and as a result when they leave to join the adult workforce they are unable to contribute on a creative and innovative level (2001). Additionally, in the current educational system, the traditional model of mass-education, stemming from the industrial age where testing and retesting of students is the only way they can be evaluated, many students shy away from experimentation (Kim & VanTassel-Baska, 2010). In general, many individuals feel they lack the ability to be creative, however research reveals that all individuals have the ability to be creative (Seltzer & Bentley, 1999). Others, after years of being informed there are correct and incorrect ways of being creative, find they are unable to problem solve, for fear of being criticized (Robinson, 2001).

The results of this study may be significant if they contribute to ratifying these problems. As this is an action research study which seeks to inform future teaching practices, the results have the potential to modify ways that teachers approach teaching creative thinking in their class rooms. If higher levels of self-compassion facilitate the creative process the findings of this study could improve teaching methods by making teachers aware of the correlation between selfcompassion and creativity and bringing it into the forefront of contemporary teaching and learning. If lower levels of self-compassion inhibit the creative process the findings of this study could improve teaching practices by enabling the teacher to identify and better support individual students with self-critical tendencies by mitigating their inhibitions, teaching the acceptance of failure, and the motivation to try again. Other researchers agree that identifying the link between self-compassion and creativity may be of some benefit to self-critical individuals (Zablina & Robinson, 2010), mainly because once recognized, an attempt can be made to nurture self-compassion, thus alleviating selfcriticism and allowing creativity to flourish.

Although this study contributes to preliminary data, further research will be necessary to discover the best form of successful intervention that could possibly alleviate the self-critical tendencies of such individuals.

Chapter Two: Literature Review

Introduction

This literature review presents information on three distinct topics: self-compassion; creativity; and the possible relationship between them. A brief review of the literature on perfectionism is also included to give the reader a clearer understanding of its relationship to self-compassion and to emphasize the impact perfectionism can have on the day to day lives of high school students. Within the context of this inquiry an attempt was made to include a variety of articles and books covering a range of topics including: defining self-compassion and creativity; exploring and understanding the variety of tools that are available to measure these two topics, confirming their reliability and validity; discovering what research has been done in this area and what still remains to be undertaken. For the purpose of comparing these results with those of other research studies, wherever possible, attempts have been made to include studies that dealt specifically with high school students or subjects fifteen to eighteen years of age.

Understanding perfectionism

Perfectionism, particularly in high school students, has been a subject of study since the early 1960s and although few of these results voice concern over the increase in students with perfectionist tendencies, research into the symptoms and the causes of perfectionism are plentiful. Educational Psychologist, Dr. Donald Hamachek, was the first to distinguish two types of perfectionism, normal and neurotic. Though other studies use different headings, such as Self-Oriented Perfectionism and Socially Prescribed Perfectionism or Adaptive and Maladaptive Perfectionism, for the purpose of this study, the terms normal and neurotic perfectionism, will be used. Normal perfectionism is associated with positive outcomes such as an individual striving to do his/her best in an examination or competition. Studies show that students in this subset pursue excellence in a healthy way, achieving success through hard work, patience and practice (Christopher & Shewmaker, 2010). When students with normal perfectionist tendencies make mistakes, their reaction is to attempt the task again, recognizing that the error was part of the learning process and ultimately part of the human experience (Frost, Marten, Lahart, & Rosenblate, 1990).

Neurotic aspects of perfectionism are associated with negative characteristics including: the setting of excessively high personal goals which, for the most part, are unachievable; fear of failure; procrastination; an all or nothing mind-set; depression; social alienation and lack of selfcompassion (Hamachek, 1978; Rice 2011). Several studies suggest that these neurotic characteristics can have a devastating effect on students, often leaving them unable to cope with day to day tasks (Frost, Marten, Lahart & Rosennblate, 1990). Young adults with neurotic perfectionism also experience higher rates of depression, concentration difficulties, social alienation and suicide (Callahan, 1993; Cross, 1996; Hewitt & Dyck, 1986; Hewitt, Flett & Turnbull-Donovan, 1992; Huggins, Davis, Rooney & Kane, 2008; Huprich, Porcerelli, Keaschuk, Binienda, & Engle, 2008; LaPointe & Crandell, 1980). As perfectionism affects individuals at varying rates on the scale of normal to neurotic the majority of researchers theorize perfectionism as a construct which is multidimensional (Christopher & Shewmaker, 2010).

Neurotic perfectionism can be caused by numerous factors but studies strongly suggest there is a high correlation between perfectionism and the perception of high parental expectations and high parental criticism. Researchers on perfectionism agree that the relationship between the parent and the perfectionist student is at the core of the disorder (Burns, 1980; Frost, Marten Lahart, & Rosenblat, 1990). Such research also suggests that the perfectionist individual may have been raised in a family where love and approval were conditional. In order to avoid disapproval and seek the love and approval he/she desires the student must perform to the highest standards. Self-evaluation is tied directly to how the student perceives his/her parents reaction, therefore any mistake may cause parental rejection (Burns, 1980; Pacht 1984; Hamachek & Hollander, 1978). On a day-to-day basis these students are highly self-critical and have little self-compassion. They hesitate over starting their work; procrastination highly correlates with perfectionist traits (Iskender, 2011). They doubt the quality of their work, questioning if their attempts will be good enough. They become fussy over their work striving for precision and seeking an orderly environment (Hollander, 1978). Additionally, the literature suggests that students with neurotic perfectionist tendencies are greatly concerned about making errors and are held back by fear of failure, not driven by a need for achievement (Hamacheck, 1978). In contrast with normal perfectionism, neurotic perfectionists cannot tolerate mistakes; even minor flaws will be considered a failure (Hamachek, 1978; Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. 1990).

Looking at self-compassion

Research on the topic of self-compassion is still in its infancy and though there are only a small number of practising experts, those who have written on the topic provide a depth of knowledge. The consensus amongst these authors is that a healthy level of self-compassion correlates with psychological well-being such as optimism, curiosity and the freedom to learn even when making mistakes (Neff & Vonk, 2009; Iskender, 2011; Leary & Tate, Adams & Hancock, 2007).

The construct of self-compassion originates from Buddhist psychology which teaches that individuals should nurture and practice self-compassion while also developing compassion towards others (Neff, 2003). As mentioned in the previous chapter, self-compassion is defined using three essential components. The first is self-kindness, to be kind to oneself when one has experienced something painful or experienced failure. The second advocates for the recognition and acceptance of one's own failures as part of a greater human experience. The third component is that of mindfulness, to be aware of one's own feelings and emotions and keeping them in equilibrium (Neff, 2003). Research suggests that self-compassion is positively associated with good mental health, social connectedness, and overall wellbeing while being negatively associated with depression, anxiety and neurotic perfectionism (Iskender, 2011; Neff, 2003). It is also an alternative concept to that of self-esteem, which has been strongly correlated to narcissism and self-centeredness. As Neff argues, "that self-esteem stems not only from selfevaluations but also the perceived evaluations of others" and "individuals with unstable selfesteem are highly focused on the implications of negative events for self-worth, making them more vulnerable to depression and reduced self-concept clarity" (Neff & Vonk, 2009, p.25). Self-compassion is also distinguished from self-pity which can cause individuals to become overly embedded in their problems, disconnecting or alienating themselves from others (Neff & Vonk, 2009; Zabelina & Robinson, 2010).

Literature on self-compassion offers a variety of studies comparing self-compassion with other concepts such as academic procrastination, dysfunctional attitudes (Iskender, 2011), stress and coping (Allen & Leary, 2010), academic failure and human development (Neff, Hsieh, & Dejitterat, 2005), and reactions to unpleasant self-relevant events (Leary, Tate, Adams, Hancock, 2007). Only one study to date was found to compare self-compassion to creativity (Zablina & Robinson, 2010).

Exploring creativity

Literature on creativity research is vast and has grown exponentially since the 1950s. It has become its own area of research particularly in the United Kingdom, United States and Australia. This review focuses mainly on creativity in education, though many constructs in the literature originate from other disciplines such as psychology, sociology and philosophy. Where possible, studies were sought out that dealt specifically with creativity and visual art. This section of the review is broken down into three areas of interest, its focus is on: the definition of creativity; theories in creativity, with particular interest in factors that stultify creativity and those factors that facilitate it and identifying reliable creativity tests that are available.

Defining creativity

The biggest challenge for researchers is defining the concept of creativity (Runco, 1997). Frank Barron, a pioneer in the psychology of creativity in the 1960s, defined creativity simply as "a product of the creative process done by a creative person", (Barron & Harrington, 1981). Although it appears to be quite a simple definition it covers three main elements of creativity found in most definitions; the process, the person and the product (Ivcevic, 2009). Other researchers have added a forth element, the environment, in which the artwork was created. Sir Ken Robinson, an internationally recognized leader in the development of education, creativity and innovation defines creativity as "a process of having original ideas that have value" (Robinson, 2001). Creativity researcher Mihaly Csikszentmihalyi states that "creativity results from the interaction of a system composed of three elements: a culture that contains symbolic rules, a person who brings novelty into the symbolic domain, and a field of experts who recognize and validate the innovation" (Csikszentmihalyi, 1996). Howard Gardner defines a creative individual as a person "who regularly solves problems, fashions products or defines new questions in a domain in a way that is initially considered novel, but that ultimately becomes accepted in a particular culture setting" (Gardner, 1993). Paul Torrance defines creativity as "a process of sensing difficulties, problems, gaps in information, missing elements, something askew; making guesses and hypotheses about a solution of these deficiencies; evaluating and testing these hypotheses; possibly revising and restating them; and finally communicating the result" (Torrance, 1962, p.24).

