



REVIEW ARTICLE

Self-Esteem as the Mediating Factor between Parenting Styles and Creativity

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Abstract

Creativity is increasingly valued as a skill for the future workplaces. Educators and employers are paying more and more attention to creativity training, the effectiveness of which relies on an understanding of creativity influencing factors. Yet, the seed for creativity might be sown early in life and nurtured through years in family and school. Links between parenting styles and creativity have been reported in literature. However, parenting styles only explain for a small variation in creativity, suggesting the roles of other factors. This paper goes further by exploring the links between parenting styles, self-esteem, and creativity. It is proposed that parenting styles' influence on creativity may be mediated by the child's self-esteem. The proposed model has implications for parents, educators, and employers in fostering creativity in their children, students, and employees. It also suggests that lack of creativity might be a deep-rooted issue that needs a long-term and consistent effort to improve, and that it is beyond equipping individuals with creative problem-solving techniques.

Keywords

Creativity, Self-esteem, Parenting styles, Creativity training

among the American population of all ages from 1990 to 2008. Specifically, Kim argued that the decline in creativity among school age children could be due to the increased emphasis on standardized tests, which encouraged memorization rather than creativity. Furthermore, schools have traditionally encouraged and prioritized conformity rather than creativity. From teachers' perspective, giving students the space to be unique in a classroom of 20-40 students could be overwhelming. Teachers are also under high pressure from educational authorities and parents to help students perform well in exams. Therefore, they often rely on well-tried methods rather than unconventional methods which may develop students' creativity. A recent qualitative study among high school teachers in Poland found that teachers supported and understood the importance of developing students' creativity [4]. However, their first priority was to fulfill the school curriculum. They also believed that creativity was more relevant for humanity or arts lessons rather than science lessons.

Introduction

As the world is stepping into the Fourth Industrial Revolution, there is an increasing concern about equipping students with the right skill sets for future workplaces. According to the World Economic Forum, by 2020, many technical skills will become obsolete while problem solving, critical thinking, and creativity will be the top most important skills [1]. Specifically, creativity will move from the 10th top skill in 2015 to the 2nd position in 2020 [2]. It is, therefore, quite worrying that [3] found a steady and persistent decrease in creativity

Kim [3] also found that the decrease in creativity over the years was largest among young children from kindergartners to third graders. This suggests that the decline began in young children and it started from home rather than in schools, or both environments might have contributed to the outcome. Therefore, creativity should be encouraged and facilitated from pre-school years. Research has also found that parents have a large influence on children's development. Among 6 and 7-year-old children, mother-child interaction had more effect on the children's creativity than peers' acceptance, perceived academic competence, and per-



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ceived physical competence [5]. Therefore, while it takes time for school and teachers to change, parents could play a more active role in helping their children develop creativity.

The Relationships among Parenting Styles, Self-Esteem, and Creativity

Creativity

Creativity is defined as “the capacity to produce ideas that are both original and adaptive” [6]. There are concepts of little c and Big C creativity, where little c refers to general creative problem solving in everyday situations, while Big C refers to eminent creators in specific domains [7]. This paper uses the little c concept.

Several frameworks about creativity have presented the role of environmental and intraindividual factors in the development of creativity. Bettencourt [8] reviewed Carl Rogers’ theory which proposed that the foundation for the emergence of creativity is psychological safety in the external environment, where an individual is accepted for his unconditional worth and not subjected to external judgement. This environment must be established first before an individual can experience psychological freedom. When an individual has psychological freedom, he can develop three internal psychological conditions necessary for creativity, namely authenticity, openness, and spontaneity.

Rhodes [9], in his attempt to clearly define creativity, pointed out the 4 Ps of creativity: Creative person, creative process, creative product, and creative press or creative environment (Figure 1). Those variables inter-

act in the emergence of creativity. The *person* variable discusses internal psychological make-up of creative individuals such as personality, intelligence, self-concept, value systems, and behavior. The *process* factor covers perception, thinking, learning, and communication during the problem-solving process. The *product* variable refers to the characteristic of the created product. The *press* factor looks at the relationship between an individual and his environment. An individual is ‘pressed upon’ by external forces that facilitate or inhibit his creativity. So, a creative person engages in creative processes to create a creative product in a creative press.

