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A Curiosity About Links Between Adventure Playgrounds, Loose Parts, Playwork Approach, a State of "Flow" and Children's Wellbeing

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Introduction

Over the past century there has been a documented rise in childhood anxiety and depression (Gray, 2013; Twenge, 2001). As an educator, the most common title for an Outside School Hours Care (OSHC) employee in Australia, in an service attached to a primary school in Brisbane, Australia, I have become more and more curious about the potential for children's play in an environment filled with loose parts to mitigate the rise in childhood anxiety and depression. This paper records some of my ponderings. I begin with an overview of the social issue itself, its historical context and the profound ramification childhood anxiety has on society. I link to the work of Peter Gray (2011, 2013) to consider "what has changed" and then postulate about what I might be able to do in my workplace, primary schools and OSHC services.

Increase in Childhood Anxiety and Depression

There has been much research work in the field of declining mental health of children. However, some of the most compelling and thorough examples of this include the work of Jean Twenge (2001,2004). Twenge and her team have meticulously analysed series of standardized assessment questionnaires issued to young people over many decades (Gray, 2011). For example, the Children's Manifest Anxiety Scale has been used since 1956 on children from the ages of 9 to 11 years of age (Twenge, 2001). This data is important as it has been collected consistently and regularly allowing for changes, such as the rise of anxiety and depression to be accurately mapped over a period of time, giving historical context to the rise of these issues. Twenge and her team have clearly established, using such data from all over the United States, a consistent increase in anxiety and depression since 1950 across varying

cultural and socio-economic groupings (Gray, 2011). The breadth of this increase in anxiety and depression is concerning and not isolated to disadvantaged populations. In fact, 85% more children and young people are shown in the data to suffer higher levels of anxiety and depression than they did in the 1950s (Gray, 2011). This increase has large ramifications on society, with it contributing to horrendous statistics, such as a quadrupling of suicide rates in children under 15 years of age (CDC,1997; Gray, 2013; Weller & Weller, 2000). Recommended treatments for depression in children and adolescents are most often reactive consisting of cognitive behaviour therapy or interpersonal therapy for mild cases and medication for more severe cases (Clark, Jansen, & Cloy, 2012). Despite these existing reactive treatments, the statistical increase of anxiety and depression in children has steadily increased.

One significant contributor to a rise in anxiety and depression is the existence of a strong external locus of control. The internal-external locus of control scale was developed by Julian Rotter in the 1950s (Gray, 2011). The premise of the scale is that those who test as having a strong internal locus of control feel in control of their situations based on their own personal abilities, skills, motivation and effort and those that test with a strong external locus of control believe that their situations are outside their control, up to chance or fate and the control of others (Westwood, 2008). The test is done using a 23-item scale to assess how an individual feels about their control of, or lack of, a situation and part of their life (Halpert & Hill, 2011). It is important to further note that those who test with a strong external locus of control are often far more prone to symptoms and diagnoses related to anxiety and depression (April, Dharani, & Peter, 2012; Gray, 2011; Westwood, 2008).Using several data pools, Twenge (2004) and her team have documented a sharp increase in the number of children and young people having a strong external locus of control in the latter half of the 20th century. This increase is not subtle. For example, in several enquiries it can be seen that children in

2002 were 80% more likely to possess a strong external locus of a control, and that primary school aged children were particularly susceptible to this development (Twenge, Zhang, & Im, 2004). Considering the links to having a strong external locus of control and the manifestation of anxiety of depression, these are grave figures for children.

The Correlation with the Decline in Play

The aforementioned increase in childhood depression and anxiety is interesting in that it doesn't correlate to significant events with potential to have serious cause and effect on children's lives, such as an introduction of mandatory formalised schooling, recessions, wars, or even an increase in divorce rates (Gray, 2013). Despite these potentially adverse occurrences, according to play historians such as Howard Chudacoff (2007), the early to mid-1900's were a golden era of children's unstructured play. Play historian Joe Frost (2009) offers insight into this and suggests that when children used to play, including children required to work or attend formal schooling, their play time was free and spontaneous, even when it was intertwined with their work. It is noted in Frost's (2009) book on play history that the development of "play deprivation" is something that developed at an increasing rate in the later 20th century. The historical research of authors such as Chudacoff (2007), Frost (2009) and Gray (2011, 2013) support, on a chronological scale, a correlated link between this apparent decrease in the time children are afforded or choose to play freely, and an increase in childhood anxiety and depression as recorded by Twenge (2000) and her colleagues.