Inevitably, the word creativity itself means different things to different people across a broad spectrum of subject areas; even within one subject area it is difficult to find two similar definitions (Amabile, 1988). Researchers are continually redefining the word, struggling to get a clear consensus of what creativity is. As a result, creativity researchers find it difficult to situate their studies (Albert and Runco, 1999).

To circumnavigate this problem, creativity expert Zorana Ivcevic suggests that instead of working towards one universal definition, creativity researchers in particular should fine-tune their own definition making sure it aligns with their research. She states that "each study should start with a definition of creativity and situate the research in relation to this definition" (Ivcevic, 2009).

As mentioned previously, this study is guided by Paul Torrance's definition of creativity and although his definition stands on its own, it can be viewed as a combination of other definitions. For example, it encompasses the three elements of Barron's definition to include a person (the student, their personality type), a process (taking interest, questioning, investigating exploring, taking chances trial and error) and a product (the artwork itself, the making of something new). The reference to the individual expressing their "basic nature" reflects Csikszentmihalyi's reference to expressing ones ideas including cultural influences, and finally the product as a form of communication with others like Barron, Robinson, Csikszentmihalyi, and Gardner all believe is an important element in creativity.

Creativity theory

Just as there are a number of definitions for creativity there are a number of theories regarding creativity. There is an abundance of literature discussing creativity theory within a wide range of subjects including visual art, music, dance, science, mathematics, education in general, business, leadership and technology just to name a few. This specific review attempts to explore the literature discussing creativity theory in education and where possible, visual art specifically. Before discussing which theory aligns best with this study it is prudent to look briefly at creativity theory within a historical context.

Humankind has acknowledged creativity as far back as early Greek and Roman times when poetry was considered to be free of rules; where poets could transcend the mundane and interpret new ways of seeing the world around them. It was believed that true creativity was bestowed by the gods on particular individuals as a sacred gift; the greater the creative output the greater the gift (Kearney, 2005). The first formal study on creativity theory was written in 1869 by Francis Galton who took a strong interest in the "nature versus nurture" argument taking interest in the common characteristics shared by creative geniuses and the mentally insane (Craft, 2001). By the 1950s, in the area of psychology, four theoretical concepts in the study of creativity were developed: the *psychoanalytic tradition* which included the explorations of Sigmund Freud into creativity and the subconscious mind and Donald Winnicott's hypothesis that all humans are born creative, as part of their intrinsic nature. The *cognitive tradition* continued to develop Galton's theory on creativity as well as introducing Guildford's theory on divergent thinking and IQ tests. In the *behaviourist tradition*, B.F.Skinner investigated the genetics of the creative individual within a specific environment, believing that if behaviour is judged as inadequate, then the environment can be manipulated to encourage creativity. Ultimately, he believed that anyone can be creative given the right environment. Lastly, the *humanistic tradition* involving Maslow's view on creativity as part of the healthy human mind saw creativity as a natural process of self-direction and self-actualization (Craft, 2001).

In the 1970s interest in creativity theory shifted to three main areas of study: personality, cognition, and creativity stimulation. MacKinnon (1975), Csiksentmihalyi (1976), and later Simon Simonton (1984), found that by interviewing creative people they could ascertain certain common personality traits that made some people more creative than others. These included a strong sense of self, commitment persistence and curiosity. This type of research has come under some criticism as the question arose as to what criteria had been used in the selection of these particular individuals. Moreover, these three researchers used different definitions of creativity in their studies making it difficult to compare their results.

Under the heading of cognition, psychometrics also emerged after the 1950s introducing ways of measuring divergent thinking. Ellis Paul Torrance introduced his Torrance Test of Creative Thinking in 1962 and five years later Joy Paul Guildford introduced his Alternative Use Test in 1967. Considerable debate continues concerning these tests - are they viable as an accurate measuring tools? (Cropley, 2000), do they have potential for capturing and measuring creative thinking? (Bachelor & Michael, 1997; Kirschenbaum, 1998; Plucker & Runco, 1998). A more detailed discussion on this topic will continue later in this chapter.

In the 1970s and 80s a continuation of Freud's theories progressed through the study of psychodynamics. This took the form of analysing groups of people with the same occupation;

such as artists, university teachers, architects, and arts students. They found that these groups were able to see alternative ways of solving problems, had strong imaginations, were able to contest the conventional, and were able to immerse themselves in their creative task with passion (Craft, 2001).

Currently, there has been a keen interest in encouraging the creativity of everyday people in everyday events, especially within the education environment. Curriculum has been rewritten to emphasize the importance of creative thinking particularly in the primary grades in the UK (Alenizi, 2008). Creativity research has become immersed in a social psychological framework. Three studies were undertaken to enhance understanding of which environment is the best one for stimulating creativity. One of these studies was undertaken by Swedish creativity researcher Goren Ekvall, (1997) and the other two developed in the US (Amabile, 1988; Isaksen, 1995). It was found that small groups of individuals working together in a supportive environment where risk taking and developing new ideas were encouraged, was highly beneficial to nurturing creativity (Craft, 2001; Alenizi, 2008). In addition, Amabile found that a non-competitive environment amongst students coupled with a facilitator that allowed freedom of expression was also beneficial (Amabile, 1988).

Perhaps the most current and influential theory today and one that aligns best with this study, and my teaching philosophy, is in Sternberg and Lubart's investment theory. Both of these researchers suggest that creativity is a decision in three parts: the decision to be creative, the decision of what to create, and how to implement such decisions (Sterberg and Lubart, 2006). Their main idea holds that creative individuals "buy low and sell high", meaning that the creative person produces something born from an innovative idea. It is usually seen by others as different or novel and over time it becomes valuable, compared to other ideas or products in its category.

Once the idea or product is embraced and accepted, the creative person moves on to creating the next product. Thus, if creativity is part of a decision-making process, Sternberg and Lubart suggest that all individuals have the ability to be creative. They propose that there are six resources individuals can use to access their creativity and once this is acknowledged creativity will flourish. A rationale is provided for each resource, explaining how it can be used in a classroom environment.

- *Intelligence* (recognizing there is a problem or a gap in information, seeing things from a different point of view than others, using insightful ways to solve problems. Teachers must give students challenging problems to solve and time in which to solve them).
- *Knowledge* (students must have some background knowledge and some foundation in technique in order to problem solve. Students must also have a clear understanding of why they need to know this information).
- *Intellectual style* (the authors suggest that the students take some enjoyment from their efforts and recognize that they have the ability to create something new or solve a problem in a creative manner).
- *Personality* (the students personalities should be such that they are willing to take risks, persevere, and have the courage to believe in themselves).
- *Motivation* (students must be motivated and interested in their work in order for them to maintain interest).
- *Environmental context* (the student's environment must encourage, evaluate and reward creative ideas)

Measuring creativity

Another common perspective amongst creativity researchers questions whether creativity could be measured and if so, whether the results would be consistent and reliable. As this study measured creative thinking amongst forty-five high school students it was important to understand fully the measurement tools available, which were reliable and which had the best reputation amongst researchers in the field of creativity. As there is a plethora of creativity tests available a set criterion was established in order to select which tests should be included in this study. An attempt was made to include tests which were specifically designed for use with children. The test should be deemed credible and have generated a large amount of evidence related to validity and reliability. It also had to have been recommended by the educational community for educational use.

Mogbel Alenizi's *Assessment of Creativity in Education (2008)*, Arthur Cropley's *Defining and Measuring Creativity: Are Creativity Tests Worth Using (2000)*, and Michael Mumford's *Where Have We Been, Where Are We Going? Taking Stock in Creativity Research (2003)* all include reviews on contemporary measures including the Torrance Test of Creative Thinking (1984), Guilford's Creativity Test of Alternate Uses (1966), and the Wallach and Kogan Creativity Test (1965). These researchers agree that such creativity tests can be valid measuring tools for creative thought but that they should not be used as test of intelligence. There has been some debate in psychology literature that questions whether intelligence and creativity are part of the same mental process or whether they are separate entities. Since the 1950s researchers such as Barron, Guilford and Kogan have suggested that correlations between these concepts are minimal. Therefore, creativity tests, in general, are designed to provide results on a number of subscales related to divergent thinking and essential constructs of creative

behaviours. These must not be confused with results from an IQ tests that are derived from a single measure of intelligence (Alenizi, 2008; Kim, 2006).

The testing of creative thinking is considered an important part of education assessment in education particularly in the US where divergent thinking and creative behaviour assessments are readily available. They are also commonly used to measure creative potential in children (Hocevar & Bachelor, 1989; Ochse, 1990; Tegano, Moran, & Godwin, 1986; Runco, 1986, 1991). One of the most widely used is the Torrance Tests of Creative Thinking (TTCT) (Davis, 1997). Developed by Paul E. Torrance in 1966 it has been updated five times in 1974, 1984, 1990, 1998 and 2008. It is the most frequently used creativity test in the field of education globally, appearing in forty different languages. According to Dr. Kyung Hee Kim, "The TTCT predicts creative achievement better than any other creativity test or divergent thinking test, and based on my extensive analyses, I have concluded that the TTCT is more than just a divergentthinking test; it is the best creativity test currently available" (2006, p.11).

There are two TTCT tests, one verbal and the other figural and the TTCT Figural has two parallel forms A and B. For the purposes of this review, only the TTCT Figural, Form A, will be discussed. The test is designed around three activities: picture construction, picture completion and picture completion using repeated lines. Additional test design information will be provided in the methods section of this study.