Similarly, Amabile [10] proposed the Componential Model of Creativity, which also suggests that creativity is the product of interactions between intraindividual and external factors. The model has evolved since then and its latest version is presented in Figure 2.

The components of the model are:

- Domain-relevant skills, which include knowledge and skills in a specific domain

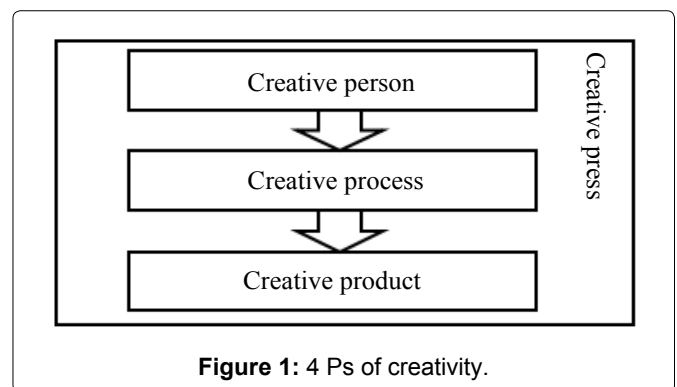


Figure 1: 4 Ps of creativity.

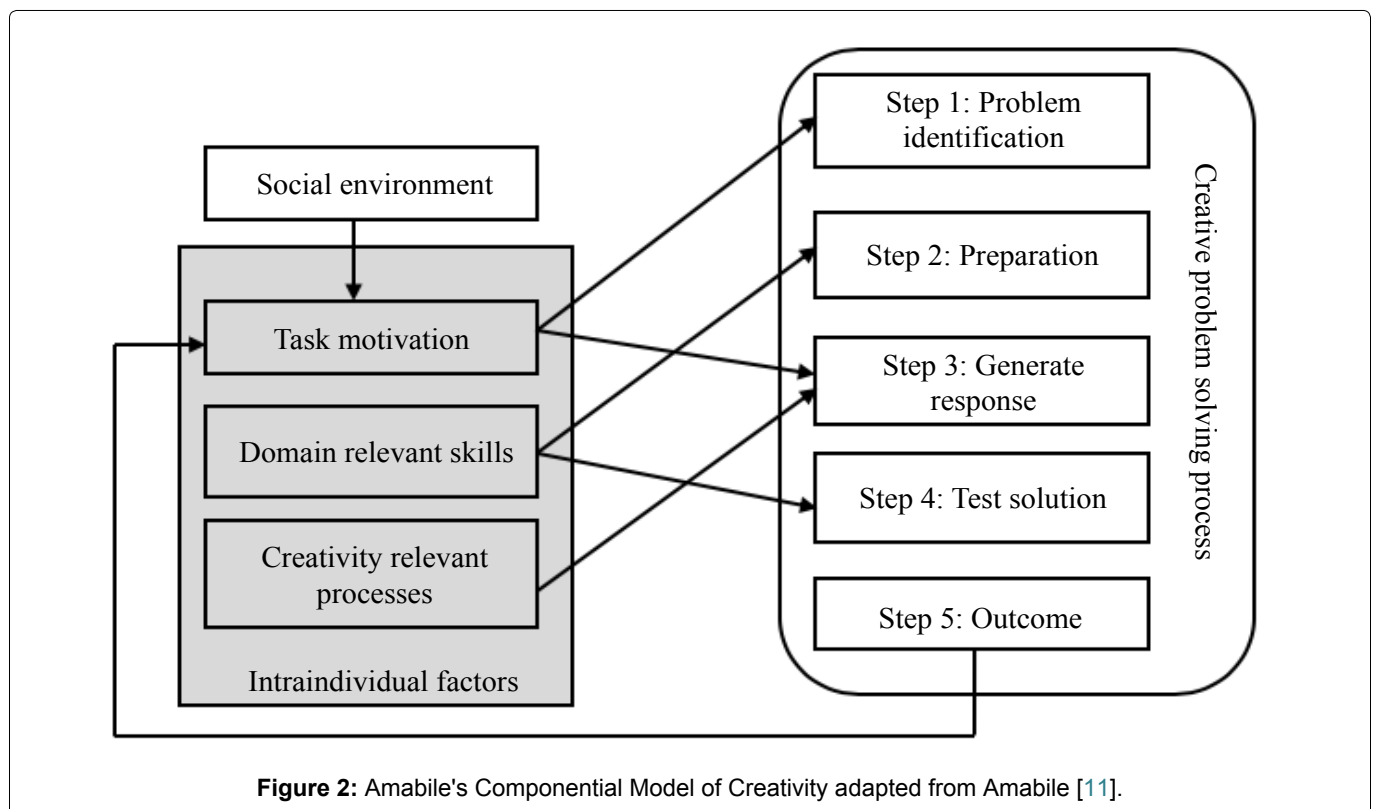


Figure 2: Amabile's Componential Model of Creativity adapted from Amabile [11].

- Creativity-relevant processes, which refer to cognitive and personality variables such as idea generation skills, openness to experience, and tolerance of ambiguity
- Task motivation, which covers the motivation in solving the problem. Amabile proposed that people are most creative when they are intrinsically motivated.
- Social environment, which includes extrinsic motivators and other external factors that facilitate or thwart creativity. Factors that can stimulate creativity include positive challenge, autonomy, encouragement of new ideas, and recognition for creative work.

The intraindividual factors in Amabile's model are similar to *creative person*, and external environment factor is similar to *creative press* mentioned in the 4 Ps of creativity model. However, Amabile's model provides a more detailed view of the direct connections between intraindividual factors and creative problem-solving steps and it considers domain-specific creativity rather than general creativity in daily life situations [11]. The external environmental factor influences task motivation, and thus has an indirect influence on the creative problem-solving process. Amabile argued that creativity is highest when an individual with relevant domain knowledge and skills for creative processes is intrinsically motivated to solve a problem and he works in a creativity supportive environment.

