
To play or not to play? A thematic analysis exploring the impact of adult-play on Primary teachers in Hong Kong.

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ABSTRACT

This study aimed to evaluate the subjective experience of a play-based intervention on a sample of primary school teachers in Hong Kong. Semi-structured interviews and reflective journals provided data for qualitative analysis. Reflexive thematic analysis was applied to establish commonalities and/ or disparities in the participants' lived experiences. Three superordinate themes were identified; perception, psychological impact and possibilities. Participants reported positive psychological responses and enhanced collegial relationships. Some showed awareness of personal and professional growth. Participants' well-being was not measured or evaluated as part of this study. However, results suggest that play-based interventions for teachers may contribute to increased well-being through play's permeating effects. This may interest school leaders, well-being consultants, and positive psychology professionals administering school-based interventions to improve well-being and teacher collaboration. Adult play, an understudied area within positive psychology, lacks data and empirical research. Therefore, this study contributes to this emerging and exciting field.

Introduction

This qualitative study sought to understand participants' lived experiences of a play-based intervention.

Despite much research into child's play, a limited body of research explores the effects of adult play (Van Vleet & Feeney, 2015). As an emerging area of positive psychology, empirical studies have offered promising results

demonstrating the benefits of adult play (Barnett, 2007; Magnuson & Barnett, 2013; Proyer, 2013a). Forward-thinking organisations across various industries have actively elicited the concept of play at work (Petelczyc et al., 2018), producing interesting preliminary results. These results suggest play can enhance the work environment by improving productivity, creativity, and innovation and fostering a positive climate. Empirical studies observing teachers' subjective experience of play-based interventions, are emergent, thus this study seeks to contribute towards this developing field. The following literature review explores modern-day teaching issues and situational challenges in Hong Kong. It explores the concepts of adult play and adult playfulness and examines cultural underpinnings.

Literature Review

The demands and pressures of teaching can affect an individual's well-being (Johnson et al., 2005; Montgomery & Rupp, 2005; Folkman et al., 1986; Kyriacou, 2001; Demerouti et al., 2001; Jepson & Forrest, 2006; Markow et al., 2013; Day & Qing, 2009). Enduring long periods of stress can result in burnout (Kyriacou, 2001) and COVID-19 compounded this. Transitioning to remote working, navigating new technologies, withstanding lockdowns and enduring social isolation, have affected teacher's well-being and mental health globally (de Oliveira Silva et al., 2021; Benevene et al., 2020; Kotowski et al., 2022; Xiong et al., 2020). Teacher recruitment has become a concern as the number of people choosing the profession diminishes (Heidmets & Liik, 2014; OECD, 2018; Schleider, 2018). Furthermore, retention has caused apprehension as countries struggle to retain teachers across the globe (OECD, 2018; House of Commons Education Committee, 2017; Aragon, 2016; Darling-Hammond et al., 2016; Brill & McCartney, 2008). In 2021, the National Education Union (NEU, 2021) surveyed 10,000 teachers amid the pandemic. Findings described 70% reported an increase in workload, and 35% intended to quit by 2026. (Kuykendall, 2022). Accordingly, Zamarro et al., (2022) found that almost a quarter of U.S. teachers vowed to leave the industry by the end of the same academic year. The National Education Association (NEA) data indicated 91% of teachers reported pandemic-related stress as a serious problem, with 86% observing educators retiring early or leaving the industry since the pandemic began (NEA, 2021, Jotkoff, 2022).

Teaching in an overseas country, such as Hong Kong, presents teachers with language barriers, cultural differences, living standards, and societal conforms (Dos Santos, 2020). Pre-pandemic, MindHk (2019) reported that 61% of Hong Kong adults suffered from poor mental health, with 1 in 7 people experiencing a common mental disorder in their lifetime (Food & Health Bureau, 2021). Work-place stress is a critical issue globally. Hong Kong is reputed to have one of the longest working weeks (Moon, 2018). Additionally, it was ranked 45th (out of 50) for unhealthy workplace culture and termed the most overworked city in 2021 (Sunil, 2021) and #2 in 2022 (Sofiah, 2022).

Additionally, teachers in Hong Kong have endured political, social, emotional and environmental disruptions since 2019. During a global pandemic, embedding the National Security Law (NSL) in June 2020 affected a troubled population (Purbick, 2019). Uncertainty became the new norm (Jung et al., 2021), with many fleeing Hong Kong fearing impending the changes. Hong Kong-based ex-pats are (typically) far from home, withstand inflexible school holidays and tolerate, *'The world's strictest travel rules'* (Favre, 2021) caused by the pandemic. Most teachers had not seen their loved ones in over two years. Consequently, the city observed the highest primary teacher turnover rate ever (Ng, 2021), with four in ten intending to leave the profession (Chan, 2021). By September 2022, the local press reported, *'The latest government figures show more than 4,000 teachers left their jobs in the past school year, a five-year high and a 70 per cent spike from the year before'* (Xinqi & Chan, 2022).

