Part II The Impact of Art on Children's Health and Wellbeing

'The arts take us to another world where we can explore our thoughts and feelings free of fear of stigma or judgement. They help children and young people to express things that they sometimes cannot say in conversation, and to celebrate feelings and thoughts that previously troubled them. The creative process can also be a curative process.'



- Professor Peter Fonagy, CEO, Anna Freud Centre

Student health and wellbeing is recognized as being paramount to their learning, so much so that curriculum frameworks are embedded in health and wellbeing training for students and teachers (Belonging, Being, Becoming, 2009 & The Victorian Curriculum 2013). Art Friends are interested in the visual arts and its impact on children's health and wellbeing. How do children feel when they make art? Is making visual arts outside the school setting beneficial to children? What happens to the brain during art making? Is there neurological evidence that making art is good for children?

In a study of 20 Spanish children, aged 6 to 12 years old, participants were invited to a series of art workshops designed to teach emotion and creativity skills through art making and art appreciation activities. In five of the six sessions, children observed multiple representations of one of the following emotions - happy, sad, angry, afraid or calm. This was followed by an exploration of a new set of art materials to express the target emotion. Afterwards, they shared their artworks and participated in a discussion.

The workshops took place in a safe environment. The researchers found evidence of improved emotion and creativity skills in children. For example, the children discussed how

they were less likely to settle on their first idea when making art, which is an important creativity skill as it reflects divergent thinking. Moreover, participants reported feeling more motivated for this type of learning and one commented on how they could voice their opinion, indicating that their risk-taking ability had improved. The ability to take risks by sharing one's thoughts 'develops a perception of self-determination, which would positively affect children's intrinsic motivation and thus their well-being' (Ebert, Hoffmann, Ivcevic, Phan & Brackett 2015).

In 2017, there was a review at Paris Descartes University of case studies from England, Korea, Spain China, Taiwan and France, where expressive arts training was used to improve children's wellbeing in schools. Each country employed different art forms and methodologies. While each study showed a positive relationship between arts engagement and the enhancement of children's wellbeing, the response from children was positive but as varied as the choice of engagement. For example, the Creative Partnership workshops in England were highly successful and were deemed responsible for improvement in students' self-confidence, self-esteem, autonomy, sense of capability and sense of belonging – determinants of wellbeing. In Taiwan the creative drama workshops improve children's emotional regulation strategies and positive emotions. The analysis showed how creative initiatives in all the studies led to the enhancement and development of children's wellbeing. Interestingly, the French investigation also observed that:

- All creative initiatives offered a play pedagogy that successfully engaged children because it gives them a sense of freedom and a feeling of happiness.
- In successful programs, children were active rather than passive learners.
- Most of the programs claimed positive emotion as an outcome for children (Celume, Sovet, Lubart & Zenasni 2017).

Playfulness, enjoyment, a sense of freedom, feeling happy and being actively engaged are qualities that children responded to and favoured in their choice of learning methods. Interestingly, these qualities are also the characteristics of play.

A 2019 study at University College London on, a survey of children's leisure time engagement in the arts found that taking part in creative activities can boost a young person's self-esteem, irrespective of ability level. The report looked at many types of arts engagements and measured if parental involvement impacted on the outcome. The researchers found that children who participated in arts activities most days were more likely to have higher levels of self-esteem. However, in the areas of reading and music activities, this arts/self-esteem relationship is only present when parents engage in these activities with their children on a regular basis, whereas for painting, drawing and making of things, the relationship with self-esteem is present irrespective of parental engagement. The authors say the research findings support two theories on why art activities support selfesteem:

 Self-Identity: Arts activities (particularly when a person is creating something new) probably 'validates the uniqueness of an individual, which gives rise to a sense of accomplishment and to feelings of self-worth in their own ability and helps to enhance self-empowerment, self-esteem, and self-worth.' Social Identity: For example, the arts have been shown to support a sense of identity, particularly in a group setting. Being part of a group activity where a person contributes to "positive distinguishes" will enhance positive social identity for group members and elevates the individual's self-esteem. (Mak & Fancourt 2019)

In an Australian study looking at the impact of arts activities on the mental wellbeing and resilience of children and young people, the researcher examined arts engagement in the community, schools and home, and the types of art engagement i.e., music, drumming, dance, singing, drama, theatre, design, painting, mask making storytelling, film/media and circus. The evidence showed that structured arts activities build resilience and contribute to positive mental wellbeing of children and young people (i.e., increase confidence, self-esteem, self- expression, self-understanding, sense of achievement, identity, improved coping mechanisms to deal with stress, and life satisfaction (Zarobe & Bungay 2017).