Why has there been a decline in free play?

There have been several serious contributors to a measurable decline in children's free play and for the purpose of the proposed intervention in this report I will focus on those that most pertain to the life of a primary school aged child during their school time. Each one of these contributors plays a part in lessening children's ability to intrinsically act on personally motivated play pursuits. It is this restriction that very directly affects their locus of control as quite literally, their personal control, over the intent and content of their time has been greatly reduced.

Risk aversion in play spaces has a very negative effect on children's free play. Despite the wealth of data and research supporting the many benefits of risk in or "risky" play, in many cases educators/teachers/play facilitators often express concern and anxiety themselves at play they see as risky (Tovey, 2010). They are fearful of litigation, reprimand or being deemed irresponsible (Gill, 2007); lack trust in children's own competence and abilities (Gill, 2007); design play spaces with limited affordance for risk taking (Little, 2011); do not want children to be injured (Brussoni, Olsen, Pike, & Sleet, 2012); and in short, often restrict or prevent these play styles from occurring. The issue in risk aversion is simply that so many play styles children seek, and from an evolutionary perspective have necessarily and always sought to do, actively involve elements of risk (Sandseter & Kennair, 2011). This indication of children's personally motivated play styles and their internal locus of control driving them to pursue risky activities suggests that preventing this opportunity only aids in strengthening their external locus of control.

The affordance of space and areas for play is another change that has had ramifications on children's ability to play freely (Wyver & Little, 2018). Historically children have used broader areas of their school grounds as play spaces, often using specific areas for specific games and past times, and freely moving between these areas (Armitage, 2005). This

affordance has largely changed in primary schools with little freedom to move between areas and mix with multiple age groups. Recess “play” areas are often rotated between breaks, and children of like age must remain in the same general location under the supervision of the designated adult “on duty”, who is not there officially to support and promote the play, but rather to meet a legislated duty of care obligations (Newnham, 2000). This is not to dismiss the relevance of duty of care, rather to point out that unlike in the classroom or curriculum linked physical education, the priority of the schools play space is a mandated break, not one to support children’s physical, social and emotional development. Regarding the restrictions of movement between spaces, there has been a dramatic change in the layout and dynamic of the design of space, with it becoming more rectangular, designed and organised (Armitage, 2001). Combine this rigidity with a lack of affordance to explore the edges, the nooks and the crannies in many areas of the school grounds and it is easy to suggest a reduced number of options to explore one’s internal locus of control and accept the restrictive nature of what is available.

As if a restricted ability to play in multiple areas, with multiple children in multiple ways was not enough to ensure a reduction in possibilities to strengthen an internal locus of control, the amount of time children have to use the limited spaces available has also declined. This reduction in play time is largely attributed to increased importance being given to schooling, and other adult directed activities (Gray, 2011). According to Gray (2011), in the United States, a combination of the school day and the school year increasing at the same time as recess or “play time” decreasing correlates with other Western countries. Armitage (2001), accounts that since 1971, play time in English and Welsh schools has nearly halved and Evans (2003) states that in Australia, a substantial decrease in the length of recess time, much of which is taken up by mandatory eating time, is typical. Once again, this reduction of

time to freely explore one's own innate abilities, talents, intrinsically motivated efforts and actions is sure to negate much potential to develop a strong internal locus of control.

In my thinking it is that adults have placed the primacy of their agendas and outcomes over those of the child. The trust that many of their developmental needs will be met innately has been replaced by an idea that they require total governance, and this is reflected in both their physical and cognitive spaces. Child historians and folklorists The Opie's wrote:

> Possibly because it is more difficult to find out about, let alone understand, we largely ignore the child-to-child complex, scarcely realising that however much children may need looking after they are also people going about their own business within their own society, and are fully capable of occupying themselves under the jurisdiction of their own code (Opie & Opie 1969).