For a child, parents possibly play a big role in shaping his external environment. According to Bronfenbrenner's Bio-Ecological Theory, an individual's development is influenced by interactions between him and his direct and indirect contexts. Parents/primary caregivers are part of a child's microsystem which involves entities with the most immediate and direct impact on the child's development [12]. Previous studies have found significant relationship between parenting styles and creativity in children [13-15]. Therefore, parenting style could be part of the *press* factor of creativity. Additionally, significant positive relationship between self-esteem and creativity has consistently been reported in the literature [16-18]. The findings suggest that self-esteem could be a *person* factor of creativity. Furthermore, parenting has been found to have significant impacts on children's self-esteem [19-22] and the effects are enduring and significant even at young adulthood [22]. These relationships are reviewed in more detail below.

Parenting Styles

Parenting styles concept: Parenting styles have been studied and classified by many researchers. One of the most commonly used frameworks is Baumrind's Parenting Styles Model (Figure 3), which classifies parenting styles based on the level of responsiveness and de-

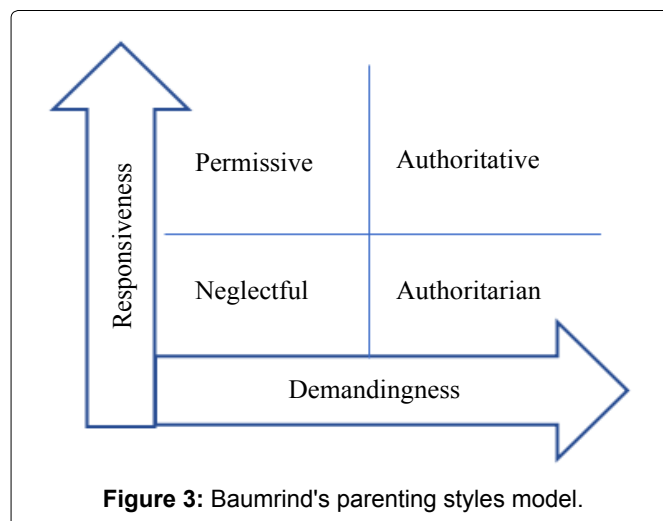


Figure 3: Baumrind's parenting styles model.

mandingness [23]. The original model shows three types of parenting: Authoritarian, permissive, and authoritative. Later, Maccoby and Martin (as cited in Martinez & Garcia) [24] added a fourth style, neglectful.