In another Australian study looking at improving health service access of young Aboriginal parents in a Sydney urban setting, the arts-community health program provided an environment of social connectedness and empowerment. The Ngala Nanga Mai ('We Dream') program strengthened parenting skills and increased maternal and child wellbeing (i.e., in the mental, social and physical domains) (Jersky, Callaghan, Zwi, Osborne, Fitzpatrick, Haswell-Elkins & Freeman 20130) & (Jersky, Titmus, Haswell, Freeman, Osborne, Callaghan L, et al. 2016).

An examination of the Canadian 'We Light the fire' Project: building resilience and connections through creative arts programme for Indigenous youth', found that the program drew positive responses such as, art skills development, resilience and it acted as a catalyst to stimulate discussion about community issues. The workshop was a means of promoting health messages and seen as art-as-a-vehicle-for-change. The workshop provided opportunities for Indigenous youth to build their capacities, voice their thoughts and beliefs, grow in confidence, sense of identity and strengthen ties with peers and communities. All these qualities are determinants of self-esteem and hence, mental wellbeing (Fanian, Young, Mantla, Daniels & Chatwood 2015)

The evidence base of the impact of art on children and youth's health and wellbeing was from the children and youth's subjective observations, as well as the observations of parents, teachers, artists and researchers. There were positive responses from children and youth when they were asked about their participation in art: they feel more motivated to learn; they liked learning through the arts, they feel happy; they like being actively engaged; they like the freedom of choice; it validates their self-identity; it supports their social identity; it builds resilience and positive mental wellbeing; it helped them grow in confidence; it strengthened ties with peers; it provides social connectedness and empowerment; improved self-esteem, autonomy, sense of capability and sense of belonging; improved emotional regulation and position emotion. What is interesting is that the responses are all about the children's feelings i.e., mental and social wellbeing. Selfesteem, confidence, autonomy are determinants of wellbeing. Hence, the responses observed provides evidence to support the notion that art has a very positive response predominantly on children and youth's mental and social health and wellbeing.

Children and Neuroscience

For ethical reasons, neuroscience has relied on the study of adult brain and animals to unravel the mysteries of the immature human brain (Frost 2011), however, with the advent of new non-invasive technologies this situation is changing. Chance studies of children with atypical childhoods, such as the deprived Romanian orphans of the Ceausescu regime, have given us invaluable insight into the importance of a happy, nurturing childhood for life-long health and wellbeing. (Green 2020). The lack of attachment to an adult caregiver and the absence of play stunted the orphans' physical, social, cognitive and psychological growth and led to an array of life-long physical, social, cognitive and psychological problems.

Animal research looks for parallels between the immature brains of animals and children. It is not a perfect scenario, but it seems that rats and humans respond to play in a similar way. As rats do not engage in art making, we look to play for enlightenment because for children art making is part of their play repertoire. In an early landmark experiment by Maria Diamond, some rats were raised in exciting, toy-filled colonies, while another group was individually isolated and confined to a boring life. When the rats' brains were examined, those that played in a rich environment had thicker cerebral cortices and hence improved memory, as well as 6% more brain mass than the bored rats. The findings changed the direction of research which up until then hypothesized that the brain was static, rather than plastic, and it had huge implications for how we raise children (Chunovic 2017).

In another rat experiment, when given the choice rats preferred to return to a unique environment where play was experienced over an environment not associated with play (Siviy). Play was also found to be important to the development of the rat. When assessed as adults, those deprived of play were assessed to be impaired socially, emotionally and cognitively. Rats also made noises when playing or anticipating play, which scientists have interpreted as markers of positive affect (Siviy 2017).

The neural networks responsible for learning are also emotional networks. Joy is a characteristic of play as well as an emotion associated with increased dopamine levels in the brain's reward system (Dopamine is a brain chemical related to mood, feelings of reward and motivation). This reward system is linked to enhanced memory, attention, mental shifting and motivation (Lui, Solis, Jensen & Hopkins 2017).

The neuroscience evidence base on rodent study shows that when rats play their reward networks are activated. This suggests that that not only is play good for children's health and wellbeing because of its joyous nature, but it is also stimulates the release of dopamine and assists in the development of the immature brain. This is a physiological response, which, added to the psychological and social responses found in the studies above, suggest that art engagement might also have positive outcomes for children and youth in that it acts as a preventative of ill health and a promoter of determinants of wellbeing, such as, selfesteem, confidence, joy, etc.