Play, a complex and elusive phenomenon, is arduous to define (Neubauer, 1987; Sutton-Smith, 1997). Play, the state, and playfulness, the personality trait, are distinct components (Proyer et al., 2020). In contrast, Shen et al., (2014) refer to them interchangeably in play and playfulness research. Brauer et al. note the lack of an agreed structural model or definition of adult playfulness (Brauer et al., 2021), and defining these concepts presents difficulties for researchers (Neale et al., 2018, Lockwood & O'Connor, 2016). Van Vleet and Feeney, (2015) believe synthesising play into a singular definition is impossible. Neale et al. (2018) identified three main attributes in most descriptions; it is enjoyable (pleasure enhancing), voluntary (intrinsically motivated) and done for its own sake (autotelic). They ideate play as a spectrum, ranging from free play to guided or structured play to allow its many variations (Neale et al., 2018). Colarusso and Nemiroff suggest the function of play remains the same in childhood through to adulthood, emergent through lifelong growth (Colarusso & Nemiroff, 1981). Proyer and Wagner (2015) argued the need to identify and distinguish between the many different forms of play. Playfulness is embedded in our personality (Bozionelos & Bozionelos, 1999; Barnett, 1991; 2007). Peterson and Seligman (2004) consider playfulness a characteristic of humour. Others posit that playfulness is applying a non-serious attitude or playful manner towards an activity (Glynn & Webster, 1992; Sutton-Smith, 2008). West et al., believe trait playfulness is stable over time and context-dependent (West et al., 2013). Brown (2009) concedes there are different playful personalities. The disparities between the many conceptualisations and interpretations of play create tremendous difficulty for researchers.

'Playfulness as a quality of play would developmentally transform itself into a personality trait of the player in adolescence' (Lieberman, 1977, p.23), theorising that playfulness (trait) is stable across time. Hence, a playful child should become a playful adult. Contrary to Lieberman, Proyer et al., (2021) found that playfulness can be stimulated, reporting minor to moderate effect sizes resulting from an online study utilising modified play-focused interventions. In contrast, Youell (2008), argued that playfulness is an essential part of play, and perceives playfulness as a cognitive function, a 'state of mind' (Youell, 2008, p.122). Additionally, the disparity

in definitions and conceptual interpretation of play and playfulness, makes measuring and generalising playfulness problematic (Gordon, 2014).

According to research, the benefits of adult play and playfulness are manifold. Play increases positive emotions (Fredrickson, 2001), decreases negative emotions and reduces the effects of stress (Chang et al., 2013). Proyer (2013) found play increases life satisfaction across the lifespan. Others believe play increases creativity (Bateson & Martin, 2013; Bateson & Nettle, 2014; Hutton & Sundar, 2010; Karwowski & Soszynski, 2008; Glynn, 1994; Zabelina & Robinson, 2010). The social nature of play support and fosters relationships with others (Aron et al., 2000; Berscheid, 2003), boosts intimacy in relationships (Aune & Wong, 2002), increases relationship satisfaction (Proyer et al., 2014) and amplified feelings of love and belonging in relationships (Plester & Hutchinson, 2016). Seligman stated, '*there is no denying the profound influences that positive relationships or their absence have on wellbeing*' (Seligman, 2011, p. 21.).

Within organisations, play may increase group cohesion and improve collective performance (Guitard et al., 2005). Establishing stronger social connections (through enhanced working relationships), leads to employee engagement and increased productivity by connecting team members in a non-judgmental environment (West et al., 2013). Highly playful employees reported lower stress levels (Schiffrin & Nelson, 2010; Magnuson & Barnett, 2013). Magnuson and Barnett (2013) speculated that playfulness alleviates stress and improves coping mechanisms, thus increases resilience, although notably, these results were derived on a majority white, American, Midwestern university-student population, who were aged between 18-27 years. In addition, participants received extra university credit for contributing, thereby interrogating the reliability of the findings.

Play at work has received a mixed response. Some believe it to be frivolous and unproductive (Abramis, 1990; Sorenson & Spoelestra, 2011), distracting, decreases task performance and productivity (Petelczyc et al., 2017) and counterproductive and disruptive (Costea et al., 2005). Yet, opposing researchers claim that play at work is advantageous. Benefits reported include reducing stress and burnout (DesCamp & Thomas, 1993), decreasing boredom (Roy, 1959), and enhancing creativity (Hunter et al., 2010). Play was also found to stimulate cognitive flexibility (Proyer & Ruch, 2011; Webster & Martocchio, 1992) and contribute to a friendlier working environment (Sorenson & Spoelestra, 2011).

Most play research has concentrated on Western societies (Barnett, 2007), overlooking Eastern countries with only a limited number of studies exploring cross-cultural perspectives (Barnett, 2017). Many Eastern societies place their prominence on education attainment, necessary for social mobility and making respected contributions to society (Zhang et al., at, 2021). Pang and Proyer (2018) suggest that due to the competitive education system in China, it is vital that students apply themselves academically, without being side-tracked

by play activities. Chinese children are taught to work hard to achieve success and happiness, and play, as the opposite of work, may be detrimental to this quest. (Harrell, 1985). In collective societies, such as China, individuals prioritise family over self (Nisbett, 2003) and their greater community (Shkodriani & Gibbons, 1995).