Over the past twenty five years the TTCT has undergone extensive development and evaluation (Millar, 2002). Amongst other tests of its kind it has the largest norm sample which was collected in 1997 and published in the TTCT manual in 1998. The sample used 55,600 kindergarten to grade 12 students from across the US and Canada. The TTCT Figural Manual of 1990 records the interrater reliability among the scorers for Scholastic Testing Services Inc. was

greater than .90 (Cropley, 2000; Kim, 2006). In addition, there were no statistical differences between test scores due to differences in language, gender, race, or socioeconomic background (Cramond, 1993; Kim, 2006).

Although the TTCT has a strong reputation as one of the "most used assessments of creative talent" (Sternberg, 2006, p.87) it has been criticized for promoting itself as a true predictor of an individual's creative potential (Craft, 2001). Torrance himself states that those who score highly on the test may not necessarily exhibit creativity on a regular basis as the motivation to create and technical knowledge are also required in the creative process (Torrance, 1990, 1998; Torrance & Ball, 1984).

The TTCT has also been criticized for the amount of time and energy required to learn the standard scoring procedures. However, in 1983 an attempt was made to provide details on the students creative functioning while streamlining the scoring process (Torrance & Safter, 1986).

Other researchers question the 'test like' atmosphere of the TTCT and have a particular dislike for the time limits given to each activity and the test like design layout of the booklet. According to Dentler & Mackler (1964) students had higher scores when tests were conducted in a relaxed environment and lower scores when tested in more stringent environments, such as an exam hall. However, creativity researchers, Kogan and Morgan (1969) could not replicate this finding (Kim, 2006). The TTCT does however attempt to make the test as relaxing as possible. In the *Preparing for the Test* section of the manual it states, "It is generally recommended that a game-like, thinking, or problem solving atmosphere be created. Create the expectation that the activities are enjoyable and invite the students to have fun" (Torrance & Ball, 1984, p.2).

Guilford's Creativity Test of Alternate Uses was also designed in the early 1960s and was used within the education field at the time. The test was based on a Structure of Intellect (SI)

model of intelligence and was administered to students in grade 4-6 through a verbal and figural component. SI theory is comprised of one hundred and fifty different intellectual abilities organized along three dimensions—Operations, Content, and Products.

- *Operations* include: cognition, memory recording, memory retention, divergent production, convergent production and evaluation.
- *Content dimensions* include: figural, symbolic, semantic, and behavioural.
- Product dimension designed to become increasingly more complex. These
 include: Units (single items of knowledge), classes (sets of units sharing
 characteristics), relations (unites seen in a sequence or pattern), systems (multiple
 relations which make up new structures), transformations (new perspectives,
 adding more knowledge to existing knowledge) and implications (predictions,
 inferences) (Guilford, 1988).

Although Guilford's test appears to be comprehensive researchers have heavily criticized its statistical techniques and its strong correlation to a regular IQ test (Crockenberg, 1972; Hattie, 1980).

Like the Torrance Test of Creative Thinking, the Wallach and Kogan Creativity Test has both a verbal and figurative component. The figural component, called the *Visual Content Tasks* requires the students to respond to various lines given as a stimulus. In contrast to the TTCT and the Guilford's Test the Wallach and Kogan Creativity Test is concerned with observing and recording the creative process and as the test is designed to capture more common responses at the beginning of the test and more complex and unique responses later, there are no time limits set for participants (Crockenberg, 1972). This research shows that creativity variables are highly reliable and correlation between creativity and IQ is low. Wallach and Kogan concluded that this test, administered under a game like environment allowed them to isolate a form of thought that they described as "dimensions of creativity" (Crockenberg, 1972).

Like other creativity tests, this one has also been criticized for scoring the number of unique responses in favour of quantity over quality. Some tests, like the TTCT provide a quality check by giving zero to responses which are clearly inappropriate (Crockenberg, 1972). Literature also cautions administrators that many of the studies based upon this test have utilized responses from gifted children, university students and high ability individuals, while other researchers have suggested that the test be used only with a high IQ sample. It is evident amongst researchers that the validity of the test is far from conclusive (Crockenberg, 1972).

Though some creativity tests have been used for thirty years or more and are well established, there seems to be a consensus amongst researchers that they fail to capture a complete picture of the creative potential of students (Coleman & Cross, 2001; Zimmerman, 2009). It appears more research needs to be done, particularly in the correlation of such tests with others in a similar vein, for example IQ tests. This should include an analysis of the validity and reliability of each test as well as the consideration of the most suitable environment in which such tests should be administered (Hattie, 1980). However, there still remains a strong interest in creativity testing in general as researchers continually improve on or develop new ways of understanding the subject (Zimmerman, 2009).

Interactions between self-compassion and creativity

The interactions between self-compassion and creativity in a high school art room are at the focal point of this study. Zabelina and Robinson's study *Don't Be So Hard on Yourself: Self Compassion Facilitates Creative Originality Among Self-Judgemental Individuals* is the first of its kind to address the relationship between the two concepts and to extend the research beyond previous studies that consisted of small samples of self- reported data. Zablina and Robinson used the short scale versions of Kristen Neff's Self-Compassion Scale and a shortened form of the Torrance Creativity Test, both of which have a reliability reading of .81, a score with which the authors were satisfied. They also discovered that a self-compassion intervention increased creative output amongst those who were prone to critical self-judgement. Their preliminary studies showed that nurturing self-compassion amongst individuals could indeed have a positive impact on their creative output (Zablina & Robinson, 2010).

Their research also demonstrated that students with low self-compassion also suffer from neurotic perfectionist tendencies, which in turn inhibits creativity and can causes a devastating impact on student performance (Frost, Marten, Lahart and Rosenblate, 1990). Healthy levels of self-compassion have a positive correlation with normal perfectionism (high personal standards). As a result of this research, it was found that self-compassionate individuals are more accepting and experience less distress when they fail to meet their personal goals, but it was also made clear that the same self-compassion does not lead to passivity (Neff, 2003; Iskender, 2011). It was also noted, that individuals with higher levels of self-compassion tended to participate in in a wider range of daily activities which involve creative thought (Collins & Amabile, 1999; Ryan & Deci, 2000). In this study it was hypothesized that self-critical individuals would exhibit less

creative originality but would show higher levels of creativity after a self-compassion intervention.

Zablina and Robinson's study, in particular, was helpful in clarifying and justifying the research topic that supports this thesis. However, their research involved subjects who were undergraduate students in the psychology department at the North Dakota State University and whose participation was mandatory and for course credit. This study attempts to extend this research by utilizing the abilities of high school students, whose participation was strictly voluntary.

Conclusion

While much has been written on the topic of creativity and self-compassion as separate concepts, little research has focused on the interaction between the two. Creativity has been acknowledged for hundreds of years and has been formally researched by many authors for over one hundred and forty years. Although it does not have a globally recognized definition, researchers are careful to choose a definition and then situate their research around it. In contrast self-compassion is a much younger concept that has a clearer and more concise definition. Fewer authors have written on this subject but the depth of their research has been vast. Additional research in this area is necessary in order to confirm whether or not higher levels of self-compassion can facilitate creativity in some individuals.

Chapter Three: Design and Methodology

Introduction

This chapter has six sections, each describing the methods used to conduct this study including: the selected approach to the study and its design; information about the participants; the instruments used for collecting the relevant data; the procedure; ethical considerations, approvals and consents necessary.

Approach to this study as teacher/researcher

From the outset, this author was dedicated to researching the ever-changing attitudes and behaviours the high school art students demonstrated toward the visual arts, particularly during the creative process. As a visual arts teacher for more than eighteen years, it was the intent to initiate the research in the classroom where the attitudes and behaviours are regularly evidenced. As the main purpose of this research was to investigate how self-compassion might influence the creative process amongst high school art students, it seemed appropriate to approach this study both as a teacher and a researcher.

In their regular teaching practice, teachers engage in research every day developing a learning environment, writing lesson plans to create new understandings, evaluating the work and sharing the results with students, parents and administrators (Anderson & Herr, 1999; Burnaford, Fischer & Hobson, 1997). They are in essence designing and implementing a plan of action, they observe their students and analyse the results, modifying and improving their plans to meet more effectively the needs of the students. According to Christian Faltis, who advocates for the teacher as researcher approach, describes the role of teacher/research as, "a systematic investigation of how teaching influences student learning over time in a single classroom or learning community. It is an inquiry that is systematic, intentional, contextual, ethical and above

all responsive to the learners' strengths and challenges" (2013). He further explains that there are three categories in which a teacher may participate as a researcher: (1) action research, (2) the case study approach, and (3) instructional interventions.

In the context of this research, an action research strategy was adopted to investigate a phenomenon within its real-life context. According to Geoffrey E. Mills "Action research is any systematic inquiry conducted by teacher researchers, principals, school counselors, or other stakeholders in the teaching/learning environment to gather information about how their particular school operates, how they teach, and how well their students learn. This information is gathered with the goals of gaining insights, developing reflective practice, effecting positive changes in the school environment, and improving student outcomes and the lives of those involved"(2012, p.21).

Relying on multiple sources of evidence, this study was designed with a mixed methods approach to capture both quantitative and qualitative data in order to generate significant and accurate results. This author had a strong interest in learning how creativity could be measured amongst individuals and to what extent that number could be influenced by levels of selfcompassion. This author was also interested in hearing the voices of her students to discover if their perceptions and ideas on creativity and self-compassion correlated with the statistical data. The quantitative data was collected from the Torrance Creativity Test, the Kirsten Neff Self-Compassion Scale and two closed questions. The qualitative data were collected from four openended interview questions.