- Authoritarian parents are high on demandingness and low on responsiveness. They expect their children to be obedient without questioning the parents' authority. They use coercive methods to control their children's behavior.
- Permissive parents are the opposite of authoritarian parents. They are high on responsiveness but low on demandingness. They tend to satisfy their children's needs and wants but place no or very little restrictions on the children's behavior.
- Authoritative parents are high on both responsiveness and demandingness. They set clear expectations for their children, but they rely on reasoning and negotiation with their children in enforcing those rules. They acknowledge the children's rights, interests, and uniqueness rather than expecting unquestioned obedience from their children.
- Neglectful parents are low in both demandingness and responsiveness. They are indifferent, and unengaged in the children's upbringing.

Parenting styles and creativity: Previous studies have found links between different parenting styles and creativity. For example, a study among 400, 12 to 14-year-old students in Iran found that creativity was positively related to authoritative parenting style but negatively correlated with authoritarian parenting style [15]. However, parenting styles explained for only around 2% of variation in creativity in this study. The study found no significant relationship between permissive parenting and creativity. Similarly, a different study done earlier in Jamaica found significant negative relationship between authoritarian parenting style and creativity among 66 primary school students and their parents [13]. Authoritarian parenting style explained for 10.7% of variance

in creativity. Again, no significant relationship between permissive parenting style and creativity was found. However, inconsistent with Mehrinejad, et al. [15], this study found no significant relationship between authoritative parenting style and creativity. Both studies used students' self-rating of their creativity and a parent's self-rating of parenting styles. Since only one parent was included, those studies may not reflect the true home environment. Additionally, the parent's self-rating might be subjective and different from the students' perception of their parents.

In another study, 421 13-year-old South Korea students classified their parents' parenting styles on two dimensions Accepting-Rejecting and Lenient-Demanding [14], which are, respectively, similar to responsiveness and demandingness subscales in Baumrind's model. Mother's and father's parenting styles were asked separately. The parents' total score on each dimension was then calculated. The students' creative personality was rated by their teachers on a checklist of traits such as confidence, curiosity, originality, risk taking, etc. The study found that parents' high level of accepting was positively associated with children's creative personality, and it explained for around 35% of children's creativity personality. However, the demandingness aspect did not have significant relationship with children's creative personality. Thus, it suggests that permissive and authoritative parents, who are high in responsiveness, would facilitate their children's creativity. On the other hand, children of parents who are low in responsiveness (neglectful and authoritarian) would have lower creativity. Additionally, the higher R^2 in this study compared to two studies above suggests that perceived parenting styles could explain creativity better than self-reported parenting styles. Another reason could be that both maternal and paternal parenting styles were included in this study.

Miller, Lambert, and Neumeister [25] also studied perceived parenting styles and creativity but with an older group and found that, among 323 high ability college students in the US, there was a negative relationship between creativity and authoritarian parenting style. This is consistent with many studies above. Additionally, they found a positive relationship between creativity and permissive parenting style, but no significant relationship between authoritative parenting style and creativity. The relationships found by the study were significant but weak. Parenting styles only explained for about 2% of the variance in creativity [25]. It is possible that at this developmental stage, young adults may have grown out of the influence of the parenting styles and their creativity may be facilitated or thwarted by many other factors and life experiences outside of the home.