The present study

The primary goal of this study was to understand the lived experiences of a sample of teachers who participated in play-based intervention for adults. Using reflexive thematic analysis, a qualitative analysis was applied to narrate the participants' subjective experiences. A further goal was to identify what benefits resulted from the intervention and understand how these might impact the teachers. Previous literature purports that play offers many benefits to adults. To date, no empirical studies have observed the impact of a play-based intervention on teachers. Therefore, this study seeks to contribute towards this emergent field, and is unique in that it sought to investigate Western and Eastern cultures through the lens of play. Therefore, the primary research question of this study was, *'To play or not to play? A thematic analysis exploring the potential impact of adult play on primary teachers in Hong Kong'*.

Method

Design

This study aimed to qualitatively explore the experience of an adult play-based intervention in a small group setting, specifically with primary school teachers in Hong Kong, using reflexive thematic analysis (Braun & Clarke, 2021). Braun and Clarke (2022) argue reflexive thematic analysis is flexible in that it offers clear guidelines to follow. They also commend the role of the researcher as advantageous as 'analysis happens at the intersection of the dataset, the context of the research and researcher skill and locatedness' (Braun & Clarke, 2022, p.11), despite receiving criticisms (Nowell et al., 2017; Xu & Zammit, 2020). Ethical considerations were anticipated, as such, the study was approved by the University of East London ethics committee prior to commencement. Social Constructivist Learning Theory (Vygotsky, 1978) positions that learning and knowledge gain are active processes within a social context. Our study aims to evaluate the teachers' response to play-based activities, deriving meanings and interpretations within a social context.

Participants

Ten self-selecting volunteers participated ($F=7$, $M=3$). Inclusion criteria required that participants were Chinese or ex-pat primary teachers aged 23-65. However, convenience (all employed at the same school) and criterion sampling (all teachers) presents a limitation as results cannot be generalised beyond this sample (Acharya et al., 2013). Participants were primarily Western (7/10), were recruited via email invitation and completed all participant due diligence prior to commencement. Upon completion of the intervention, all participants received a Participant de-brief sheet

The intervention

The participants attended 4 x 45 minutes sessions, hosted in the researcher's classroom immediately after the school day had finished. Each week the participants completed challenges or activities ranging from less structured to more structured play (see Appendix A for further information). Materials and resources were prepared for time efficiency. The activities intentionally encouraged collaboration between participants, solved problems and ignited creativity. Participants chose self-selecting groups or partners to work with, offering autonomy and an agentic experience.

Data collection

Participants wrote reflective journals weekly, including thoughts, observations, and feelings following the session, to capture time-sensitive and context-specific data (Hyers, 2018). Critics warn about diary data limitations; participants may fear disclosure, thus limiting content, or manipulate data according to study outcomes (Day & Thatcher, 2009), thus diminishing reliability.

The semi-structured interviews invited open communication, specifically with open-ended questions (Moustakas, 1994). Qualitative interviews are commonly critiqued for being poorly constructed (Young et al., 2018) and lack sufficient depth to provide meaningful and valuable data (Connelly & Peltzer, 2016). Utilising two datasets counteracted this.

Moreover, probing questions produced clarifying or additional details (Lingard & Kennedy, 2010). Executing the interviews in a familiar environment helped the participants to open up (Edwards & Holland, 2013). Critics argue that qualitative interviews cannot be replicated. As a contextually-dependent social interaction, Edwards et al. (2014) believe there are too many effectual variables. Crow and Pope (2008) emphasise the social complexity between interviewer and researcher which may influence results.

The interviews were audio recorded on an iPad, enabling the researcher to actively listen to the participants instead of accurate note-taking (Edwards et al., 2014). Recordings were manually transcribed by the researcher, typing it verbatim into a word document for subsequent analysis. Audio transcriptions provide immediate and precise access to verbatim quotes (Luker, 2008), although some consider audio recordings to influence the data (Nordstrom, 2015). All datasets were anonymously coded, e.g. P1 – P10. Henceforth, participants are referred to accordingly.

Data Analysis

Qualitative data is criticised as analysis derives from researcher interpretation (Braun & Clarke, 2022). Bias is understood to be an influence that can mislead findings within a study (Polit & Beck, 2014; Denzin & Lincoln, 2000; Braun & Clarke, 2022). It is not as rigorous or as deterministic as quantitative research might be (Edwards, 2013). Braun & Clarke (2022) suggest using a reflexive, systematic approach to thematic analysis to

reduce impact. Reflexivity involves the researcher reflecting on awareness of assumptions, expectations, actions and choices throughout the research process (Finlay & Gough, 2003). Reflexive thematic analysis detected three themes to delineate the participants' experiences, following Braun et al.'s iterative 6-step process (Braun et al., 2018). Braun & Clarke (2013) argue the flexibility of Thematic Analysis (TA) is advantageous, and inductive analysis was used to drive the data rather than manipulating it to fit into pre-defined categories (Percy et al., 2015).