Due to this difficulty in understanding we (adults) seem to largely ignore this children's society the Opie's refer to, and its importance on children's self and, arguably, the development of their own codes of jurisdiction and thus internal locus of control. This ignorance has the potential to be costly.

In order to further reflect on my curiosity, I have been reading about flow theory developed by Martin Seligman's colleague Mihaly Csikszentmihályi. The relevance of flow to this program and its aims is the fact that being in a state of flow is the very antithesis to being anxious or bored (Csikszentmihalyi, 2008). Thus, I have pondered whether the proactive creation of a state of flow has the potential to prevent the cause, or symtoms of depression and anxiety before they manifest. Also critical is how one can achieve a flow state, this being by balancing the level of challenge, against ones current level of skill (Csikszentmihalyi, 1999). I reflected on how I had observed some of the behaviours in the children in the OSHC setting, with the affordances the setting offers and how they can very strategically set their own level of challenge depending on their various levels of skill.

Although not specific to play based interventions, there are several initiatives present in the literature involving the implementation of positive psychology and flow theory that have been applied in school settings that have improved wellbeing, and in some cases academic accomplishment (Gilman, Huebner, & Furlong, 2009); Terjesen, Jacofsky, Froh, & DeGieseppe, 2003). Although no literature appears to exist that directly links positive psychology and playwork, the two concepts coming together reflects my concern for the wellbeing of children, and there appears to be synergy between this thinking and my passion for using a playwork approach in my OSHC setting.

It is important to note that for the most part none of the contributing factors to the decline of play and the rise of anxiety and depression in children aforementioned have been brought about through malicious intent but, contrarily, in an effort to protect and shelter children from harm. It is the author's opinion that this very point affirms a need to deal empathetically with any adult who works with children in devising environments better suited for children to develop healthy and strong internal loci of control and thus an increased chance at wellbeing.

My Philosophy

My philosophy for practice aimed at creating a flow state in children, thus strengthening their capacity to develop a strong internal locus of control and thus proactively mitigate the precursors of anxiety and depression, is linked to the concepts of adventure playground and playwork theory and practice. In Australia we often refer to an "adventure playground" as a fixed metal, prefabricated playground that frequents parks and play spaces these days. However my interest in the adventure playground (AP) refers to one more typical in the United Kingdom and brought into the mainstream, or at least common knowledge, by Lady

Marjory Allen of Hurtwood (Chilton, 2018). Lady Allen, after witnessing the play in a Danish playground developed by the landscape architect Carl Theodor Sørensen in Emdrup, was convinced of the many benefits this environment offered for children, particularly in regards to psychological wellbeing in the aftermath of World War II (Wilson, 2011). The playground in Emdrup was titled in Danish a "skrammellegepladsen", which literally translates to "junk playground" due to the copious amount of loose parts available for children to play with (O'Connor & Palmer, 2003). When Marjory Allen brought the idea back to the United Kingdom they were renamed "adventure playgrounds" (Allen & Nicholson, 1975). APs were a place where children could freely pursue their interests, push boundaries and develop competencies and a strong internal locus of control under the watchful eye of trained play leaders (later named playwork practitioners) (Chilton, 2018). One of the critical things, aside from aesthetic that separates an AP from a regular playground is the presence of the playwork practitioners. Playwork is an approach to working with children that aims to support and facilitate the play process.

> At its most basic level, playwork is about removing barriers to play, and enriching the play environment…. The role of the playworker is to create flexible environments which are substantially adaptable or controllable by the children… (Brown, 2015).