This study also serves a purpose for future research when looking at possible instructional interventions. If self-compassion is proven to be linked to the creative process, the

next logical step would be to develop an intervention strategy that strengthens self-compassion enabling the creative process to flow more easily.

About the participants

The forty-five students (out of a potential fifty eight) who participated in this study were high school art students attending an independent school in the downtown area of a small city in British Columbia. The school had an overall population of four hundred and twenty-five students. The self-selected sample were students that came from two senior art classes at the school in which they had elected to take the art course; all students were between the ages of fifteen and eighteen. The study was undertaken in the art room during class time. The sample was composed of twenty seven females and eighteen males, all of whom volunteered to take part. As each art class was a general visual arts course, a cross-section of abilities was present. Some students had never taken an art class before where others had wider experience.

Thirty-three of the students were Caucasian, two from India, three Aboriginal, two from South Korea, two from Japan, and three from South Africa, most of whom came from middle class families with both parents living at home. With its diverse cultural background and a wide range of abilities the construction of this group made an ideal sample to provide quality data for the study.

Ethical considerations, Approval and Consent

This study received a Certificate of Approval from the Thompson Rivers University Ethics Committee for Research and other Studies Involving Human Subjects. Please see Appendix D for a copy. Ethical considerations of students' wellbeing were given priority to all aspects of this study. The researcher's philosophy was to share as much information as possible with the participants and the participant's parents. Although they were not given details about the two tests or the interview questions, they were privy to the date and time of the data collection and the research study's general purpose. Parents were asked to sign the Consent Form for Minors which outlined the scope of the study and the student's rights as a participant. Even though it was not necessary, students were also asked to sign the Consent Form for Minors, as evidence they understood what was being asked of them. In addition, this study received consent from the Principal of the school in which this study took place. Please see Appendix E for a copy of this letter. After the data was collected a form entitled, TRU Human Subject Feedback Form, was distributed to students and mailed home to parents. Its purpose was to receive feedback on how the data was collected making sure that there were no significant deviations from the original planned procedures. See Appendix F for copy of this form.

Measures

Four measures were used: the Torrance Test of Creative Thinking (TTCT) Figural, Form A; Kirsten Neff's Self-Compassion Scale: (short form); two closed questions delivered in a Likert Scale; and four open ended interview questions. Samples of each test can be found in Appendix A.

The Torrance Test of Creative Thinking

The TTCT Figural, Form A, is appropriate for all ages, kindergarten to adult. The test is an eight page booklet divided into three activities: Picture Construction, Picture Completion, and Lines. Students were allowed a maximum of ten minutes to complete each section.

Activity one, *Picture Construction*, required students to use a given stimulus, in this case a large black egg shape placed in the middle of an otherwise unmarked sheet of paper. The students were asked to draw a picture using the egg shape within their drawing, thinking as
creatively as possible. They were then asked to give their unique drawing a carefully considered title.

Activity two, *Picture Completion*, offered students ten different boxes with different line drawings within each box. Students were asked to use the line drawings as a stimulus to inspire them to complete a drawing which tells a story. Students were encouraged to provide titles to accompany the drawings.

The third activity, *Lines*, was three pages long and displayed thirty pairs of parallel lines. The students were asked to use these lines as a starting point for a finished drawing. In this activity, extra points were given to those who used more than two sets of parallel lines to create one picture.

When the test was complete, each drawing was scored using a five norm-referenced measure within the following categories:

- fluency
- originality
- elaboration
- abstractness of titles
- resistance to premature closer

In addition, each drawing was scored using thirteen referenced measures of creative strengths:

- emotional expressiveness
- storytelling articulateness
- movement or action
- expressiveness of titles

- synthesis of incomplete figures
- synthesis of lines
- unusual visualization
- internal visualization
- extending or breaking boundaries
- humour
- richness of imagery
- colourfulness of imagery
- fantasy

Each measure was designed to tap into different aspects of creative functioning, culminating in a raw score. Using the raw score, five types of derived measures were made: Torrance Creativity Index, Standard Scores by age and grade and National Percentile by age and grade. For the purposes of this research, the Torrance Creativity Index was used, reported on scale having a mean of 109.9 and a standard deviation of 16.4.

As mentioned in the literature review, the TTCT is known for its comprehensive scoring system designed to capture creative thinking within an original drawing. As the test requires the administrator to have a full understanding of the test and all of its scoring procedures, it is highly recommended that anyone facilitating the test becomes a TTCT certified scorer. For this purpose, the author of this research travelled to the University of Georgia in Athens, Georgia, for seven days, in February 2011. Working with creativity expert Bonnie Cramond, the certification process was started and three months later certification was granted. A copy of this certificate is found in Appendix B

The Rater Reliability of the TTCT test has been reported in five separate studies involving students in grade 2, 5, 8 and college level, and a random group. In each group, completed tests were independently scored by two different administrators. For fluency, the coefficients of correlation for the 5 studies provided values of 0.96 for grade 8 and 0.99 for each of the other grades. For originality, coefficients ranged from 0.91 to 0.99; for abstractness of titles coefficients ranged from 0.93 to 0.99; for elaboration coefficients ranged from 0.95 to 0.98; and for resistance to premature closure coefficients ranged from 0.90 to 0.99. These studies show that when the administrators of the tests follow the scoring procedures properly, a high degree of accuracy results (Torrance, 1998).

Self-Compassion

The Self-Compassion Scale: Short Form, (SCS-FS) created by Dr. Kirsten Neff is a qualitative measure that asks twelve questions; two questions each from the following six categories:

- self-kindness
- common humanity
- mindfulness
- self-judgement
- isolation
- over-identification

Students were asked to respond to the questions on a scale from 1 to 5. Number 1 on the scale representing 'almost never' and number 5 representing 'almost always'. Six of the twelve questions were reversed scored.

Three samples were used to cross validate the factorial structure of the test, two from Holland and one from England. The SCS-FS has proven to be both valid and reliable with an internal consistency using Cronbach's alpha of .86. It also had a strong correlation to the Self-Compassion Scale: Long Form with .97 making it a time saving alternative to the long form (Neff, 2003). In past studies, using 415 US students, the mean score for this scale is 36. About 70% score in the range of 29 to 43 and about 95% of participants score between 21 and 51 (Neff, 2011).

Two closed questions: Self perceptions of perfectionist behaviours and levels of frustration

Two Likert-type items were developed by the teacher/researcher for this inquiry, to record the students' perception of their level of perfectionist behaviours and level of frustration while creating their artwork. Students were asked, *How perfectionistic are you when creating your artwork?* Students responded on a scale of 0 to 3 (0 being Never, 1 Somewhat, 2 Most of the time, and 3 Always). For levels of frustration students were asked, *How frustrated do you get when creating your artwork?* Students responded on a scale from 0 to 3 (0 being Never, 1 Somewhat, 2 Most of the time, and 3 Always).

Four open ended questions

Four open ended questions were also designed by the teacher/researcher and were included in the research to capture the students' thoughts on creativity and self-compassion. The questions were designed to draw out the students' perception of their own creativity and any potential issues they may have with perfectionism and being overly self-critical of themselves during a time when they are being creative. The questions asked were:

1. Have you ever had an artist's block? If so, what do you think blocked your creativity?

2. Do you think self-compassion has anything to do with perfectionism?

3. Do you think lack of self-compassion inhibits creativity?

4. What can be done to help students who experience an artist's block?

Procedure

One week before the collection of data, fifty-eight senior art students were introduced to the topic of the study and were asked if they would like to volunteer as subjects. They were given a brief outline of what to expect on data collection day as well as how long the data collection would take. A discussion on ethical procedures was also introduced emphasising the importance of protecting the well-being of the students as research subjects. Students were told that they did not have to participate and that their decision would not affect their grades or class standing. Students were also made aware that they could withdraw from the study at any time without negative repercussions. Students were reminded that, as usual, they could access their grades at any time to check on their marks.

Students were provided with a Consent Form for Minors which they were asked to take home and have signed by their parents and have returned for next class. Students were also asked to review the information on this form and sign it. A copy of this form is found in Appendix C

Students were also made aware that no names or personal identification would appear on any of the activity sheets, instead a number would be used. In addition, all information collected would remain confidential and that the four activities would take approximately one hour to complete.

Two classes later, forty six permission slips were returned signed by both the parent and the student. One student reported that she had changed her mind as she would prefer to continue with her current art assignment; leaving forty five subjects. To further orient the students to the research, one class was set aside to discuss some of the terminology they would encounter during the testing period. While the students who decided not to participate continued with their in class assignments, the sample group looked at the definition of creativity developed by Torrance and brainstormed about why he would include certain elements in his definition and not others. We briefly discussed how this definition aligned with the development of his creativity test, although we did not discuss what the test looked like. We followed the same procedure when looking at Neff's definition of self-compassion and again with understanding perfectionism. In hindsight, the time taken to orientate the students was vital. Identifying these three concepts and understanding their definitions provided the students with a foundation on which to build their responses meaningfully. At the same time it created cohesion between the data results and the research questions guiding this study.

On June 1, 2011, data collection day, the students were reminded that their role as a subject was voluntary and at any time they might withdraw from the study. The researcher made every effort to create a regular classroom environment, one which is calm and quiet. The students were given room for their paper and art supplies, there was ample light and the temperature of the room was made comfortable by opening the windows to let a light breeze in. Students were then introduced to the Torrance Creativity Test as a fun interactive activity. The researcher showed the class the booklet while encouraging them in a positive tone of voice. Students were then instructed that they could draw anything they would like using the prompts provided. Though written instructions in the booklet were provided for the three part activity, they were read aloud to the whole class. Students appeared to be happy to receive their booklet and content to get started. Students were given ten minutes to complete each section, for a total of thirty minutes. As this test is timed, students were then asked to move to the next activity.