Doucet and Mauthner (2008) consider the complexity of language interpretation during interviews, offering two criticisms. Firstly, that language is fundamentally ambiguous and open to interpretation and secondly, what a question or answer may translate into different meanings to both interviewer and interviewee. Three of the participants were native Chinese speakers, yet the intervention and interviews were conducted in English. Janusch, (2011), interviewed Chinese speaking participants in English, and secondly in their mother-tongue, observing that switching to Chinese was empowering for the participants and allowed them to express themselves more fully and accurately, therefore producing richer data. As this study was conducted solely in English, this is an important validity element to consider during analysis. Typing the interviews verbatim ensured that ethically, the data collected was as overt as possible (Sanjari et al., 2014). An active component of the interview process, the researcher was mindful of biases that could influence the data by actively listening, appropriating silence and allowing space for reflection (Seidman, 2013).

Findings

Analysis of the data produced three superordinate themes, each with supporting subordinate themes represented visually in Figure 1. The overarching themes identified were perception, psychological impact and possibilities, explored in further detail below.

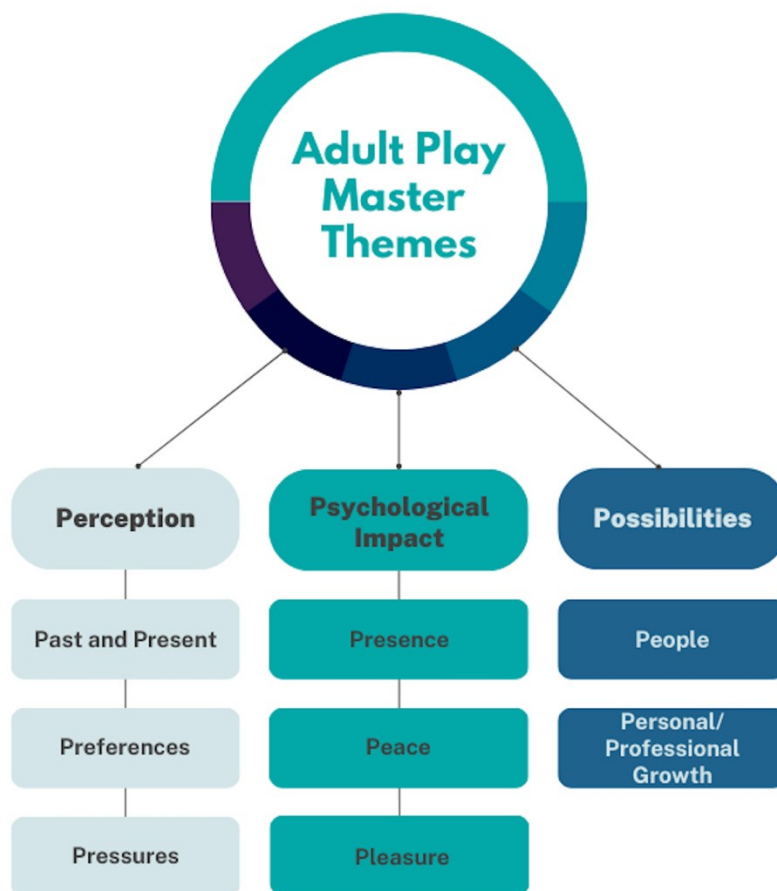


Figure 1: Thematic map of the superordinate themes and corresponding subordinate themes.

Perception

Perception pertains to an individual's unique understanding and interpretation of play, encompassing awareness of self and others, value systems and how it resonates with their individual experiences. This theme has three distinct areas; past and present, preferences and pressures, demonstrated below.

Past and Present

Past and present emphasised a position correlation between participants' childhood play experiences and their perception of adult play. Those who enjoyed creative/ unstructured games as children prefer similar activities as adults. As a child, 'we'd make up super imaginative games and just have a lot of fun together...pretty unstructured too' (P2), whilst her adult perception of playfulness is to 'not worry too much about what's gonna happen and just enjoy the ride' (P2). Similarly, sporty and competitive youths maintain their sporty and competitive penchant as adults. 'I've just always been very, very, VERY competitive, and I like winning' (P1). P5 expressed a more relaxed experience of play 'Mum and dad would bring us to the playground in Hong Kong...so play to me is really just playing the playground or just explore outdoor' (P5). In adulthood, maintaining a connection to the outdoors remains

essential, *'I will have an activity outdoor, like go hiking or go on a bike ride'* (P5).

