

Rethinking the Tortured Artist: The Role of Empathy in the Shared Vulnerability Model

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Abstract

A long-standing stereotype, the “tortured artist” portrays artists as striving for creativity through mental suffering. Although heavily romanticized, this stereotype presents a fascinating question from a scientific viewpoint about the relationship between creativity and psychopathology. If creativity improves mental health, why is it often associated with mental illness? The shared vulnerability model explored this question through a genetic lens, finding that creativity and psychopathology share many traits, with outcomes determined by certain protective or risk factors. However, because research on this topic has largely focused on genetics, key areas such as social cognition remain underexplored. The current paper expands the shared vulnerability model to include the social-cognitive factor of empathy. Using historical analysis, research on Theory of Mind, and an analysis of empathy, this paper explores empathy’s conceptual contribution to mental health and creativity and the shared vulnerability model as a potential protective factor that shifts an individual more towards creativity and less towards psychopathology. These findings, when integrated into therapies and treatments, suggest applications not only to artists but also to a broader population of creative individuals or individuals who experience struggles with mental health. It may also reduce the stigma associated with the tortured artist stereotype by offering a more complex explanation.

Keywords: shared vulnerability model (SVM), creativity-psychopathology relationship, empathy, social cognition, Theory of Mind (ToM), latent inhibition, schizotypy, protective vs. risk factors, tortured artist stereotype

1. Introduction

The “tortured artist” stereotype has been around for centuries. From as early as Sophocles’ Greek tragedy *Philoctetes* to modern-day Hollywood stars and artists, the association between creativity and mental suffering has been present (Kaufman, 2014). Countless famous artists, musicians, and writers, such as Van Gogh, Beethoven, and Ernest Hemingway, are all assigned the vague yet unifying title of “tortured artist.” The tortured artist is someone who performs negative identity work, a process of defining oneself with characteristics opposed to societal norms, to achieve a positive artistic self (Alacovska & Kärreman, 2023). Modern research has begun looking past simple anecdotes and case studies, diving into the mechanisms with experiments, brain scans, and models for the relationship between creativity and mental illness. However, proposed explanations, such as Shelly H. Carson’s shared vulnerability model, have only focused on neurological, biological, or genetic approaches. Because creativity and mental illness are both extremely complex in nature, it is important to consider alternate perspectives.

This paper will extend previous work on the shared vulnerability model (SVM) to incorporate empathy, a social-cognitive function, into the model. Understanding the role of empathy in the shared vulnerability model is important because of its role in creativity (Alzayed et al., 2022). Although many social-cognitive functions may influence creativity and psychopathology, this paper focuses on empathy because it includes both affective and cognitive processes. Since having both socio-affective and socio-cognitive capabilities leads to more successful social interaction (Preckel et al., 2018), empathy provides a useful framework for understanding the role of social cognition in the relationship between creativity and psychopathology. Grounded in this model, social-cognitive functions, specifically empathy, are considered within the SVM as protective or risk factors, with cognitive and affective empathy potentially functioning differently.

The importance of empathy in this discussion is that it has been overlooked due to the romanticization of the concept (Becker, 2001). Further examining the relationship between creativity and psychopathology can reduce stigma around “tortured artists.” Empathy specifically is important because of its role in emotional well-being. Using the shared vulnerability model, empathy could prove crucial in explaining how protective factors impact creative or at-risk individuals. In addition, empathy’s role could be used to improve therapy, interventions, and mental health education. Understanding the complex relationship from empathy’s perspective could eventually help refine treatments for those struggling with mental health by incorporating creativity to bring individuals away from pathology. Overall, empathy has not been explored in past research and represents an important new factor to consider.

In this paper, the history of the “tortured artist” stereotype will be explored, emphasizing that there are more factors at play than genetics. Then, the shared vulnerability model (SVM) will be discussed. The general idea is that, genetically, psychopathology and creativity share multiple vulnerabilities, such as low latent inhibition and cognitive disinhibition. These traits are seen as heritable and polygenic. Protective and risk factors determine whether an individual is more prone to creativity or psychopathology (Carson, 2011). However, the examined risk and protective factors have only been genetic, rather than other perspectives important to psychology. One such perspective is the social-cognitive perspective. Later research has examined Theory of Mind and its role in the SVM, suggesting it is a key mediator and important protective factor (Sampedro et al., 2020a). However, a step further from Theory of Mind is empathy. Yet to be examined in the context of creativity and psychopathology, the role of empathy will be discussed in this paper, along with applications to the real world.



2. Approach

This paper utilizes a theoretical synthesis approach, which combines and interprets theories and findings across disciplines to expand conceptual understanding and examine the role of empathy in the SVM, with the use of case studies to understand the history of the tortured artist. Using literature from various fields, the relationship between creativity and psychopathology is conceptually expanded into the social-cognitive perspective by including discussions on empathy's role.