After thirty minutes the tests were collected and stored away in a secure filing cabinet in the administration office.

Instructions for the Self-Compassion Scale activity were also read aloud. Students were asked to place the appropriate number in the box provided that best reflected their perception of their own self-compassion. Students were given fifteen minutes to complete the task then the activity papers were collected and locked away with the other test booklets.

Students were then presented with two closed questions, in the form of a Likert-type Scale, and four open-ended questions for discussion. In both cases students were offered the choice of recording their responses on paper or in audio format. Forty-one students recorded their responses on paper while four opted to record their responses on a tape recorder. It was anticipated that the students would embrace the opportunity to move away from working on paper to an open discussion format where students could share their experiences with the topic. Although fifteen minutes was set aside for that portion of the study, it was clear that students felt more comfortable communicating their thoughts on paper, hence requiring more time. Since this section of data retrieval was not time sensitive students were given an additional twenty minutes, for a total of thirty-five minutes, to record their responses, after which the papers were collected and placed with the other data in the same locked filing cabinet.

Chapter Four: Presentation of the Findings

Quantitative findings

Data were collected from the Torrance Test of Creative Thinking, The Kirsten Neff Self-Compassion Scale, and the students' perceptions of their own level of perfectionism and level of frustration, and the data was analysed using statistical tools including the Pearson Correlation Analysis, and Minitab Scatterplots. These two statistical tools were chosen to represent the findings from a number of different viewpoints and to answer the two questions that guide this study; do low levels of self-compassion inhibit creativity in the art making process amongst high school art students?

Pearson Correlation Analysis is a technique for investigating the relationship between two quantitative, continuous variables, and in this case, was used to determine if there is a correlation between the Torrance Test of Creative Thinking and the Kirsten Neff Self-Compassion test. As Table 1 below illustrates, the two tests positively correlated at (r=0.85, p<.001, two tailed) suggesting that these two variables increase and decrease together; students who scored higher on the Self-Compassion Test scored higher on the TTCT and conversely students who scored lower on the Self-Compassion test scored lower on their TTCT.

Additional quantitative data on student's perception of perfectionism and perceived levels of frustration were taken from the two closed interview questions taken from a Likerttype Scale and entered into the Pearson Correlation Analysis. Results showed that perfectionism and levels of frustration negatively correlate with the Self-Compassion and TTCT tests. Expressed alternatively, the higher the students scored in self-compassion and creativity the less likely they were to experience perfectionist traits and frustration. The less self-compassion, the less creative, the more likely they would be to exhibit perfectionist traits and higher levels of frustration. The following table illustrates these relationships.

Table 1Pearson Correlation Analysis between the four variables

	Torrance Creativity	Kirsten Neff	Perfectionism Score	Frustration
	Index	Self-Compassion		Score
		Test		
Torrance Creativity	1	.859**	833**	-750**
Index		.000	.000	.000
	<i>n</i> =45	<i>n</i> =45	<i>n</i> =45	<i>n</i> =45
Kirsten Neff		1	899**	876**
Self-Compassion			.000	.000
Test		<i>n</i> =45	<i>n</i> =45	n=45
Perfectionism Score			1	.898**
				.000
			<i>n</i> =45	n=45
Frustration				1
Score				
				n=45

**. Correlation is significant at the 0.01 level (2tailed)

In addition, a scatterplot, (see Figure One), was used to illustrate the correlation between the TTCT and the Self-Compassion data. As the smooth line suggests the students who had more self-compassion had a higher creative output. By fitting the line to the data points the smooth line allows one to see the trend or relationship between the variable more easily.

Figure One



Although it was not the intention of this study to analyse gender, the data was readily available and relatively straight-forward to analyse. I chose to include these results for interested researchers and other readers alike. The results show, (see Figure Two), that the female students were slightly more creative than the males and had minimally more self-compassion. Of the twenty-seven females and eighteen males who participated, eleven males scored under the mean of 32 on the self-compassion test, and seven males scored over 32. Ten females scored under 32 in the self-compassion test and seventeen over 32. As there are three females for every two males, the results demonstrate little difference in test results between genders. As there were a limited number of subjects participating in this study, the results may not be generalized. Further research into the topic of gender differences with a larger number of participants is necessary.

Figure Two



In other findings, (see Figure Three), the Self-Compassion results were compared to the perceived perfectionist behaviour the student felt they had. In this case when students were asked: *Do you think you have perfectionist traits?* twenty-five students felt they carried perfectionist traits, eighteen said they did not and two said they did not know. The students who recorded acute perfectionist behaviours scored between 16 and 28 on their self-compassion scale. The students with mild to moderate perfectionist behaviours scored between 18 and 38 on their self-compassion scale; students who thought they did not exhibit any perfectionist traits, with the exception of one student, scored between 36 and 44 on their self-compassion scale. These numbers suggest that the more self-compassion the less likely one is to exhibit perfectionist traits. According to Neff, this may not be a surprising result as self-compassion is

"associated with increased levels of reflective and affective wisdom, personal initiative, curiosity and exploration, happiness, optimism and positive affect" (Neff & Vonk, 2009 p.26).



Figure Three

Figure Four illustrates similar results when looking at Torrance Creativity Index scores and levels of perfectionist behaviours. Students who scored higher on the TTCT perceived themselves as having fewer perfectionist tendencies. In this case, twelve males and thirteen females recorded that they had mild to acute perfectionist traits on the Likert-type Scale, and scored between 85 and 150 on the TTCT. However, two additional students did report some perfectionist traits and yet scored quite high on their TTCT with a score of 150, this discrepancy was acknowledged. The eighteen students who felt they did not have any perfectionist traits scored higher on the TTCT with scores between 117 and 173.

Figure Four



Conclusion

Results from quantitative data suggest there is a relationship between self-compassion and creativity. In particular, Figure One supports the results found in the Pearson Correlation Analysis table which suggests that the higher the student's self-compassion, the higher their creative output. Figures three and four, which dealt primarily with perfectionism, found those students with low self-compassion exhibited more perfectionist traits and less creativity. Conversely, those students with higher levels of self-compassion exhibited less perfectionistic traits and more creativity.

Although there seems to be little difference between genders in creativity performance, Figure two illustrates that slightly more males perceived themselves as having perfectionist behaviours in comparison to females.

Qualitative Findings

Of the possible fifty-eight art students, forty-five participated in the study and of those forty-five, all completed the study. Four open-ended questions were included in the research to capture the students' thoughts on creativity and self-compassion and the possible relationship between these two attributes. The questions were designed to draw out each student's perception of their own creativity and any potential issues they may have with perfectionism and being overly self-critical during a time when they are being creative. The questions asked were:

- Have you ever had an artist's block and if so, what do you think blocked your creativity?
- Do you think self-compassion has anything to do with perfectionism?
- Do you think lack of self-compassion inhibits creativity?
- What can be done to help students who experience an artist's block?

Participants responded to each question, expanding on their ideas. As expected, the responses varied by student but after some analysis common themes became apparent.

Results from question 1 Have you ever had an artist's block? If so, what do you think blocked your creativity?

Six students responded they had not experienced an artist block before. From their openended responses and from previous discussions in the classroom they understood and recognized what an artist block is but added they had not experienced any themselves. They reported that nothing blocks their creativity because they constantly create alternative options as part of their creative process. One student explained, "I know what you mean but no, I don't really think anything blocks my creativity, when I have trouble I just know that if I keep trying something will turn out". Another student reported, "I just keep working, I sometimes turn my work upside down (so the image is upside down to the artist); it kinda helps". Other students wrote, "I don't think of it as an artist's block, I just change things around, I go and work on something else until I figure things out" and "I just keep going".

It seems evident from the responses that these students have a level of flexibility in their approach to creating art, either working through the issues at hand or working on something else until a solution is found. These students are comfortable with making modifications while creating their artwork and they recognize them as part of the process. As discussed in the literature review, students who exhibit this level of flexibility often score higher on the self-compassion test as they are more adaptable to experimenting with new approaches, techniques and materials without fear of failure. In general, these types of students tend to exhibit less self-critical tendencies, and find it less challenging when creative problem solving, (Neff, 2011; Neff and McGehee, 2010). Specifically, these six students scored very high on their TTCT, scoring above 152. Five of these students scored 40 and higher on the self-compassion scale.

The other forty students reported they had experienced an artist's block but at different levels of intensity. Eight reported they felt the condition was a normal part of the creative process, and realised that it would only be temporary and that they had the ability to push through the problem and keep going. The majority of these students scored higher on their TTCT test, above the 150. These same students also scored high on their self-compassion test with results above 38.

The majority of the class, thirty-one students, attributed their artist block to a variety of issues: various aspects of perfectionism; being asked to explore new subjects; materials or technologies when they felt disinclined to do so. Other complained of a lack of ideas; not knowing what to draw; not having the skills to create what is required of them; and not having enough time to complete the project.

Twelve students felt that perfectionism was the leading cause of their artist block. As one student explains, "I just keep thinking I want it a certain way. It makes me mad that it won't turn out the way I want so I either quit or use something different." Another student reported, "I don't know why I just stop and start all the time. I want it to be perfect the way I see it in my mind". A third student wrote, "I think I get creative blocks when I stress myself out. I want to be good at what I do but I'm too hard on myself and that makes me feel even worse."

While reflecting on the comments in this group, all students except one, scored low on their TTCT, below 100 and the majority scored well below average on their self-compassion tests. However, the one exception was one student that did not follow this pattern scored higher than expected on the TTCT test at 142 and low in the self-compassion test at 22.