P10 experienced learning difficulties growing up; creativity and play-based learning were a fundamental part of his childhood education. In adulthood, he still insists on the power of play-based learning for all (children and adults), particularly for neuro-diverse individuals, due to its tendency towards inclusivity, offering options for all learners. However, not all could reminisce on positive childhood play experiences. P9 states she never learned how to play. As an only child, her parents *'Brought me to the toy shop and bought me a lot of toys that I like...but I didn't know how to play'* (P9). Correspondingly, in adulthood, play is not essential for her.

Preferences

Preferences pertains to the participants' individuality, including personality types, likes and dislikes, and motivations towards play. Some were motivated by the purpose of play. For P10 it was necessary to understand why he was partaking in the activities, *'I don't know if it's been instilled in me, but like a purpose – you know, like a reflection or a reason why. I'm like are we teaching coding? Is the goal perseverance?'* (P10). The purpose of play, and how it changed as she matured, was highlighted by P9, describing, *'Compared to when I was younger, it's very different ... I'm in different stages of life, the feeling is different, the purpose is different'* (P9). Parental play was important for almost half of the participants (4/10).

P3 expressed how parenthood changed her perspective and playful preferences, *'I wasn't the most playful person and then when I had [son's name], that's when I started as an adult. If you add a bit of playfulness, it's easier'* (P3). This learned playful-parenting approach aids her when interacting with her son.

Winning and competition were intrinsic motivators for some (P1, P3, P5, P10). Competition against other participants was perceived as incentivising, or threatening. *'When the game was revealed, I was quite excited as I love competitive games...my competitive streak came out and I was excited to win!'* (P3), *'I can't honestly remember a time where I just played without trying to win'* (P10), in contrast P6 reported, *'I found myself looking at the other group....it kinda made my anxiety, stress levels go up a little bit'* (P6). When confronted with a general knowledge game P1 found it, *'Stressful because I know my general knowledge is not very good. I know I'm not going to do very well. It's not something I would enjoy'* (P1). Highlighting the significance and importance of personality types, she contrasts play-based activities which induce enjoyment that *'Involve a lot of people, I'm a team person'* (P1).

P7 exclaimed, *'Play diminishes from your life as you get older'*. However, it seems that rather than diminishes, play or our perception of play, changes as we age. Hiking, rock climbing, grabbing a coffee with friends, reading, board games with friends, and videogame nights were all identified as play-based activities by the participants. Thus, the perception of play and how we choose to play seemingly changes through our lifespan.

Pressures

The participants emphasised the theme of pressures within different contexts, the commonality being that pressure prevents play. Parental pressure was cited as an impediment to play (4/10). *'The last 18 months, play has very much changed because of my daughter...'* (P6) and *'at this stage of my life, I'm pretty much-taking care of my kid, and work, so for me play is to do with my child'* (P9).

The issue of age arose and how it thwarts play, *'I feel like, as an adult, we are not meant to play. Like you work, you have responsibilities, sometimes you have relaxing time, but it's never really classified as play'* (P7), *'it kinda changed like how I saw like in my mind adult play'* (P8) and *'I'll remember adults can play too and **give myself permission** to play'* (P2). The semantics of 'permission' implying adults need approval or justification. Life gets complicated and busy as we get older, *'it made me realise that maybe I need more play in my life, and I'm trying to think about maybe the best ways to kind of do that as an adult (P7)'* seeking validation or convenience to make space for play in her life.

P10 referred to gender pressure and *'male toxicity'* and how gender roles might inhibit freedom. *'You start seeing the kids develop that, I'm a boy, you're a girl'*, and how a childhood friend was told, *'it's gay to be in the choir'*. He further proclaimed, *'when you get older, those kinda things are really strict'* (P10), characterising the societal, cultural and gender pressures within societies.

Psychological impact

This theme has three distinct areas; presence, peace and pleasure. Psychological impact encompasses the participant's psychological responses to the intervention. The subjectivity of the individual's personality and motivations produced a rich and varied response rate of being present in body and mind, feeling peaceful and enjoying the activities.

Presence

Being present in body and mind during the play-based activity was highlighted. P7 reflected, *'just switching off from daily life and being in the moment and enjoying what you are doing... I completely forgot about any work or anything else I had to do. I was in the moment'*. P4 was able to *'change gears and fully engage in this activity after finishing a busy day'*. For P6, the task itself lost meaning as he was so engaged in the emotion and awareness of the moment. *'I lost interest in the competition because I enjoyed the play, laughing, trying and having so much fun!'* (P6). P2 confessed she was not in the mood one week due to workload stress, *'but having a fun, new task to concentrate on did divert me a bit. Like mindfulness, I would drift off and start stressing again, then remind myself of the task in hand'*, alluding to the mental struggle to detach from work.

P10 reflected on the concept of play and freedom, specifically, mental freedom, *'I like to be free, just to be...and it's not just like the mental freedom, the social freedom, the freedom of work, the freedom of hours/ time that*

is'. Being free and 'just being themselves' (P7) allowed the participants to fully immerse and mindfully engage in the activities, focussing and acting as their authentic selves. P10 observed some peers could not fully engage, remarking 'just enjoy the moment, and just lose yourself...cos they weren't able to lose themselves in play because they had, ok, what all do I have to do tonight...you know all that stuff', observing how pressure impedes play.