The critical elements of this playwork environment are the facts that it is both flexible, thus allowing children to manipulate it, and controllable by the children, such that they control how it can be manipulated. Both elements foster a strong internal locus of control and promote flow. Often these playgrounds have loose parts which are materials that can be moved, carried, combined, redesigned, lined up, and taken apart and put back together in multiple ways. They are materials with no specific set of directions that can be used alone or combined with other materials (Nicholson, 1971). Loose parts support the establishment of

a flow state admirably as they quite literally provide affordance to children, regardless of age or capability, an opportunity to set their own respective challenge based on their current skill. Further, they can continue to raise the bar in regard to the level of challenge, thus maintaining the flow state. This is an affordance that most, if not all fixed metal playgrounds simply cannot offer (Storli & Hagen, 2010).

The Playwork Principles (PPSG, 2005) detail exactly how focussed playwork practitioners are on allowing children the affordance to pursue their own intrinsic interests, develop a strong intrinsic locus of control and allow them to maintain a flow state without unnecessary intrusion. The play cycle, developed by playwork practitioners Gordon Sturrock and Perry Else (1998) is a simple and yet deeply intriguing way of viewing, comprehending and documenting children's play. It is a way of translating the universal language of play using a cycle commencing with a state of metalude and progressing into a play cue, a play return, a play frame (hopefully the establishment of play flow), and ends in either annihilation (a natural ending to the play) or adulteration (an ending caused by adult intervention or interaction). Understanding the play cycle helps playwork practitioners better develop a common language and thus "play literacy" (King & Sturrock, 2020). This play literacy is critical for the suggested program as it arms all practitioners with a common language, and common understanding of relevant intervention styles and affordances. Understanding the play cycle is also critical in allowing children the optimum amount of time in a flow state. The play cycle recognises "play flow" as a goal (Sturrock & Else, 1998). Supporting this state of flow is crucial to a playwork practitioner in an AP, and strategic, deeply reflective efforts are considered to prevent the cessation of play flow through adulteration (unwanted/unnecessary adult intrusion) (King & Sturrock, 2020). For me, understanding the play cycle needs to be combined with understanding the play types (Hughes 2002). Reflecting on play types and the play cycle drives my curiosity to think about children of

different capacities, inclinations, and learning styles within an opportunity to find their own way of learning what they need to learn in context with their current knowledge, abilities, and predispositions. I am concerned about making sure adults understand these play types are important in the maintenance of play flow, and not adulterating the ones that challenge us from an adult perspective (i.e. deep play and rough and tumble play). This understanding helps prevent adulteration and thus fosters the development of a strong internal locus of control as children are put into a position of developing agency because they innately solve more problems themselves. These concepts and their explanations, with their respective linkages to the intended outcome of a state of flow and the development of a strong internal locus of control, lead me to postulate that adventure playgrounds and playwork practitioners have the potential to mitigate anxiety and depression.

In my experience, the children playing in the space would be of mixed ages, mixed genders and mixed interests with the goal being to facilitate the most natural play space possible. I am contemplating a program with the aim of reducing anxiety and depression in children before it manifests, aimed at all children in primary schools and OSHC services. This is a significant differentiation to other programs that respond reactively to existing signs of anxiety and depression. Existing in a flow state, after all, is the navigating of the channel between anxiety and boredom (Csikszentmihalyi, 2008).

Aside from the many linkages supporting this approach, ability to foster a state of flow, and develop a strong internal locus of control, I believe the most significant benefits to justify why this program should be chosen is its ability to be proactive and inclusive. Unlike many programs and therapies provided to children suffering from anxiety and depression this program is not reactive, that is, making an attempt to deal with an ill after it already exists. As per the correlation in the decline of play, and the increase in anxiety and depression, this program aims to flip that coin and increase play, thus decreasing anxiety and depression. I

implore that this program should be accessible to any child in the respective school community that takes on the project, not those lucky enough to have been identified as needing an intervention. This intervention, as well as being inclusive, is sustainable, not relying on one therapist to be successful for one child.

I am aware that the skill of practitioners in the playground environment is critical. They should use the common language of playwork theory and practice and reflection in the collection of resources and facilitation of the environment in the creation of the AP itself, thus creating the tangible environment for the program. Conducting the two phases in this order is, in my opinion, critical as too often I have seen elements that foster deep play and risk taking added to a play environment, such as loose parts, heights, fire and rough and tumble play, but without the affordance given to the children in their play for these elements to have intrinsically discovered positive effect. Community engagement in the acquisition of loose parts offers more chance of success to the program as it creates buy-in from the wider community (Casey & Robertson, 2019). Once practitioners are trained, and the AP exists, play and the program can commence.