First, with academic databases such as Google Scholar and PubMed, sources were found and selected using a combination of keywords, including “shared vulnerability model,” “creativity,” “tortured artist,” and “empathy.” The chosen sources were categorized into four categories of evidence: foundational theoretical works, meta-analyses/systematic reviews, empirical studies, and historical or cultural illustrative support. Foundational theoretical works, such as Shelly Carson's SVM research, were used to define the conceptual basis in which empathy will be evaluated. Meta-analyses and systematic reviews were used to understand broader relationships between empathy, psychopathology, and creativity, while empirical studies were examined for more specific associations. Historical, cultural, and individual studies serve to contextualize the “tortured artist” as illustrative support.

Next, the sources were evaluated for recency, relevance, and credibility. Although recency was considered in the evaluation process, multiple older works were included for historical purposes, as well as foundational works such as Carson's SVM, for conceptual and background relevance. Sources were excluded when not relevant to the tortured artist, creativity and psychopathology, the SVM, or empathy, or when they lacked sufficient empirical or theoretical evidence.

In terms of integrating empathy into the SVM, literature on empathy was then divided into three further categories. First, the relationship between empathy and mental wellbeing, psychopathology, or other functioning relevant to mental illness was examined. Second, empathy's role in creativity. Third, empathy was evaluated in relation to existing protective factors in the SVM.

How the literature fits together was also examined to identify limitations and to address research gaps. Supportive evidence was used to refine the proposed role of empathy. Any contradictory evidence was not disregarded or treated as against empathy as a protective factor, but rather as a tool to define boundaries in empathy's role in the SVM, such as with the distinction between affective and cognitive empathy.

The theoretical synthesis approach offers new insights into the relationship between creativity and psychopathology by integrating ideas from multiple domains and perspectives, rather than conducting an empirical study. This approach allows for theory building by integrating new ideas into existing models.

3. Historical Literature

Historical contextualization and case studies provide illustrative support and understanding for the “tortured artist.” It provides important context for the term “tortured artist,” establishing how the association of creativity and psychopathology developed without claiming an empirically derived understanding of the relationship.

The association of creativity with mental illness has long predated neurological attempts at explaining the relationship.



Scholars have found that the idea existed as early as ancient Greece in the writings of famous philosophers such as Plato and Aristotle. Through their work, they describe madness as something that could contribute to artistry and creativity (Whitehead, 2017). They believed that it was madness that drove individuals to think imaginatively and to be in uncontrolled states of mind, allowing for creativity. These Greek philosophers saw this type of madness as a divine gift only given to a few (Zafeirenia, 2024). As the idea progressed, many similar explanations for creative genius appeared. In the Renaissance Era, philosopher Marsilio Ficino called it *furor divinus*, meaning “divine madness” in Latin (McMahon, 2013). This idea, too, stated that creativity was a divine right that would cause mad states of imagination.

It was not until the Enlightenment Era, starting in the late 17th century, that creativity and genius were understood to be natural human talents (Mason, 1995). The Enlightenment is defined as a period of time when reason was emphasized over divine explanation. This new rising value contributed to the shift in ideas about creativity, seeing it as an innate characteristic rather than a divine intervention of madness.

However, beginning in the 19th century, as a response to the reason-oriented perspective, the Romantic Era emerged as a turning point in the modern-day concept of creativity. Unlike the Enlightenment, the Romantic Era was one of emotion and passion, leading to more artistic approaches to creativity. Researchers found that Romantic poetry, for example, explored human feelings, and it was believed that madness was emotion being pushed to its limit. Because creativity produced poetry, poetry was emotion, and the peak of emotion was madness, the artistic process became associated with madness in the minds of not only consumers but also in the minds of artists themselves (Becker, 2001; Whitehead, 2017).

Historically, before the advancements made in mental health in later centuries, like updates from the DSM-II to DSM-III in 1980, psychiatric conditions, such as obsessive-compulsive disorder (OCD) or schizophrenia, lacked formal diagnoses and definitions (Farreras, 2019). This left much room for misinterpretation when considering the caricature of the “tortured artist.” For example, an obsessive painter labelled as a tortured artist may be diagnosed with OCD by today’s standards. A sculptor staying awake for multiple nights at a time could now be identified as a symptom of a manic episode. A musician who claims to hear the music and voices in their head could be seen as schizophrenic today. Even as definitions became formalized, artists continued performing negative identity work, where they adopt self-destructive traits to fit a social norm, thereby further making mental illness a hallmark of art (Alacovska & Kärreman, 2023).

One of the most notable examples that demonstrates the modern understanding of the “tortured artist” is the story of Vincent Van Gogh. As an unsuccessful artist who, though debated to this day, as experts suspect, suffered from bipolar disorder, his story of pain and suffering is seen as the epitome of a tortured artist whose mental health problems drove his artistic ability (Stamm, 1971). Retellings of his story largely attribute his tragic journey through life to his artistic process, each stage of his life representing one of his painting eras, such as his famous *Starry Night* being painted in a mental asylum, further linking the association of creative processes to mental illness. As modern art evolved, a multitude of other examples rose that fit the tortured artist stereotype.