Three of these twelve students reported they felt they did not have the required skills to complete the project to their expectations and found frustration in trying to create the perfect artwork. As one student explained, their frustration came from, "not being able to draw something new and exciting, not being able to draw what I wanted to draw...not skilled enough or can't do it....it looks like crap...I usually start by gripping the page arhh and then ripping it in half".

An additional theme amongst a number of these students was their reference to external pressure from family and friends to create something perfect. This external pressure from others, particularly a parent, has long been understood by researchers in the field of perfectionism and has been established as the leading cause of perfectionism amongst youth (Burns 1980, Hamachek, 1978 and Hollander, 1978, Pacht 1984; Frost, Marten, Lahart & Rosenblate 1990).

Five students reported that they did not like being asked to try new things; instead they would prefer to be left alone to choose their own subject matter and drawing style. As one of the

students explains, "I like my own style; I don't want to try new things....When I get an artist's block it's usually because I am trying something new and I don't like it. I get frustrated and I don't want to create anything anymore. People say I'm a good artist but I don't think so or I would be good at more."

Four students felt their creative block was due to lack of ideas. They revealed that they "lack inspiration", or "....I just don't know what to draw", and lastly three students felt they didn't have enough time to complete the task at hand which caused a higher level of frustration. The students in this category scored low to average in the self-compassion test between 25 and 33 and low to moderately high on the TTCT test from 100 to 123.

Results from question 2 Do you think self-compassion has anything to do with perfectionism?

The majority of students (thirty-four) agreed that self-compassion must have something to do with perfectionism. A number of students who felt very strongly that these two elements were related reported "I think self-compassion has a lot to do with perfectionism. I think if a student had more self-compassion they might be more open to making mistakes". Another student reported, "If students were kinder to themselves they wouldn't mind making mistakes and perhaps they would be more creative. I think students who have perfectionistic traits may be too hard on themselves. Maybe self-compassion helps to lessen that so students can work more creatively". These findings are in keeping with current research on self-compassion and its correlation to perfectionism. As Kirsten Neff explains, "Research suggests that self-compassion is strongly related to psychological well-being, including increased happiness, optimism, decreased anxiety and depression and neurotic perfectionism" (Neff & McGeehee, 2010, p.4)

Though other students agreed that there could be a relationship between self-compassion and perfectionism, they were unsure to what extent. One student said, "I guess self-compassion could help stop perfectionism because students who felt okay about themselves and their work would be less picky." Another student agreed by saying, "I can't help but feel badly about my artwork, maybe self-compassion will help me get unstuck when I want to give up on my work. Not sure if it will make me less of a perfectionist because I think I will always have those thoughts I will learn how to do something different with them."

Results from question 3 Do you think lack of self-compassion inhibits creativity?

Twenty–eight students felt strongly that lack of self-compassion could inhibit creativity and four said they only thought it might. Eight felt that self-compassion and creativity were unrelated and five were unsure. Unexpectedly, this author found no correlation between the responses and the self-compassion or TTCT scores. However, several interesting themes emerged from their responses. As the above numbers state, the majority of students felt there could be a strong relationship between self-compassion and creativity. One student concluded by saying, "Yes I think it does. People who give themselves such a hard time are not nice to themselves. I think the more self-compassion a person has the more they are willing to make mistakes and its okay." A number of students also talked about finding the right balance, having just enough self-compassion but not too much. As one student reported, "I think there needs to be a balance between challenging oneself and being too hard on oneself. I think a healthy amount of self-compassion probably helps creativity." A second student reported, "I think selfcompassion has to be in the right balance. I think it might help with frustration and maybe less frustration makes creativity flow better." Other students made the case that with too much selfcompassion a student could become lazy and unmotivated. However, according to current research on self-compassion, this has not been shown to be the case. Murat Iskender, Professor and Researcher at Sakarya University in Turkey, explains that "self-compassion is negatively

associated with self-criticism, rumination, procrastination and other avoidance-oriented strategies" (Iskender, p.231). Kirsten Neff supports this argument in more detail, "Although it is possible that individual sometimes adopt a self-compassionate attitude as a pretext for being complacent, passive, or to avoid taking responsibility for one's harmful actions, this is unlikely to occur when feelings of self-compassion are complete and genuine. Although self-compassion requires that one not be harshly judgemental toward oneself, the mindfulness component of self-compassion suggests that one's failings are seen clearly rather than being ignored or disregarded. Moreover, truly having compassion for oneself entails desiring health and well-being for oneself, which means gently encouraging change where needed and rectifying harmful or unproductive patterns of behaviour. Thus, self-compassion should counteract complacency as long as mindfulness is present" (Neff 2003, p.225).

Another important point to emerge was that there were a significant number of students who evaluated their level of self-compassion as too low. At this point, in the proceedings, the students had written their self-compassion test but were not privy to the results. Most said that they would like to have more self-compassion but didn't know how to develop it. They also wondered how self-compassion would ultimately impact other behavioural outcomes such as frustration and anger. These particular students tended to score below 25 on their self-compassion score and below 100 on their TTCT.

These comments were found to be mature and insightful leading the teacher/researcher to question how might a higher level of self-compassion impact student learning in the future. Is it possible that self-compassion could become a crucial component of social-emotional learning? Could self-compassion encourage and support the development of other positive attributes such

as persistence, resilience, responsibility, and problem solving? Some of the students seem to recognize that self-compassion might be useful once they learn to nurture it.

The responses from those students who didn't think lack of self-compassion could inhibit creativity varied. One student reported when, "people are hard on themselves they get frustrated and angry which stops them from being creative I don't think lack of self-compassion does" A second student thought, "that a gentle push will encourage creativity, but that doesn't mean that a lack of self-compassion inhibits creativity."

Responses to question 4 What can be done to help students who experience an artist's block?

Thirty-one students suggested that those students who experience an artist block should try to be kinder to themselves by accepting their mistakes, being less judgemental when mistakes occur, prevent stress by taking one step at a time, take a break for a few minutes the return to finish the project. Two additional students advised that they needed more time to work on their assignments and suggested that music could act as inspiration. The majority of these students scored high on both their TTCT and self-compassion scores with the exception of two that scored in the mid-range.

Nine students felt they could not offer advice as they identified themselves as members of a group that needed the help. As one student reported, "I'm the one who needs this advice, can you please share these results." A second student agreed by writing, "Not sure, I stop and start, if you have a solution please let me know." Another student reported, "Don't know, I'm the one who needs the help!" Eight of these students scored 22 on the self-compassion test and under 100 on the TTCT. The ninth student scored 22 on the self-compassion score and surprisingly high on with 142 on the TTCT. This discrepancy was noted.

Conclusion

While the majority of students understood the concept of an artist block their personal views on the subject varied. A small number of students said they had never experienced one, whereas the majority said they had experienced an artist block on one level or another. Reasons for the artist block also varied but 27% of students felt quite certain it had something to do with perfectionism.

On one end of the scale, those students who had not experienced an artist block were those with higher levels of self-compassion. This group also perceived themselves as having less perfectionist traits and reported less frustration when creating their artwork. On the other end of the scale were the other group of students who experienced an artist block on a regular basis. These students perceived themselves as having strong perfectionist traits; they also reported low levels of self-compassion and experienced more frustration during the creative process.

Similarly, the majority of students understood the concept of perfectionism with 75% feeling strongly that there is a relationship between self-compassion and perfectionism. However, responses concerning how these concepts are related and to what extent one influences the other, the student's opinions varied. A number of students started to examine their own creative practices questioning what would happen if they could acquire more self-compassion, could it help them to become less judgmental.

When asked if the students thought lack of self-compassion could inhibit creativity, 62% felt strongly it could. Many of the students wrote comments on their response papers expressing a concern that their self-compassion as too low and questioned how they could nurture it. The researcher was surprised to see so many mature and insightful answers particularly where the

students pondered how self-compassion might alleviate other negative behaviours such as anger and frustration.

After answering the first three questions it is not surprising that the students responded to the question *What can be done to help students who experience an artist's block?* with comments associated with encouraging more self-compassion. However there were nine students that could not give any advice as they felt they were the ones that needed help most.

Chapter Five: Limitations of this study and recommendations for further research *Limitations of the study*

There are several limitations to this study including: the small sample size which produced limited quantitative data; testing creativity and self-compassion only once, in a relatively short period of time; the subjects tested were a highly homogeneous group with a similar socio-economic background; and potential bias on behalf of the teacher-researcher towards the results of the data.

This study was based on a limited number of participants, N=45 and therefore it provides only a small amount of quantitative data. Further research using a larger number of participants would have to be studied before the results can be generalized. However, in contrast the qualitative data collected was sufficient as it is not expected that the results be replicated.

Although the TTCT comes with a strong reputation for being an accurate tool for measuring creativity it is usually administered only once. Given the small number of students in the study if one or two students were having an "off" day in which they were feeling less creative the numbers and the overall results could have been different. However, both the qualitative and quantitative data show that even with certain variances the results would still illustrate a strong correlation between creativity and self-compassion.

Although the participants in this study come from a variety of ethnic backgrounds they all share a similar socio-economic upbringing. As most participants come from middle class families where the student lives with both parents, responses to the two tests and the interview questions might be seen as coming from a homogenous group of "advantaged" students. Further research should be undertaken to include students from a larger number of ethnic and socioeconomic backgrounds to determine if there is a link between self-compassion and creativity in a broader population.