The visual arts are a powerful, unlimited set of mediums in which to play. As children learn to manipulate art materials and develop motor skills to create a visual construct, their brain

is developing all sorts of emotional and cognitive neural networks. In short, art making is good for the brain and the health and wellbeing of children and youth.

'Art for Wellbeing' in Schools Pilot Program

Student wellbeing underpins every aspect of a student's schooling, from their ability to learn in the classroom, to their ability to build positive relationships which is an important aspect of learning. 'Art for Wellbeing' is currently being trialed in a primary school in Victoria.

The intention is to take vulnerable children out of the classroom and into a place that is calm, safe, nurturing, non-judgmental and pressure-free. Children are invited to engage in expressive art experiences and may choose to be silent or speak to the facilitator if they wish. The art experiences allow them to express themselves in non-verbal ways. It has been observed that the majority of students who undertake this program are able to recalibrate self-regulation and their mood. Students reenter the classroom relaxed, happy and able to engage with their social and classroom learning in a more positive frame of mind.

Wellbeing in the school environment can be defined as "when a student can function as a confident and creative individual with a sense of self-worth and self-awareness." Through this they are then able to manage their emotional, mental, spiritual and physical aspects of themselves.

Wellbeing does not mean that you must feel good all of the time. Emotions such as sadness, fear, anger and frustration are all normal human experiences, and actually help students to learn, grow, stay safe and build meaningful connections with others. Well-being means that these students have the capacity to cope and manage these emotions in a way that is positive for their development.

Wellbeing is also a combination of social, emotional and physical factors. It is innate curiosity about the world. It is the ability to bounce back from failure and disappointment. And for students it is the ability to adapt to the many changes and challenges that occur in a classroom within the course of a day.

Adverse experiences in social, cultural, emotional and cognitive development, and socioeconomic status can impact on a student's development and wellbeing. In addition, up to 20% of children have learning or behavioural problems that interfere with school functioning, which suggests a significant public health issue. There is evidence that persistent school problems can have a negative impact on a range of outcomes throughout the life course of a student into their adult life (Oberklaid, 2014). For these students a classroom environment can pose many challenges in their inability to adapt to these challenges. Research has shown that this can lead to student disengagement within the classroom. (Kids Matter, 2011), (Lawrence, Johnson, Hafekost, Boterhoven de Haan, Sawyer, Ainley, & Zubrick, 2015).

Engagement within the classroom can be described as the student seeing the task as meaningful, interesting, challenging and worthwhile. The student is concerned at "getting it

right" and can learn at a high level, transferring the learning to other contexts and retain the learning (Murray, Mitchell, Gale, Edwards, et. al, 2004)

Conversely, indicators of disengagement within a primary school level can be observed as not paying attention, not completing schoolwork, disruptive behavior, withdrawal, underachievement, truancy and school refusal. This can lead to low self-esteem, low intelligence, psychological problems, physical illness, poor academic performance, specific learning problems i.e., poor literacy and numeracy, intellectual disabilities, and behavioural problems (Murray et al, 2014).

What this program intends to provide is an outlet for students whose wellbeing cannot be fully addressed by the classroom teacher on a one-to-one level. Once the child is recognized as needing assistance (due to observed disengagement) within the classroom environment they are invited to participate in an art for wellbeing program. This program is open to any student (along with a friend if they wish) in the classroom who wishes to participate. This avoids any judgment that may stigmatise individual students. This program does not intend to replace psychological or other mental health services.

As numerous research studies have demonstrated the creative arts, namely in adult populations and some children youth populations where individual wellbeing has been negatively impacted, assisted in facilitating a state of mental and physical wellbeing. Therefore, it could be stated that if expressive and creative arts were to be implemented in school settings to a younger population, being their formative years, increased benefits would most likely be observed in these students' states of wellbeing. This could be the research question that is then tested at the school (i.e., testing positive effects of wellbeing in students using expressive and creative arts).

Conclusion

Regardless of ability level, "engaging in any sort of visual expression results in the reward pathways of the brain being activated, which means that you feel good, and it's perceived as a pleasurable experience", says Professor Girija Kaimal, of Drexel University and president of the American Art Therapy Association (Kaimal 2019). Christianne Strang, professor of neuroscience at the University of Alabama Birmingham and the former president of the American Art Therapy Association, supports using art for health. She says, "Creativity in and of itself is important for remaining healthy, remaining connected to yourself and connected to the world." (Strang). For optimal health and wellbeing, artistic pursuits are a rich source of engagement for adults and children alike.

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