After World War I, a generation in the Western world known as the Lost Generation gave birth to many writers who wrote books reflecting the disillusionment of a post-war society as previous values of honor were destroyed and replaced by suffering. One of the main writers in Lost Generation literature was Ernest Hemingway, yet another example of an artist characterized by tremendous suffering (Durham, 2003). Hemingway suffered a traumatizing childhood with his father committing suicide, and he led a life of depression, alcoholism, and rash adventures until he ultimately took his own life. At



the same time, he produced many works considered masterpieces, such as *The Old Man and the Sea*.

However, after World War II and the resulting trauma, the world began to focus more on mental health, leading to a revolution in mental health awareness. Multiple mental health organizations were established during this time, as well as the NIH's National Mental Health Act in 1946 in the United States (Brand, 1965). It was in this period that new psychological research worked towards debunking the tortured artist stereotype, as its role in defining artists became toxic (Taylor, 2017).

As the topic of mental health approaches the present, how we see creativity has shifted into a healthier light, now defining it as a process of creating original works (Young, 1985). However, the link between creative individuals and mental illness continues. Modern-day musicians, such as Michael Jackson, Amy Winehouse, and Britney Spears, continue reinforcing the relationship between creativity and mental illness. Given all this history, it is clear that there are more than just genetic factors influencing the stereotype of the tortured artist.

4. The Shared Vulnerability Model

The relationship between creativity and psychopathology has been debated for decades, as a multitude of historical anecdotes have demonstrated the positive association between creativity and psychopathology. (Silvia & Kaufman, 2010). However, empirical studies on this topic have resulted in contradictory evidence. These findings have pointed to an explanation: the inverted-U model. This means that minor instances of psychopathology can be associated with creativity, but severe cases cannot. For example, while mild traits, such as cognitive disinhibition or overinclusive thinking, can promote creativity, they hinder creativity when the traits are severe, such as thought disorder or psychosis (Abraham, 2014). For example, one study found that while full schizophrenia is negatively correlated with creativity, certain symptoms of schizophrenia are positively correlated, such as psychoticism or positive schizotypy. This means that individuals with schizophrenia are less likely to be creative, but specific psychopathological traits are associated with creativity, supporting the inverted-U hypothesis (Acar et al., 2018).

Another example with bipolar disorder found that although they exhibit a small correlation, those with mild bipolar traits generally tested higher in creativity, while those with full bipolar disorder did not (Forthmann et al., 2023). These studies, and a multitude more, conclude that although not directly correlated with illness, creativity predicts traits of mental illness along the inverted-U. This finding suggests that there is a certain point on the inverted-U at which creativity and psychopathology do not associate, leading to further exploration of their relationship. Current and future research seeks to expand the knowledge on this topic beyond anecdotes and into mechanistic and empirical arenas. One of the most popular models probing the relationship between the two variables is the shared vulnerability model (SVM). While the inverted-U displays where individuals fall in the relationship, the SVM looks into why they are there.

As a precursor to the SVM, the stress-vulnerability model, originally adapted in 1977, explored the characteristics of those prone to schizophrenia. It describes that those with higher levels of these characteristics, or vulnerabilities, are more likely to respond to stress with a psychiatric episode. Essentially, it explained that vulnerabilities and stress contribute to mental illness such as schizophrenia (Goh & Agius, 2010).

The stress-vulnerability model, influencing the structure and organization of the shared vulnerability model, inspired the creation of the model that explains creativity and psychopathology. Similar to the 1977 model and combined with the



inverted-U model, the SVM model proposed by Shelly H. Carson used three specific genetic vulnerabilities, deficits in latent inhibition, novelty seeking, and neural hyperconnectivity, that are shared between creative people and those at risk for psychopathology (Carson, 2011). These vulnerabilities are referred to as genetic because the traits are heritable and polygenic. This characterization suggests that traits determining creativity or psychopathology run in families. However, external factors can influence the expression of these traits. The shared vulnerabilities include reduced latent inhibition, novelty seeking, and neural hyperconnectivity (Carson, 2011).