In a rare study that included neglectful parenting style, Fan and Zhang [26] found that among 341 adolescents of 16 to 21-years-old in China, perceived parent-

ing styles influenced the degree the students engaged in creativity generating thinking style. Students who rated their parents as neglectful engaged much less in this type of thinking compared to students with other three parenting styles. Additionally, both permissive and authoritative parenting styles were found to promote this thinking style. However, parenting styles only explained 3% to 6% of variance in thinking styles, suggesting that there are other factors that influence an individual's engagement in creative thinking styles rather than parental factors [26].

Thus, those studies found a consistent negative relationship between authoritarian parenting style and creativity in both children and young adults. However, the relationships between permissive parenting - creativity and authoritative parenting - creativity were either positive or not significant. When the relationships were significant, they were quite weak, suggesting that other factors could play a role. Therefore, it is important to explore further if any factor mediates the relationship between parenting style and creativity, so that intervention could be designed more effectively. Furthermore, there were limited findings that neglectful parenting style was negatively correlated with creativity. In modern society, it is quite common that children grow up with a single parent or with both parents working. As a result they may not receive enough attention and care from their parents. Therefore, this parenting style is worth studied further.

Parenting Styles, Self-Esteem, and Creativity

Self-esteem concept

The above findings also indicate that even though authoritative and permissive parents could facilitate creativity development in children more than authoritarian and neglectful parents, they might not be the sufficient conditions for creativity to bloom. David Kelley, the founder of the design firm IDEO and an author on innovation, once said that many people have the fear that they are not creative, but actually they only lack creative confidence to unlock their creative potential [27]. What Kelley referred to seems to be very close to self-esteem. Self-esteem is defined as a person's valuation of himself or herself [28]. Morris Rosenberg proposed that self-esteem relies on two factors: (1) Reflected appraisals and (2) Social comparisons [29]. Reflected appraisal means we take on other's perceptions of us and internalize those views as our sense of self. Studies cited in Bhatti, et al. [30] found strong links between self-esteem and perceived appraisal and between self-esteem and appraisals from significant others. As parents are significant social agents to their children in early years, perceived appraisals from parents may be internalized by children and become their reflected appraisals. The second factor, social comparison, means we make positive or negative self-evaluation based on comparing ourselves with others. Children and adolescents tend

to compare themselves with those in their immediate interpersonal environments, which could include parents, siblings, and peers. Therefore, to have high self-esteem, or *“in order to love one-self, one has to first be loved, approved of, and nurtured by parent figures. Lacking this parenting, [individuals] cannot develop high self-esteem”* [30]. In turn, a high self-esteem may be the psychological conditions for creativity to emerge. Yau [31] found many common personality characteristics between individuals who are creative and those with high self-esteem. They were both found to be open to experience, self-confident, have low inhibition, have internal locus of evaluation, and high self-acceptance. As Kelley put it, without high self-esteem, a person might not have the confidence to be creative.

Parenting styles and self-esteem

Several studies have found the links between parenting and children’s self-esteem. Self-esteem developed during childhood becomes the foundation for adults’ self-esteem [32]. A longitudinal study that followed children from birth to 27-years-old found that the quality of home environment which included parenting style, cognitive stimulation, and physical environment in early childhood significantly predicted an individual’s self-esteem later in life [22]. The effects were enduring until young adulthood even though they became smaller with age.

Cross-sectional studies have found mixed results about the relationship between self-esteem and parenting styles [20,21]. A study of 150 primary school children and their parents in Iran [20], and another study among 112 16-18 years old Romanian teenagers and their parents [21] have found significant positive relationships between authoritative parenting style and self-esteem. Additionally, both studies did not find significant relationship between authoritarian parenting style and self-esteem. Both studies used parents’ self-reported parenting style and participants’ self-reported self-esteem. Parenting styles explained for about 22% to 33% of the variance in self-esteem in Mogonea and Mogonea [21] and about 13% in Moghaddam, et al. [20]. However, Mogonea and Mogonea (2014) [21] found a negative

relationship between permissive parenting style and teenagers’ self-esteem and while in Moghaddam, et al. [20], this was not significant.