Personality types and individual preferences influenced the subjective experience of the participants. P5 experienced a student's perspective, 'It's hard for us as an adult. We know more than the kids, and it's still really difficult for us, so it's interesting to be from the student's perspective'(P5). These sample quotes illustrate the scope of presence and awareness experienced by the participants.

Peace

Feeling peaceful and de-stressed from life's grind was mentioned as a psychological response. 'It's a nice de-stressor, it's a nice way to cut myself free from reality, I'm still in reality but in the same time not having to think of all the stressors...all the things I need to do' (P8). The same participant acknowledged how stress-free people are more open. 'It really makes you switch off from all the stress and work that's going on in your mind' (P7), and 'I left feeling calmer and having my mind a little bit cleared of work'(P3).

P2 described how 'freeing' it was to 'relax a little bit'. P1 forgot about daily struggles and realities of life; 'during the activity I was able to forget about the struggles of the day and have a fun time'. P4 described feeling a 'weight shift' after a busy teaching day. P10 expressed awareness that he needs to engage more intentionally, 'Maybe I need to make it a goal of mine to get lost a little in the fun of the activities and relax a bit, instead of focussing on what needs to be accomplished', acknowledging his reflections are relevant 'because I think it speaks to the importance of play, fun and stress-free activities' as per his personal preferences and professional philosophy.

Pleasure

Pleasure focused on the overall enjoyment experienced from the intervention. Initial negative responses were confessed, 'Feelings of nervousness, embarrassment shame and guilt...those quickly disappeared ... the mood in the room was relaxed, curious and excited' (P6), 'I was a bit nervous cos I'm not sure what is happening...but very quickly I joined along...it was very enjoyable' (P9), 'I really like the idea of the challenge but actually felt a bit stupid at the start...once we started...I really relaxed and enjoyed it more. We had a lot of laughs, and I left the group feeling positive and energised.' (P3). Initial negative associations were replaced by positive ones.

The sessions helped invigorate the participants and replenish their energy after long and stressful days, 'as

exhausting as tired, as overwhelmed as we all were these last few weeks. I always felt better and more energised and happy leaving them.’ (P3), ‘fun and giggles, just what you need after a long day’ (P4). P1 recalled, ‘I am always really tired on a Thursday. I feel like I can never get through to Friday, so it was nice to have this time when you just forgot about school, you forgot about what you still had to do, and we would have fun. After the session, I felt a lot more awake. I felt refreshed’ (P1).

For P10, the sessions went beyond literal fun. He felt he was exploring, ‘It’s not only having fun, but it’s something like I enjoy and I just learn to do it, and explore even more’, suggesting the many benefits of play for personality types and neuro-diverse participants beyond the literal activity.

Possibilities

Possibilities was sectioned into two sub-themes; people and personal/ professional growth.

This theme explored the opportunities and prospects pertaining to individual growth, being professionally and personally upskilled, and fostering relationships with people at work.

People

References to people, relationships and building connections with others were prominent in the data.

Unexpected collegial relationships were mentioned. P9 recalls her positive experience, which was ‘A plus for me and very enjoyable.’ Subsequently, she intentionally targeted unfamiliar colleagues, explaining, ‘I don’t get to talk to them very often simply because I don’t work with them. And this game is a good time to get to know each other’ (P9), play offering the utility to forge improved working relationships. Authenticity was relational to building relationships. P4 identified the activities were ‘neutralising, and it sees people as their real self ... you can’t fake play’. The ‘stress-free’ (P7) nature of play encouraged participants to be ‘less guarded’ because ‘there’s less pressure to appear in a certain way and less pressure to do certain things’ (P8), reinforcing authentic behaviour and actions between colleagues.

Play connected people professionally and authentically. The ripple effect of the enjoyment was infectious. P9 reported, ‘It was really enjoyable just to watch that [people having fun]’. Also experienced by P6, who observed his team member who was ‘Very much in it, as in in the activity’ [very engaged]. Observing how his teammates created self-appointed roles for themselves, himself included declaring, ‘I had already assumed the role of that corner (P6)’. Considering team dynamics, P5 explained how when participating in teamwork, you need to be ‘open-minded’ and ‘aware that you are in a group; otherwise, it’s hard to work together’ (P5). Believing ‘people need to be aware of who they are in the game, and then what their personality, or what part they are playing in the game’ (P5) suggests the prevalence of roles and/ or identity with teams.

Being present and engaged in the activity was vital for the team’s success, as was open-mindedness to try new

things and take risks to overcome a challenge to solve problems. P6 proposed applying these activities at family gatherings as a mode of bringing people together, 'It will be great to play those games with family and friends again...I think everyone will get something from it'. Being equipped with the awareness that play brings people together, whatever the capacity, professional or personal, everyone can gain something from play.