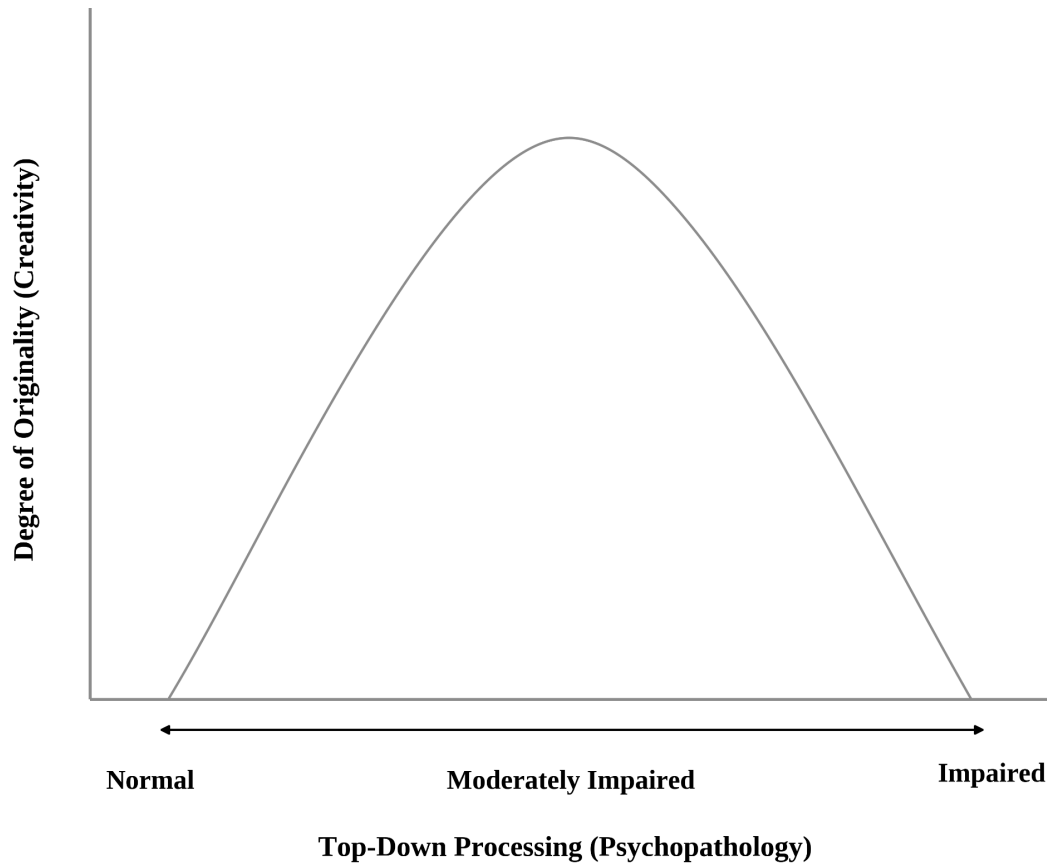


Figure 1: The inverted-U model demonstrates that minor occurrences of psychopathology can be associated with creativity, while severe cases cannot. Adapted from Abraham (2014).

Latent inhibition, as used by Carson, is defined as the capacity to screen from conscious awareness stimuli previously experienced as irrelevant (Carson, 2011). Essentially, it is the ability in classical conditioning to ignore a stimulus if it is not accompanied by a consequence. This skill is important in brain functions to filter out irrelevant stimuli. However, both creative people and those with psychopathological issues, such as schizophrenia, have been found to have a deficit in latent inhibition (Carson et al., 2003). For creativity, this means individuals can make unique connections, and those with

psychopathological issues have higher distractibility and are more likely to pay attention to irrelevant stimuli than to relevant ones. The reason the same characteristic can cause different results is because of certain protective and risk factors, such as cognitive abilities.

Carson also explains that novelty seeking is present in both creativity and psychopathology. Novelty seeking refers to the intrinsic motivation for new stimuli rather than familiar patterns. For those who are creative, novelty seeking explains the desire to create and explore, but for mental illness, it can mean recklessness and dangerous behaviors (Carson, 2011). Similar to latent inhibition, the same process can yield different results due to protective and risk factors.

Neural hyperconnectivity refers to an abnormally great amount of neural connections between different brain regions. Multiple mental dysfunctions and other neurological conditions have been found to exhibit hyperconnectivity between different brain regions, such as schizophrenia, bipolar disorder, major depressive disorder, and synesthesia (Nguyen et al., 2025). A multitude of studies have shown that hyperconnectivity between brain circuits can serve as a neural sign that can predict traits of psychopathology, such as through the default-mode network and cerebello-thalamo-cortical network (Cao et al., 2018). In creative individuals, on the other hand, hyperconnectivity influences metaphorical thinking (Carson, 2011). These hyperconnectivities occupy similar brain circuits to those in psychosis (Lakoff, 2014).

These three factors make up the shared vulnerabilities of the model, but their outcomes vary. According to the SVM, the outcome is determined by certain protective and risk factors. The protective factors are high IQ, working memory, and cognitive flexibility, while risk factors are low IQ, working memory deficits, and perseveration (Carson, 2011). Individuals who have low latent inhibition but high IQ can create associations but also not be distracted, and in one particular study, those with high IQ and low latent inhibition were found to predict 30% of variance in creativity scores (Peterson & Carson, 2000). These protective and risk factors influence the expression of the shared vulnerabilities by allowing them to be expressed in a healthy or an unhealthy way (Carson, 2011).

Table 1: Summary of Carson's Shared Vulnerability Model with all original protective, risk, and vulnerability factors. Adapted from (Carson, 2011).