When and Where Would the Program Be Implemented

The program would be implemented in whatever play time and recess could be afforded on school grounds or in OSHC services. In order to expand play time in this environment, I recommend the following: 1) make the AP available for use to before school and after school care facilitators; 2) link the school's curriculum to children's play pursuits in the AP in order to provide more AP usage during the school day; and 3) allow access to the AP on weekends and holidays if adequate playwork supervision is available. The number of children utilising

the space would be solely dependent on the size of the space available in the respective school ground.

Limitations to Implementation

In my musings I have identified three limitations to the implementation of the AP program. First, outcomes will be decidedly difficult to measure - how can I easily measure anxiety and depression, particularly over a significant period of time? Second, as the translation of Skrammellegepladsen (junk playground) suggests, APs are not always attractive to adult eyes and can thus suffer ill-informed negative scrutiny. Lastly, the perception of risk in APs often bares greater scrutiny from stakeholders because they appear to have more risk than regular play spaces (Leichter-Saxby & Wood, 2018).

I have postulated ways to ameliorate the extent of these limitations. First, Twenge and her team (Twenge, 2001) suggested a longitudinal approach over a large sample group would be required in an attempt to effectively document the reverse trend. Thus, although challenging, a commitment to a longitudinal study would be required to demonstrate the suggested benefits of this program and take it from a theoretical curiosity to a program with empirical rigor. Much like Twenge's research, surveys and scales must be applied over a to-be-determined number of annual cohorts to measure internal versus external locus of control, anxiety and depression and likelihood to find a flow state. To increase sample size and make comparisons of the influence of demographics, it would be ideal for the same data to be collected from several projects conducted in a variety of cultural and/or socio-economic environments.

Second, I would suggest that once a solid foundation of playwork understanding sinks in, adults involved in the program would see the space through a different lens - one full of

possibility for children. In regards to teachers and other educators directly facilitating the program, this would at the least require formal training in the theory and practice of playwork in order foster a mindset to envision and understand the many benefits an environment offers. For parents of children involved, information that details the beneficial intentions, not ill-considered haphazardness, has been effective in the evolution of the play space in which I personally work and have co created with follow playwork practitioners and children. If problems arose due to aesthetics, pack up options are possible (although I do not recommend the mitigation due to potential adverse effects on the play cycle). For example, play pods (effectively a loose parts storage unit) are well-established alternatives to leaving the loose parts out all the time (Armitage, 2009; Verberne, 2014).

Lastly, like the aesthetics, much of the fear that surrounds the belief that more physical risks exist in an AP is perceptive rather than reality. Research by David Ball (2002) on playgrounds and Morgan Leichter-Saxby and Jill Wood (2018) on APs indicate that the outcome of injury is actually less than on traditional fixed playgrounds. I largely attribute this to the very obvious nature of the risk and the children's ability to engage with and manage it through developing self-efficacy and a strong internal locus of control. These facts should become further evidence given to the practitioners who will be facilitating the space, and evidence to further affirm the intentions of the program to parents.

Conclusion

This paper is the musings of a playworker concerned with the documented increasing rise in anxiety and depression in children. The decline in play has been suggested and evidenced as the reason for this rise in anxiety and depression. A program has been suggested to mitigate this concerning rise with the introduction of adventure playgrounds into schools that are

facilitated by adults primed with knowledge on playwork theory and practice. The goal of this program is to create a state of a flow in the children's play, thus proactively mitigating anxiety and depression before they manifest. Limitations to implementation have been identified and suggestions to ameliorate them were offered. It is this playworker's hope that, through a respect for play and a consideration of the aforementioned curiosity, many children will be able to proactively navigate the avoidance of anxiety and depression rather than needing treatment because rich play opportunities were not made available.

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