Using a different approach, Milevsky, et al. [33] compared self-esteem of participants in different parenting styles group. In a study among 272 students aged 14 to 17 in the US, participants answered questionnaires about maternal and paternal parenting styles and self-esteem. This study classified parents into four groups according to Baumrind’s model and tested whether self-esteem of students in these groups were significantly different. Additionally, mother’s and father’s parenting styles were studied separately. The study found significant main effect of both maternal and paternal parenting styles on self-esteem. Students who had authoritative mother had significantly higher self-esteem than other groups, followed by permissive, authoritarian, and neglectful groups. Students who had authoritative father had significantly higher self-esteem than authoritarian and neglectful groups, but not significantly different from permissive father. Thus, this study shows that self-esteem is highest among students with authoritative parents and lowest among students with neglectful parents. It also shows that permissive parenting styles facilitate self-esteem more than authoritarian and neglectful parenting styles. The findings were consistent with another study among 1,239 11 to 15-year-old Brazilian adolescents which found that children of parents high in responsiveness (permissive and authoritarian) had higher self-esteem than children of parents low in responsiveness (authoritarian and neglectful). However, this study found that permissive parenting style was more conducive to self-esteem than authoritative parenting style [24]. The following table summarizes the findings regarding relationships between parenting styles-creativity and parenting styles-self-esteem (Table 1).

Self-esteem and creativity

The findings regarding relationships between parenting styles -creativity, and parenting styles - self-esteem have been mixed. The relationship between creativity and self-esteem has been found to be consistently posi-

Table 1: Summarized findings regarding relationships among parenting styles, self-esteem, and creativity.

| | Creativity | | | | | Self-esteem | | | | |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | + ^a | x ^b | + ^c | x ^d | 1 ^e | + ^f | + ^g | 1 ^h | 1 ⁱ | 2 ^j |
| Authoritative | + ^a | x ^b | + ^c | x ^d | 1 ^e | + ^f | + ^g | 1 ^h | 1 ⁱ | 2 ^j |
| Permissive | x ^a | x ^b | + ^c | + ^d | 1 ^e | - ^f | x ^g | 2 ^h | 1 ⁱ | 1 ^j |
| Authoritarian | - ^a | - ^b | - ^c | - ^d | 3 ^e | x ^f | x ^g | 3 ^h | 3 ⁱ | 3 ^j |
| Neglectful | | | - ^c | | 4 ^e | | | 4 ^h | 4 ⁱ | 4 ^j |

Notes: + = Positive relationship; – = Negative relationship; x = No significant relationship; 1, 2, 3, 4 = Ranking of the level of creativity or self-esteem from highest to lowest respectively.

^a[15]; ^b[13]; ^c[14] This study did not classify parents into four groups but instead found significant positive correlation between parental acceptance and creativity. ^e[25]; ^f[26] This study found children of authoritative and permissive parents engaged in more creative thinking than authoritarian and neglectful groups. ^f[20]; ^g[21]; ^{h,i,j} Studies compared and ranked self-esteem among different parenting groups. ^h[19] children’s self-esteem was compared and ranked among four maternal parenting style groups. ⁱ[33], paternal parenting style; ^j[24].

tive in several studies of different age groups. For example, Goldsmith and Matherly [17] found that among 118 college students, self-reported creativity and self-reported self-esteem were positively correlated, and the relationship seemed to be stronger among females than males. Another study of 281 staff at a university in Iran, Charati, et al. [16] also found a significant relationship between self-esteem, as measured by Eysenck self-esteem scale, and creativity, as measured by Torrance Test of Creativity. The beta coefficients for the relationships ranged from 0.63 to 0.98. The positive relationship has been found among young children too. In a study of 64 four- and five-year old children in the US, self-esteem was found to be correlated positively with creativity [18]. In this study, the children's creative potential was rated by teachers, while their self-esteem was measured by mother's, teacher's, and the children's responses. Thus, the positive relationship between creativity and self-esteem has been consistently found across different age groups.

Proposed Conceptual Model

The reviewed empirical studies suggest that parenting styles may have both direct and indirect effect through self-esteem on children's creativity. Based on theoretical frameworks and existing literature, this paper proposes a conceptual model that captures how the interaction between the *press* component of parenting style and the *person* component of self-esteem can influence creativity (Figure 4).