Creativity - Protective Factors	Shared Vulnerability	Psychopathology - Risk Factors
High IQ Good Working Memory Cognitive Flexibility	Low Latent Inhibition Novelty Seeking Hyperconnectivity	Low IQ Working Memory Deficits Perseveration

The SVM highlights the relationship between creativity and psychopathology, their underlying similarities, and factors that pull individuals towards either side. However, its primary focus has been genetic, and many more factors could be examined, such as social-cognitive processes. These social-cognitive factors could play a crucial role in further



understanding the shared vulnerability model and the relationships between creativity and psychopathology.

5. Theory of Mind

Understanding the role of social cognition is essential to further understanding creativity and psychopathology. Social cognition studies the psychological processes of how individuals understand, process, and respond to others. Examining social cognition is important and expands on current knowledge because, like many psychological issues, it is crucial to integrate environmental or interpersonal factors in addition to genetic factors.

Theory of Mind (ToM) refers to the ability to understand that others have their own individual thoughts, beliefs, and perceptions (Frith & Frith, 2005). It forms one of the pillars of social cognition processes that work with understanding intentions. Studies find that psychopathological individuals, particularly those with schizophrenia or bipolar disorder, exhibit deficits in ToM (Burghardt et al., 2023). On the other hand, creativity and ToM are positively associated, meaning those who are more creative often have higher levels of ToM (Beloyianni et al., 2024). In creative individuals, ToM is especially important in the ability to understand perspectives and create new, original thinking. For example, an actor with functioning ToM could accurately interpret how their character perceives the world, or a novelist would be able to understand the motivations of their characters. On the other hand, deficits in ToM can impair an individual's ability to understand others' perspectives or intentions.

One particular study published in 2020 explores the role of ToM in Carson's model of shared vulnerability (Sampedro et al., 2020b). It explores how neurological and, more importantly, social-cognitive functions can determine the extent to which an individual will exhibit creativity and/or psychopathology. Researchers found that in their experimental groups, social cognition, specifically ToM, was positively correlated with creativity. In fact, the study found that social cognition had a stronger correlation and was more important than many neurological functions. The study then went further to refer to the SVM, highlighting the importance of ToM as a protective factor that can channel vulnerabilities into creativity rather than psychopathology. This addition of a social-cognitive function in this study to the SVM brings in new possibilities for risk and protective factors.

To account for limitations, the study further explains that although ToM was examined, it is not enough to determine if social cognition is, as a whole, a protective factor in the shared vulnerability model. These limitations, along with the fact that this study was the first to include ToM, open a new world of possible factors to the SVM: social cognition. Naturally, the next step from ToM is the importance of empathy, as empathy is one step further from understanding the existence of different beliefs and emotions, but is actually feeling those emotions. Empathy is also a key social-cognitive function, and learning its place in the shared vulnerability model would provide deeper connections and insights.

6. Empathy

The role of empathy is important as social cognition in the SVM continues to be explored. Empathy is the ability of an individual to not only understand that others may have different perceptions than they do, but also to share in the associated feelings. Unlike ToM, which is simply being able to know that others can have different thoughts, empathy is more complicated, referring to both the cognitive ability to understand those thoughts and an affective response. Modern psychology defines these two halves as cognitive empathy, which is understanding another perspective, and affective



empathy, which is emotionally responding to others (Cuff et al., 2016). Because empathy operates both intellectually and emotionally, it is in a unique position to influence personal experiences in individuals and can provide insights into creativity and mental illness. While both cognitive and affective empathy can play a role in creativity and mental well-being, their differences may cause different effects within the SVM.

6.1. Empathy and Mental Well-being

Research has shown that positive empathy plays a significant role in well-being and happiness, where higher levels of empathy predict higher levels of well-being and life satisfaction in individuals (Morelli et al., 2015). A mastery of empathy demonstrates high social functioning skills that are imperative to mental well-being. Not only can empathy enable an individual to identify emotions, but it can also enable them to interpret and react to emotions effectively (Morelli et al., 2015). In one study, it was shown that participants with higher empathy levels had higher-quality apologies, meaning their apologies contained more apology elements, such as remorse or responsibility (Schumann & Dragotta, 2021). Empathy has also been shown to reduce emotional stress and promote prosocial behavior, allowing an individual to both react emotionally in a healthy way and connect socially.

The role of empathy and its relationship with mental illness has also been explored. Specifically, in schizophrenic individuals, a study found that they exhibit a deficit of empathy both socially and neurally. Additionally, in the study, several antisocial mental health disorders also exhibit similar dysfunctions, such as psychopathy and narcissism, where individuals were shown to have the most trouble identifying negative emotions. In depressive disorders as well, dysfunctional empathy is associated with depression, as empathy is replaced with guilt rather than emotional regulation (Farrow & Woodruff, 2007). These mental illnesses suggest that a lack of empathy may contribute to their development.

Considering the positive effects of empathy and the negative effects of a lack thereof, it is suggested that empathy has a considerable impact on the mental health of an individual. Its relationship with mental well-being demonstrates empathy's ability to properly identify and regulate emotion on multiple levels. However, many of these studies identify empathy as a whole rather than working with cognitive and affective empathy separately.