This teacher-researcher acknowledges the bias towards more positive data results, especially as the tests were administered, collected and evaluated by the teacher/researcher. However, with this awareness, self-scrutiny and adhering to the strict guidelines set out by the authors for evaluating the TTCT and the Self-compassion tests, the data were collected with as much care and accuracy as possible. To increase the reliability and validity of the results, a triangulation method was used by cross checking the quantitative data with qualitative data. In addition, triangulation was used within the quantitative data by using different statistical tools to see if the same results could be achieved and within the qualitative data by including the voices of all forty-five students.

Recommendations for future research

As this study reveals, there seems to be a strong correlation between creativity and selfcompassion. It would be beneficial to replicate the quantitative data in this inquiry using a larger number of subjects from other schools and other ethnic and socio-economic backgrounds to see if similar results exist within a wider population. In addition, it might be significant to take a closer look at gender differences in a similar inquiry with the purpose of exploring whether there is a difference in levels of self-compassion within each group and how it might affect their creativity.

A natural extension to this research would be to explore an instructional intervention, an action research approach where one would encourage the development of self-compassion amongst high school art students. The design of such research could be developed in three parts. Part one would administer the TTCT, the self-compassion test, and the interview questions. In

part two, an intervention designed to improve self-compassion would be introduced and implemented during a regular art lesson. Part three would administer, for the second time, the TTCT and self-compassion tests and the interview questions to see if there was any improvement in the level of creativity. The results may prove to be significant if students find themselves freer to create their artwork given the tools to increase their levels of self-compassion. If higher levels of self-compassion do facilitate creativity, redesigning the visual arts curriculum to include a series of lessons around this concept may prove to be beneficial to the student.

In addition, it would be worthwhile to see if self-compassion could facilitate creativity amongst other groups of visual artists such as university art students, emerging and professional artists. This research may help to answer questions such as: does age play a factor in how an individual evaluates their own level of self-compassion and how would their level of selfcompassion influence their creative output?; Does the level of proficiency play a part in their level of self-compassion and thus their creative output? By taking a closer look at one of these sub-groups it would be interesting to interview a group of professional visual artists to explore how they might interpret their level of self-compassion and then compare the results with their level of creativity. Potentially these results could be compared to the results collected in this study.

Chapter Six: Personal Reflection and Conclusion

Implications for future teaching practices

In keeping with the framework of an action research study this chapter focuses on the improvements made to my day to day teaching practices. As a teacher, working with students on a regular basis has enabled me to observe emerging patterns of behaviour. As a researcher, it has allowed me to take a closer look at these behaviours, question why they might exist, research the topic and analyse the data, all with the end goal of improving my teaching practice. The teacher/researcher approach ultimately supports a stronger relationship between observing the behaviour and the design and methodology of the study. It allows for an effective way to modify curriculum and to maximize student learning. Action research heightens my awareness, focuses my problem solving and enhances my ability to choose design and content that specifically suits my students. I strongly believe taking these two roles on simultaneously has provided me with accurate and meaningful data with which to positively change the teaching and learning experience.

Reflecting upon the data collected and the student responses I have modified my teaching approach with students who exhibit perfectionist tendencies. I have a broader understanding of their issues and am less likely to interpret their behaviours as being too fussy, too slow, or an excuse to avoid getting down to work. Instead, on a day-to-day basis, I now promote open discussions on perfectionism, self-compassion, and creativity and how these topics might affect them as individual students.

More specifically, for those students who really struggle with perfectionism and low selfcompassion I am currently exploring new ways that students can create art without the stress of thinking they might make a mistake. Based on some of the responses from the interview questions, I now provide both group and individualized demonstrations so students have a better understanding of how to use particular techniques or specific materials. I remind my students that creating their artwork is a process which requires them to make many decisions along the way. Instead of being afraid to make the wrong decision, I encourage them to be open to experimentation and accepting of unexpected results, recognizing them as part of the creative learning experience.

For those students who feel they do not have enough ideas when creating their work, I have added an additional section to each of my lesson plans allowing more time for discussion and viewing of samples. For smaller projects and sketchbook assignments, I have installed three *Idea Stations* around the art room, each designed to inspire the student or prompt them with ideas of what they could draw or paint.

In response to the students' comments about lacking the skills and abilities to create, I have implemented a three tier demonstration segment to each lesson. As most of the classes are made up of more than two grade levels, I now teach three levels of ability separately, making sure that new students, even if they are in grade 12, join the beginner group.

I continue to observe my students with keen interest as I investigate the ways they approach their work and I watch closely for clues as to what facilitates their freedom to create. With every new class that arrives I see a growing number of perfectionist students and wonder if five years from now I will see a significant number more. In the near future I hope to continue my research into self-compassion and creativity providing students with an effective intervention program to improve their self-compassion, to alleviate their struggle and frustration and provide them with the sense of freedom to create.

This study has also raised the question of how best to use this information in today's current educational system. If self-compassion does facilitate creativity could it be used in other areas of study, not just the visual arts? As education in British Columbia shifts its focus toward differentiated learning it becomes more important to understand how individual students learn, what might inhibit their learning and what might facilitate it. Bringing the topic of selfcompassion into the learning process on a daily basis may support creative thinking across a wider range of topics. Furthermore, according to the Premier's Technology Council: A Vision for 21st Century Education, published in 2010, reports that in British Columbia, as well as elsewhere, 21st Century Learning promotes a holistic approach to education, with the objective to teach competencies such as collaboration, critical thinking, problem solving and creativity. The results from this type of education supports the educational perspective that promoting creativity and expressive capabilities enables students to be well rounded by developing their personal, cultural and social identity. This document also stresses the importance of teaching these competencies to today's students in order for them to meet the demands of a rapidly changing world.

Unexpected findings

After three years of researching and writing on the subject of self-compassion and its relationship to creativity, I am still intrigued by the topic, perhaps even more so. For some time I wondered if there could be a relationship between the two subjects, it was a question that surfaced many times over years of teaching and observing thousands of students work through their creative process. After collecting and analysing the data I was surprised to see such a strong Pearson correlation. While a correlation of 0.380 with 45 observations would be significant at the 0.01 level, the correlation from this study was much higher at .859. This indicates that close to 75% of the variation in Torrance Creativity Index can be predicted using the Kirsten Neff Self-Compassion Test. (The 75% figure is called the coefficient of determination and it is the square of the correlation coefficient: 0.859^2=0.738.)

I was equally surprised with the feedback I received from my students. They demonstrated a mature approach to taking the two tests and answering the interview questions; their responses were longer, included more detail, and were more articulate than I expected. I was moved by the depth of their insight when responding to the questions on self-compassion, particularly those who felt self-compassion was a short coming. I was also struck by their honesty when recording their answers. Instead of giving a three or four word answer most opted to elaborate on their feelings and their experiences. They worked diligently during the time they had until the bell rang to change classes. On reflection, I may have asked too many questions, it may have been more efficient to ask the first three open ended questions and delete the fourth that didn't directly support the research questions.

After analysing the quantitative and qualitative data, patterns started to emerge in regards to the student's level of self-compassion compared to their level of creativity. The data analysis confirmed that the student's level of self-compassion could predict their level of creativity and vice- versa. However, there was one outlier; one student's scores did not fit the pattern. In this case the student had a low self-compassion score yet a high creativity score. This same student self-identified as having acute perfectionist behaviours yet scored quite high on the creativity test. Although this discrepancy was noted, it raises questions as to the causal reasons and whether low levels of self-compassion must always negatively influence creativity. These types of unexpected findings along with the questions they create provide rich opportunities for future research.

Conclusion

Based on the analysis of both quantitative and qualitative data, it is evident that there is a relationship between self-compassion and creativity with both types of data providing significant findings regarding the two research questions that guided this study:

- Do lower levels of self-compassion inhibit creativity in the art making process amongst high school art students?
- Do higher levels of self-compassion facilitate creativity in the art making process amongst high school art students?

In both cases the Pearson Correlation Analysis provided evidence that low levels of selfcompassion inhibited creativity in the art making process, while higher levels of self-compassion facilitated creativity, with both results showing a high degree of accuracy. In addition, the qualitative data supported this finding with the majority of students feeling strongly that lack of self-compassion could inhibit creativity. Ultimately, the students felt the best way to improve creativity was to nurture their own self-compassion.

Since making modifications to my teaching practice, particularly with students who exhibit perfectionist tendencies, there appears to be less anxiety around starting the art project. However, there seems to be the same amount of negative self-judgement during the creative process when the project is under way and particularly when the student prepares to complete the project. Although the students are aware of the impact their negative attitudes could have on their work, their self-critical tendencies still prevail. As previously discussed, an intervention, implemented over a period of time, where students can practice nurturing their self-compassion may contribute significantly to alleviating their self-critical tendencies. Although more research needs to take place before these findings can be generalized, the results of this study are compelling. If self-compassion can facilitate creativity in some individuals, it could benefit a great number of art students and potentially those that work in any creative environment.

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Appendix A: Sample of the Torrance Test of Creative Thinking: Thinking Creatively with Pictures

On the opposite page is a curved shape. Think of a picture or an object which you can draw with this shape as a part.

Try to think of a picture that no one else will think of. Keep adding new ideas to your first idea to make it tell as interesting and as exciting a story as you can.

When you have completed your picture, think up a name or title for it and write it at the bottom of the page in the space provided. Make your title as clever and unusual as possible. Use it to help tell your story.

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P



YOUR TITLE:

Activity 2. PICTURE COMPLETION

By adding lines to the incomplete figures on this and the next page, you can sketch some interesting objects or pictures. Again, try to think of some picture or object that no one else will think of. Try to make it tell as complete and as interesting a story as you can by adding to and building up your first idea. Make up an interesting title for each of your drawings and write it at the bottom of each block next to the number of the figure.