Parenting styles may play a significant role in the children's development, including the development of creative potential. Authoritative parents provide an environment where children feel safe and secure to explore. The children are encouraged to be independent and autonomous. Their needs and opinions are heard and they are allowed to engage in negotiation with parents. Parents also set reasonable expectations for their children and are involved in the children's performance. Therefore, according to Amabile's Componential Model of Creativity [11], this parenting style creates a home environment that is conducive to creativity by posing reasonable challenge, providing support, allowing autonomy, encouraging of new ideas, and recognizing the children's achievements.

On the other hand, permissive parents may respond well to the children's needs but do not set much expectations for the children and often let them make their own decisions. The lack of parental expectation

and involvement in the children's behaviours could result in their feeling lack of challenges and motivation [23]. According to Amabile's Componential Model of Creativity, task motivation is an essential component of creativity [11]. Therefore this parenting style could foster creativity but is not the optimal home environment. The relationship between permissive parenting style and creativity would not be as strong as between authoritative parenting and creativity, and could be hard to predict.

Authoritarian parents are controlling and strict with the children. They do not accept that their children have their own perspective and autonomy. The children are not encouraged to make their own exploration and decisions. Those children may grow up with high inhibition and become averse of risk [23]. This parenting style could be an obstacle to the children's development of creativity.

Neglectful parents are not responsive to the children's needs nor control the children's behaviour. The children may grow up with low sense of self-worth and experience anxiety or stress due to lack of family support. They tend to display cognitive deficits and have external locus of control. They may also lack social skills, emotional skills, and have difficulties forming close personal relationship [23]. These consequences are all counterproductive to the development of creativity.

Therefore, parenting styles could have direct impacts on creativity. However, as the children grow up, they may expose more to environment outside of the home. According to Erickson's Psychosocial Theory of Human Development, during the child's first six years, parents or primary caregivers are the significant social agents helping the child achieve important developmental tasks such as developing a sense of trust, a sense of autonomy, as well as capacities to initiate and explore. If these tasks are not achieved, they will result in less optimal development of the child and hinder his progress to the next developmental stage. As the child grows, he will expose to more social agents outside of the home such as peers, teachers, community, which will help him achieve other developmental tasks [34]. Therefore, the effect of parenting styles, which gives the children developmental foundation, could fade out. Several studies have found significant relationship between parenting styles and creativity but the relationships were quite weak, suggesting the roles of other factors. Self-esteem, which has been found to have a strong consistent relationship

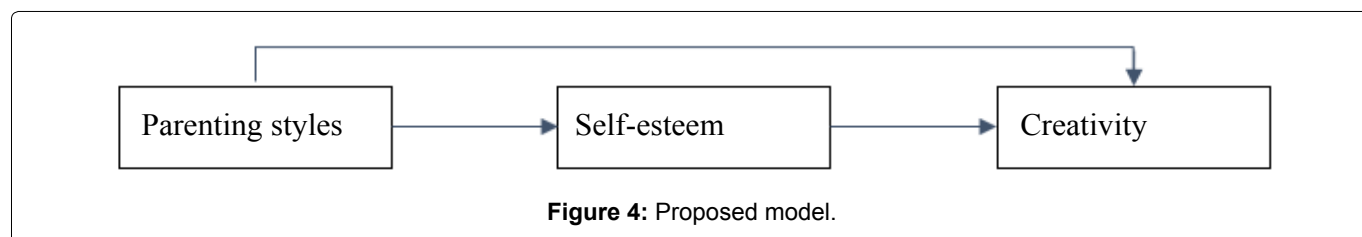


Figure 4: Proposed model.

with creativity, is a potential mediating factor. As Morris Rosenberg proposed, self-esteem relies on social comparisons and reflected appraisals [29]. It also means that self-esteem is based on perception of self rather than reality. So, it is natural that children who receive support, encouragement, and are provided opportunities to experience small successes from young ages would perceive themselves favorably and develop strong self-esteem. This speaks to authoritative parenting style. On the other hand, the lack of support and encouragement from parents, as in neglectful or authoritarian families, could result in the children's low perception of self, or low self-esteem.