In examining affective vs cognitive empathy, one study looked at differences in social functioning between different age groups, and its results suggest that older adults, who generally had decreased cognitive empathy but increased emotional empathy, had more impaired social functioning (Khanjani et al., 2015). Another study evaluated empathy and mental health in caregivers and found that higher affective empathy was associated with worse mental health, while higher cognitive empathy showed no effect (Hua et al., 2021).

Further research on affective empathy and mental health shows complex relationships. Excessive affective empathy may contribute to empathic distress, which is when an individual may become overwhelmed by the suffering or pain of others. Empathic distress has been associated with internalizing disorders, depression, anxiety, and even emotional exhaustion, or burnout. Some studies have even shown increased vulnerability to PTSD and related symptoms (Huang et al., 2025).

These studies suggest that affective empathy may have bidirectional effects on mental well-being. Cognitive empathy may be more closely related to the social functioning skills that support well-being, while affective empathy, under circumstances with poor emotional regulation, can be harmful.



6.2. Empathy and Creativity

Research has found that creativity and empathy are positively correlated, with more expressions of creativity predicting higher levels of empathy (Li et al., 2024). Empathy reflects an ability to use imagination to imagine how another feels, and the ability to do so enhances creative imagination as well. Additionally, the ability to take in and understand new perspectives allows for an open mind and increased idea generation (Tie et al., 2025). In one study, empathy classes were taught at a school and creativity was measured. After comparison with a control group, it was found that creativity increased in the school with the empathy class (Demetriou & Nicholl, 2022). Overall, research suggests a positive association between empathy and creativity.

However, studies that differentiate between cognitive and affective empathy show that they may influence creativity differently. For example, in one study, it was shown that individuals with high levels of cognitive empathy were more likely to recognize the value of creativity in disadvantaged artists, while those with high levels of affective empathy did not produce the same outcome, suggesting that emotional responses may influence creativity differently than understanding perspective (Pei et al., 2022). This demonstrates that the two processes can yield differing effects and can influence creativity differently as well. From research, it is suggested that there is a stronger association between cognitive empathy and creativity than affective empathy. The variability in affective empathy's role could be based on individual factors that require further examination.

6.3. Empathy in the Shared Vulnerability Model

To recap, Carson's SVM proposes a relationship between creativity and psychopathology through shared genetic and neural traits between the two states, such as latent inhibition, novelty seeking, and hyperconnectivity. Additionally, the model proposes that there are protective and risk factors that pull an individual towards either creativity or psychopathology. These include working memory, intelligence, and cognitive flexibility. However, Carson's SVM focused solely on genetic factors and did not account for other perspectives, such as social-cognitive functions (Carson, 2011).

Past research has considered empathy as a possible factor for further research, but it has not yet been integrated into the model. With the findings outlined in this paper, I propose empathy as a possible social-cognitive contribution to the SVM. Empathy has been associated with improved mental health conditions, and many issues of mental health can be connected to deficits in empathy. Creativity has also been positively associated with empathy.

However, in considering the distinction between cognitive and affective empathy, research suggests that cognitive empathy may play a larger role as a protective factor in the SVM than affective empathy. Cognitive empathy involves the abilities of perspective-taking and the understanding of situations, which are more closely related to the existing protective factors of the SVM, such as cognitive flexibility. On the other hand, affective empathy primarily involves emotional responses and may influence both mental wellbeing and creativity through different pathways. Affective empathy, like cognitive empathy, is shown to contribute to wellbeing and creativity, but its results are less consistent. Because of the complexities involved in affective empathy, empathy as a whole may be better understood as conditional rather than uniformly protective, with cognitive empathy representing the primary component driving protective effects and affective empathy as a conditional, bidirectional factor. Further research would be required to pinpoint the conditions under which affective empathy acts as a protective factor.