Personal/ professional growth

Several allusions to personal and professional growth were made, and the activities seemingly created opportunities to upskill. P3 boasted, 'Like keeping on with something and getting better at it feels really good, it's a great feeling ...at the beginning, I didn't know how to do it and at the end, I could'. For P10, play and exploration are crucial for his professional capability, 'I just play. That's how I learn, tech is really hard if you don't spend a lotta time playing cos there could be tons of things going wrong' (P10).

The experience encouraged a perspective shift for P5, alluding to how his experience as a student created awareness of his learner's needs, 'Logistically, what they need, do they need more time, and maybe the instructions needs to be more clear'. He showed professional growth, wanting to improve as an educator, 'Help me how to lead people or like how to be better,' (P5). Developing new professional skills is an intrinsic part of teaching. P4 reflects, 'I didn't really see myself as a coder, or you know ...it was really good'. P3 also relates to limitless opportunities from playing, 'You can still learn a lot from playing...when you're doing something like that, like playful playing, you realise how much more you can learn' (P3) highlighting the positive emotion stemming from being upskilled. P3 recognised that resilience and grit were being developed to problem-solve, 'Practicing those skills of trying and failing and trying again and keeping on trying to make it work' (P3). P8 observed the development of coordination and social skills, stating, 'in the real world, the ability to solve problems, the ability to socialise with another person', developed through the act of play.

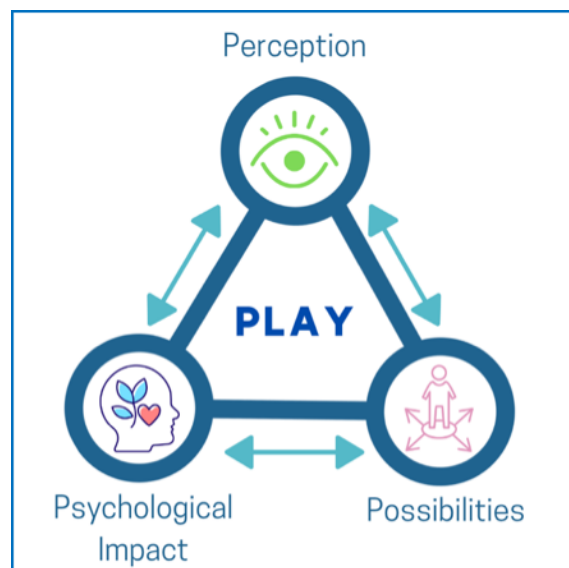
Play can teach conflict resolution, 'even though, as adults, we know this, it's still being in that situation that allows you to practice it [solving problems] a little bit more in a fun way.' (P7) and 'how to solve the problem together, how to work as a team and if there's a problem then you have to keep trying til you solve the problem' (P5). P10 felt strongly about the necessity for play for all staff and students advocating that play is 'open-mindedness, taking risks, being vulnerable and not knowing things.'

Teamwork was essential to the participants. Working collaboratively to do their 'best as part of the group' (P4) was commonly cited desiring to perform well for their teammates (P3, P4, P6, P8, P9, P10), evidencing collegiality and a sense of duty. Communication and connecting with others were important 'in the real world; the ability to solve problems and socialise with another person is essential' (P8).

Discussion

This study sought to evaluate the subjective experience of a play-based intervention on a participant group of ten teachers employed at a private school in Hong Kong. Qualitative data provided diverse, rich evidence narrating the lived experience of the participants. The findings produced three superordinate themes, as represented in Figure 2.

Figure 2: Illustrative representation of the interdependency and connection between the superordinate themes (Kavanagh & Martin, 2023).



(Kavanagh & Martin, 2023)

There are many challenges to studying adult play. It is a notoriously complex and elusive concept and difficult to define (Neubauer, 1987; Sutton-Smith, 1997; Neale et al., 2018; Lockwood & O'Connor, 2016), disparities exist in distinguishing between (state) play and (trait) playfulness (Proyer, et al., 2020) and significantly, the absence of a congruent structural model or definition of adult playfulness. (Bauer et al., 2021) present enormous challenge for researchers.

This study did not intend to define nor measure play or playfulness. Whilst attempts to create reliable, usable measurement tools have been made (Barnett, 1990; Glynn & Webster, 1992; Schaefer & Greenberg, 1997; Proyer et al., 2017), critics note the deficiency of theoretical grounding and weak construct validity within them (Shen et al., 2014). Shen et al., (2014) introduced the Adult Playfulness Trait Scale (APTS), aiming to assess trait playfulness, state play (behaviour) and situational play (context dependent), the first of its kind to consider a third play constituent, context. All three play positions (state, trait and context) may have contributed to the results of our study, the authors acknowledge that reliability of the data may be interrogated, as the effect of

each variable is unmeasurable. However, the data did yield three superordinate themes which will be explored further.