4



Activity 3. LINES

In ten minutes see how many objects or pictures you can make from the pairs of straight lines below and on the next two pages. The pairs of straight lines should be the main part of whatever you make. With pencil or crayon add lines to the pairs of lines to complete your picture. You can place marks between the lines, on the lines, and outside the lines—wherever you want to in order to make your picture. Try to think of things that no one else will think of. Make as many different pictures or objects as you can and put as many ideas as you can in each one. Make them tell as complete and as interesting a story as you can. Add names or titles in the spaces provided.









CAT# TT 171002R1

self-compassion scale: short form

how I typically act towards myself in difficult times ...

please read each statement carefully before answering; using the scale given below indicate, to the right of each item, how often you behave in the stated manner:

	almost never 1	2	3	4	almost alway 5	5
1	when I fail at somethin	ng important to i	me I become consun	ned by feelings of	f inadequacy	
2	I try to be understandi	ng and patient to	owards those aspect	s of my personali	ty I don't like	
3	when something painfo	ul happens I try i	to take a balanced v	iew of the situation	on	
4	when I'm feeling down, I tend to feel like most other people are probably happier than I am					
5	I try to see my failings as part of the human condition					
6	when I'm going throug	h a very hard tir	ne, I give myself the	caring and tende	erness I need	
7	when something upset	s me I try to kee	ep my emotions in ba	alance		
8	when I fail at somethin	ng that's importa	nnt to me, I tend to f	feel alone in my fa	ailure	
9	when I'm feeling dowr	I tend to obses	s and fixate on every	vthing that's wron	ng	
10	when I feel inadequate shared by most people	e in some way, I e	try to remind myself	f that feelings of i	nadequacy are	
11	I'm disapproving and j	udgmental abou	t my own flaws and	inadequacies		
12	I'm intolerant and imp	atient towards th	hose aspects of my p	personality I don't	like	

self-kindness (2, 6) = common humanity (5, 10) = mindfulness(3, 7) =

self-judgment (11, 12) - reverse scored = isolation(4, 8) - reverse scored =

over-identified (1, 9) - reverse scored =

total score =

In a study of 415 US students, mean scores (with standard deviations) were:

self-kindness = 5.86 (1.46)	self-judgment = 5.98 (1.71)
common humanity = 5.79 (1.60)	isolation = 6.14 (1.83)
mindfulness = 6.69 (1.55)	over-identification = 6.39 (1.83)

total score = 36.00 (7.33) - so about 70% score in range 29 to 43 & about 95% in range 21 to 51

Raes F, Pommier E, Neff K, Van Gucht D. "Construction and factorial validation of a short form of the self-compassion scale." Clinical Psychology & Psychotherapy (in press)

The objective of the present study was to construct and validate a short form version of the Self-Compassion Scale. Two Dutch samples were used to construct and cross-validate the factorial structure of a 12-item Self-Compassion Scale–Short Form (SCS-SF). The SCS-SF was then validated in a third, English sample. The SCS-SF demonstrated adequate internal consistency (Cronbach's alpha ≥ .86 in all samples) and a near-perfect correlation with the long form SCS (r≥ .97 all samples). Confirmatory factor analysis on the SCS-SF supported the same six-factor structure as found in the long form, as well as a single higher-order factor of self-compassion. The SCS-SF, thus, represents a reliable and valid alternative to the long form SCS, especially when looking at overall self-compassion scores. ... and in their discussion, the authors write "As a whole, the present findings indicate that the shortened, 12-item SCS can be effectively and efficiently used as an economical alternative to the full SCS. The SCS-SF may be of particular use in time and cost intensive survey and therapy outcome research, often containing loaded test batteries. Also, clinical practitioners who wish to monitor treatment progress of their individual patients can use the short version to minimize time consuming assessment. However, we should also note that the internal consistencies for the SCS-SF subscales were relatively low ... we would recommend using the full scale if information about subscales is crucial. For total score information, however, the SCS-SF is an economical alternative to the long form as it has the same factor structure, good internal consistency, and a near-perfect correlation with the long SCS."

Please answer the following two questions by circling the one that best reflects how you feel.

How perfectionistic are you when creating your artwork?

0 Never

1 Somewhat

2 Most of the time

3 Always

How frustrated do you get when creating your artwork?

0 Never

1 Somewhat

2 Most of the time

3 Always

Jerms . For achieving inter-rater reliability in scoring November 20 Date Torrance Center for Creativity and Talent Development Philippa Glossop Greative Mimking wards this Certificate o Greativity and Talent Development Director, Jorrance Center fo Bonnie Oramond, 94 The Torrance Texts of 11

Appendix B: University of Georgia, Certificate from the Torrance Center for Creativity

Appendix C: Consent Forms for Minors



THOMPSON RIVERS UNIVERSITY Consent Form for Minors

I give permission for my son/daughter to participate in the research entitled *Self-Compassion Facilitates Creativity Amongst High School Art Students,* conducted by Philippa Glossop for her Masters thesis in Education, taught at Thompson Rivers University and supervised by Dr. Joi Freed–Garrod in the faculty of Education (250) 371-5985.

The study investigates the relationship between self-compassion and creativity. Data will be gathered through four components: a five page drawing assignment which measures creative thinking in visual images; a questionnaire on self-compassion; two closed questions delivered in a Likert Scale; and a focus group interview with four questions to capture the thoughts and ideas of the students which will be videotaped. If any student prefers not to be videotaped they have the option of recording their answers on paper. Videotaped material will be viewed only by those directly involved with the thesis defence panel and will not be shared with other teachers or students.

The main purpose of this study is to confirm the relationship between lack of self-compassion and blocked creativity. If self-compassion is understood to be an important component of the creative process, ultimately its nurture would alleviate self-critical tendencies and promote freer creative expression. This research study will also contribute insight into a compelling subject that appears to lack basic research.

I understand that all information will be treated with the strictest of confidence. Data collected will not have the students name attached and all videotaped material will be stored in a locked cabinet and will be destroyed immediately after the completion of the study.

I understand that my son/daughter will participate in this research during regularly class time scheduled for the last week of classes June 13-16, 2011. This study has been approved by Mr. Shawn Chisholm, Principal of St. Ann's Academy.

I realize that my son/daughters participation is voluntary and that he/she may withdraw from the study at any time without any negative repercussions or change in grades or class standing.

Any questions or concerns can be addressed by Dr. Michael Woloszyn Chair, TRU Human Research Ethics Committee at <u>mwoloszyn@tru.ca</u> or (250) 377-6148.

DATE: _____

PARENT'S/GUARDIAN'S NAME: _____

SIGNATURE:
STUDENT'S NAME:
SIGNATURE
TEACHER/RESEARCHER'S NAME
SIGNATURE

Appendix D: Certificate of Approval from the TRU Ethics Committee



Thompson Rivers University Ethics Committee For Research and Other Studies Involving Human Subjects

ertificate broval

PRINCIPAL INVESTIGATOR

Philippa Glossop

DEPARTMENT Faculty of Human, Social and Educational Development

INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT

TRU

CO RESEARCHER(S) Joi Freed-Garrod

SPONSORING AGENCIES

Self-Compassion facilitates Creativity Among High School Students

APPROVAL DATE	TERM (YEARS)	AMENDED
June 8, 2011	1	
SUBSEQUENT CERTIFICATE(S) ISSUED	L	

CERTIFICATION

The protocol describing the above-named project has been reviewed by the Committee and the experimental procedures were found to be acceptable on ethical grounds for research involving human subjects.

Chair, Research Ethics Committee - Human Subjects

This Certificate of Approval is valid for the above term provided there is no change in the experimental procedures.

Appendix E: Letter of Approval from the School Principal



April 19, 2011

Attn: TRU Research Ethics Committee,

Please be advised that Mrs. Philippa Glossop has kept me informed of her research project and St. Ann's Academy fully supports the scope and methodology Mrs. Glossop has proposed for her research project.

Please do not hesitate to contact me @ 250-372-5452 if you would like to discuss this matter further.

Sincerely

Shawn Chisholm Principal

205 Columbia Street • Kamloops, BC • V2C 2S7 • T (250) 372-5452 • F (250) 372-5257 • www.stannsacademy.bc.ca

Appendix F: Human Subject Feedback Form



THOMPSON RIVERS UNIVERSITY ETHICS COMMITTEE FOR RESEARCH AND OTHER STUDIES INVOLVING HUMAN SUBJECTS

Human Subject Feedback Form

Dear Participant:

The Research Ethics - Human Subjects Committee would like to thank you for participating in this study.

If you have served as a subject in a project and would care to comment on the procedures involved, you may complete the following form and send it to the Chair, Thompson Rivers University Research Ethics Committee on Human Subjects. Completion of this form is optional, and is not a requirement of participation in the project. All information will be treated in a strictly confidential manner.

Name of Principal Investigator: Philippa Glossop

Title of Project: Self-Compassion Facilitates Creativity in High School Art Students

Department: Department of Education

Did you sign an informed Consent Form before participating in the project?

Were you given a copy of the Consent Form?

Were there significant deviations from the originally stated purpose, procedures and time commitment:

I wish to comment on my involvement in the above project which took place:

(Date)

(Place)

(Time)

Comments:

Completion of this section is optional

Your name: ____

- 11 -

Address:

This form should be sent to the Chair, Thompson Rivers University, Research Ethics Committee on Human Subjects, c/o Vice-President, Academic, P.O. Box 3010, TRU, Kamloops, B.C. V2C 5N3