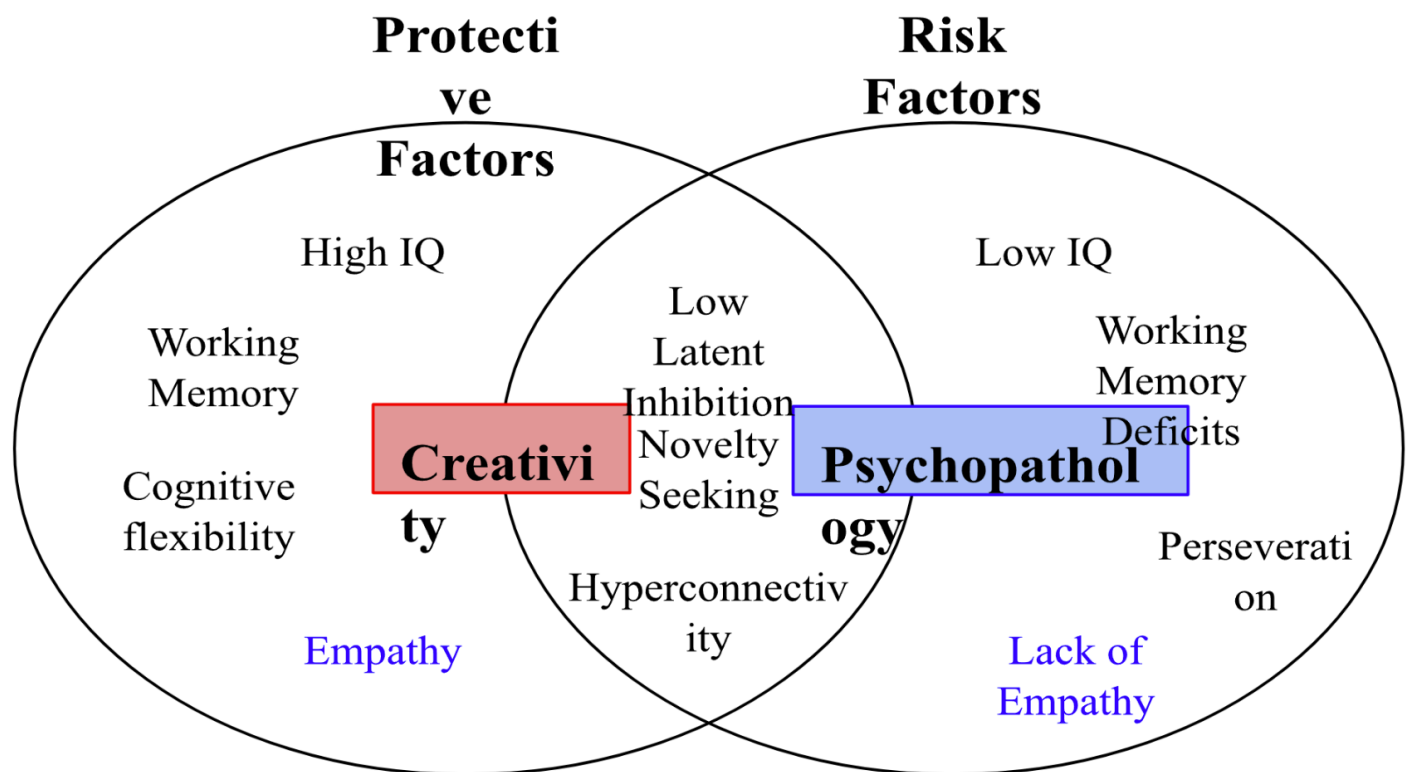


Figure 2: This is the SVM with the newly integrated empathy factor. Cognitive empathy acts as a proposed protective factor, and affective empathy as a bidirectional/conditional factor. Adapted from Carson (2011).

Furthermore, within the SVM, empathy is also closely related to the other protective factors. Empathy and working memory are closely associated (Gaesser, 2013). Similarly, empathy and social intelligence correlate positively, as do social intelligence and IQ (Kaukiainen et al., 1999). Empathy is positively associated with cognitive flexibility as well (Grattan et al., 1994). These associations provide further conceptual support for integrating empathy into the SVM.

The addition of empathy differs from the other protective factors because it extends the discussion beyond genetic factors and brings in the possibility of more personal influences, such as social cognition. While genetic factors provide insight on a more bio-deterministic level of understanding, social cognition applies factors of human interaction, such as social meaning and emotional salience. Studying the role of empathy may expand the possibilities and introduce more social-cognitive factors.

7. Applications

Carson provided many applications for the SVM, noting the model suggests that chances of psychopathology can be reduced either through treating vulnerability factors, enhancing protective factors, or enhancing overall creativity (Carson, 2011). Carson notes that because directly trying to rid individuals of vulnerabilities for treatment could impact an



individual's creativity, she suggests regulation rather than a removal of those shared vulnerabilities. This means individuals would most likely prefer treatment related to bolstering creativity. For example, she suggested implementing creative therapies, such as art, music, writing, and theater, to enhance creativity (Carson, 2011). Creative art therapy is often incorporated into mental health treatments. These therapies engage emotions, cognition, and communication using creative expression, especially when it can be difficult to express oneself (Shafir et al., 2020).

However, because Carson's SVM was based on genetic factors, it would be difficult to provide treatment by enhancing protective factors. If cognitive empathy is considered a protective factor, then the skill can be learned and improved; enhancing it could also be a possible treatment method. Many empathy-based therapies, such as mentalization-based therapy or psychoanalytic therapy, could be effective in enhancing cognitive empathy (Garrote-Caparrós et al., 2023). Additionally, empathy can be applied to educational environments to improve creativity. By fostering skills in emotional regulation and perspective-taking, the likelihood of shared vulnerabilities leading to psychopathology could decrease while also supporting creative growth (Demetriou & Nicholl, 2022).