Self-esteem in turns facilitates or inhibits the emergence of creativity. High self-esteem is associated with internal locus of evaluation [31], so individuals with high self-esteem are less concerned about opinions of others. They are more likely to engage in creative problem-solving and pursuing new ideas when facing uncertainty. On the other hand, individuals with low self-esteem may avoid taking risk, pursuing new ideas, and being different because of external locus of control and lack of motivation and confidence in their capability [35]. As such, the effect of parenting styles on creativity could be mediated by children's self-esteem. The direct and indirect effects via self-esteem of parenting styles on creativity would be consistent with theoretical framework and previous findings about long term effects of parents on their children's development.

Implications and Future Research

The interaction effect of parenting style and self-esteem on creativity has not been studied well, even though there are indications in literature. For example, a recent study of 151 children aged 6 to 12 in Spain found that maternal sensitivity had a direct positive relationship with children's self-esteem but no direct effect on children's verbal creativity [35]. Instead there was an indirect effect of maternal sensitivity on creativity via self-esteem. Additionally, different combinations of maternal and paternal parenting styles may also have different effects on children's creativity, as found in a study by Milevsky, et al. [33]. Therefore, future research could explore these relationships to understand more fully the impacts of parenting styles on the development of children's creativity.

Additionally, this conceptual paper proposes that the impact of parenting style on children's self-esteem is not immutable. Even though the foundation for creativity and self-esteem may be laid early, they may be malleable through later life experience. If there is mediating effect of self-esteem on the relationship between parenting style and creativity, training for individuals in self-esteem could enhance the positive effect or lessen the negative effect of parenting on creativity development. This conceptual paper, thus, highlights the potential need to work on an individual's self-esteem as part

of any creativity training program. As the 4Ps of creativity model points out, providing individuals with creative problem solving techniques might not be enough. The *person* factor should also be addressed. The proposed model, therefore, could have important implications for schools and employers who want to facilitate their students' or employee's creativity. Individuals could also take initiative to improve their self-esteem and grow out of the negative impact from their relationships with parents in the past. Additionally, a direct strong effect of self-esteem on creativity, if found, could also indicate that individuals with low self-esteem may need more time and a different intervention approach to increase their creativity than people with high self-esteem.

The links between parenting style and self-esteem and creativity could mean that the issue of low creativity and low self-esteem might be deep rooted. Understanding a person's childhood history could shed light to his current creativity and self-esteem levels and help him overcome past adversaries more effectively. It may also indicate that improving on self-esteem and creativity could take time and effort and may require a certain level of self-reflection.

Finally, for current and future parents, the proposed model should be considered in adopting which parenting style to facilitate their children's development of self-esteem and creativity. Fostering authoritative parenting style may not only cultivate creativity but also other positive outcomes for the children such as high self-esteem. The conceptual model also proposes the needs to provide intervention to both parents and children.

Conclusion

The Fourth Industrial Revolution will bring about faster changes in daily life and working places, and the world will become increasingly unpredictable and complex. Therefore, it is important and urgent to cultivate creativity in our future generations. This proposed model suggests that to help children develop creativity, parents should not only encourage their children's engagement in creative activities but also support their self-esteem. Similarly, schools and educators should review their approaches in fostering creativity in schools. Providing students with arts lessons might not be sufficient to unlock the students' creative potential. Additionally, we should continuously improve ourselves to stay competitive in the labour market. Creativity training for both children and adults will be highly valuable and relevant in this age; however, more research is needed to understand the development of creativity more thoroughly. A more complete picture should include not only developmental factors that influence creativity such as parenting styles but also the pathways of influence such as through self-esteem. Armed with a more comprehensive understanding of creativity, parents, educators, and employers can design an environment that facilitates

the emergence of creativity, as well as effective interventions to help individuals recover from nonoptimal developmental history.

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