One example of empathy's potential role in the SVM is contemporary artist Yayoi Kusama, who, in her autobiography *Infinity Net*, openly discusses her struggles with mental illness (Kusama, 2021). Kusama is not only famous for her unique art style in her sculptures and installations, but her story is also inspiring and uplifting. In her book, she describes her experience with hallucinations, OCD, and depersonalization disorder, and how she channels these experiences into her art as a way to cope. In 1977, she admitted herself to Seiwa Hospital for the Mentally Ill in Tokyo, and since then she has continued producing art, often traveling back and forth from the hospital and her studio. By turning her internal, psychological state into physical forms with art, she invites others to understand her world and see her perspective, reflecting key processes of empathy. Her story illustrates how psychopathology can be expressed through creativity and the potential role empathetic processes play in the art-making process.

8. Limitations and Future Direction

There are many limitations to the proposed role of empathy in the SVM. One limitation is that this paper utilizes a theoretical synthesis rather than an empirical study. The literature used in the theoretical synthesis often provides correlational evidence, so empathy's effects on mental well-being and creativity have not been directly tested. Further research should test the role of empathy empirically in the SVM to confirm validity, using empathy tests such as the Empathy Quotient (EQ) test or the Questionnaire of Cognitive and Affective Empathy (QCAE). It is also important to consider information about differing populations, such as gender, culture, or ethnicity. Furthermore, other social-cognitive functions can be tested, such as neurological perspectives, emotional functions, and developmental factors. In the SVM, it is also important to consider the spectrum between creativity and psychopathology, and future research could examine this continuum.

Additionally, the paper focuses on empathy as playing a larger role in the SVM. However, empathy as a whole may not function uniformly as either protective or risk, as cognitive empathy tends to lean protective while affective empathy is bidirectional. Furthermore, expanding on the role of affective empathy, some researchers argue that an excessive amount of affective empathy may lead to more harmful effects on mental wellbeing than beneficial, and that empathy itself, although crucial to social function, may not really be protective of one's mental state nor creativity (Huang et al., 2025). Other factors such as emotional regulation, exposure to others' pain, or environmental differences may refine affective



empathy's contribution to the SVM, but it would require additional research to properly define the boundaries.

Several pieces of literature counter the existence of the “tortured artist” concept. (Dietrich, 2014) suggest that studies on the tortured artist often ignore baseline rates of creative individuals having psychopathological behavior, and they argue that because so many individuals worldwide experience mental illness, it is very likely that a high proportion of them will be creative. This suggests levels of confirmation bias and illusory correlations, and that the evidence is not strong enough to explain that there is a relationship at all. Although modern research has examined these concerns with empirical studies and has proposed complex explanations, such as the inverted-U or SVM, the larger critique remains regarding the strength of the relationship between creativity and psychopathology. If the association stems from confirmation bias or illusory correlations, current models may overstate the mechanisms of the SVM or other models. Dietrich's critiques of research on the tortured artist phenomenon can contribute to a larger, more nuanced discussion of the relationship between creativity and psychopathology and would require further research to investigate.

9. Conclusion

The relationship between creativity and psychopathology has long been in discussion and romanticized throughout history. Modern research, however, has begun to examine this relationship further, such as through the shared vulnerability model, which provides a framework for understanding shared genetic traits between creativity and psychopathology, mediated by protective and risk factors. Because Carson's SVM was focused on genetic factors, it did not account for other potential parts of the puzzle.

This paper extends the discussion on the relationship between creativity and psychopathology. The evidence reviewed suggests that empathy may not be a uniformly protective or risk factor in the SVM, but rather a potentially conditional one, with cognitive empathy as a proposed protective factor and affective empathy as bidirectional. With the integration of empathy into the SVM, the framework for understanding the “tortured artist” can be expanded into social cognition. If examined empirically, cognitive and affective empathy could be an important factor in the relationship between creativity and mental illness. It could also provide new approaches to therapy and education. By examining empathy, the tortured artist can become less of a mythologized or romanticized concept, away from the misconception that mental illness produces creativity.

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Author Biography

Jinny Zhao is a high school student in Kennet Square, Pennsylvania. In her studies, she is greatly interested in mental health, psychology, and the social sciences. In her free time, she loves spending time with art. She plays multiple instruments, such as piano, violin, and guitar. She also loves singing and drawing. Her interests in psychology and art often converge, and she has spent much of her time examining the relationship between creativity and mental illness. She often explores this as a volunteer at her local hospital's creative arts therapy sector, performing piano in the Atrium. She has also written an illustrated self-help book for teenagers and manages a mental health Instagram page. In the future, she hopes to pursue psychology in college and become a psychiatrist.

Mentor Contribution Statement

In the development of my paper, **Dr. Avila**, my mentor, and I met online about every two weeks. In these meetings, I shared my ideas, my progress, and asked questions about my research. My mentor would often review my work, raise any concerns or suggestions, and answer my questions. I independently conducted the literature review and theoretical synthesis, with my mentor occasionally guiding my approach to be as accurate as possible. I developed the argument, wrote the manuscript, and finished revisions on my own, with my mentor fulfilling an advisory role by providing feedback and guidance.