The Merriam Webster dictionary (n.d.) defines perception as the 'capacity for comprehension', how one interprets and understands their world. In past and present, our findings indicated childhood experience directly correlates with adult perceptions of play. Participants with carefree/ unstructured childhood experiences (6/10) embraced the same as adults. Similarly, participants whose childhoods were competitive or lacking in play (4/10) adopted continued preferences in adulthood. Theorists stipulate trait playfulness naturally develops through the lifespan and is stable across time (Lieberman, 1977; Barnett, 1990). If trait playfulness is deep-rooted within our personalities, as is suggested (Bozionelos & Bozionelos, 1999; Barnett, 1990; 2007; Trevlas et al., 2003), it would be prudent to recognise that participants would be characteristically more playful than others. Thereby dictating their perception, preference and their psychological impact responses to play.

Brown (2009) identified eight play personas and acknowledged fun for one personality may incite boredom in another. Anderson et al., (2022) refer to the Goldilocks Principal, essentially the importance of deciphering an activity that is a preferential fit. Facilitating an effectual play-based task is complex, as mismatching may occur when participants differ in their goals and interests (Van Vleet & Feeney, 2015). The subtheme of preferences appears to support this. Participants reacted positively to certain activities (P1, P2, P4) whilst some tasks were anxiety-invoking for others (P1, P3, P6, P9). Considering some participants are inherently more playful also creates difficulty, applying a playful approach may be challenging, 'I think REAL adults who don't have anything to do with kids probably struggle with *this*' (P2). In contrast to others who propose that playfulness is cultivatable (Bateson & Martin, 2013; Proyer, 2013).

Barnett (2007) purports playfulness in young adults is determined by personality traits, supporting the findings of Costa and McCrae (1988). The researcher acknowledged study limitations, including the use of self-reporting data, and the homogenous participant sample was unrepresentative of the wider population (Barnett, 2017). Whilst the results were not affected by gender, Barnett observed gender differences in the perception of play between males and females (Barnett, 2017). Interestingly, gender seemingly affected the participants' subjective experience in our study. The females ($n=7$) reported emotional responses, 'fun' (P3), 'thrilling' (P1), 'stress-free' (P7), 'pure joy' (P4). In contrast, the males ($n=3$) offered practical reflections, 'people used their initiative to try to help in the group' (P6), 'help me how to lead people or like how to be better' (P5) and 'my reflections and thoughts are all centred around the idea of accomplishing and achieving something' (P10).

In contrast to Barnett, Yarnal and Qian (2011) found older adults displayed different characteristics of playfulness than younger counterparts, suggesting playfulness is a developable attitude in accordance with

other theorists (Solnit, 1998; Proyer, 2013). However, an empirically tested, inherent model of playfulness is non-existent (Boyer, 1997; Brauer et al., 2021), thus a deterministic perspective of adult playfulness is not possible (Gordon, 2014). Additionally, other limitations affected Barnett's study. The participant sample were mainly female German, and no definition of playfulness was provided. Barnett attempted to bridge a gap in literature between Eastern and Western studies of play in her research into female Chinese students living in the United States, concluding those with prolonged exposure to American culture were more likely to recognise and appreciate playfulness, surmising that adults can learn to be more playful (Barnett, 2017). Interestingly, this findings of this study did not yield any observable differences between the Western and Eastern teachers. Longitudinal data assessing play through the lifespan is nascent, although academics have highlighted how the subject is underappreciated (Whitton & Moseley, 2019) and continues as understudied field in psychology (Leung, 2014), and is under-prioritised (Gordon, 2014).

The theme of pressures identified impediments to play. Maturing adults might feel guilty or embarrassed about indulging in play (Walsh, 2019), or believe it to be childish (Parham & Primeau, 1997) and unproductive and unprofessional (Brown, 2009). Several participants referenced negative perceptions of play (P7, P9, P4, P3). P9 highlighted how play has changed throughout her life. Cavanaugh et al., (2017) argue play serves different purposes at various stages of life, from socialisation and learning in childhood to learning how to try, fail and problem solve as we age. In contrast to Colarusso and Nemoriff (1981), who argued the function of play remains the same from childhood to adulthood.

Adults manage multiples roles expectantly, thereby play would manifest differently within distinctive social settings. A study on playfulness using LEGO (Heimann & Roepstorff, 2018) found participants who operated within non-playful conditions reported feeling stressed, obligation and boredom versus those enduring with playful conditions, who felt autonomous and surprise at their LEGO creations. Walsh (2019) posits some people view play as inappropriate for adults, and context and permission are needed. This was illustrated by some, reporting that they needing permission to play, 'I feel like, as an adult, we are not meant to play P7' and 'I'll remember adults can play too and give myself permission to play' (P2).

However, Gordon (2014) demarcates that play, as a discrete activity with specific and measurable outcomes, is difficult to define as there are so many variations of it. In a study of fourteen professionals who adopt playful approaches at work, Walsh (2019) deduced twenty-nine different types of permission for play to occur, grouped into six overarching themes, determined by how we 'frame' a situation (Goffman, 1986).

Aforementioned, the parents in this group (4/10) felt it was permissible to play in the public playground, or jump like bunnies when leaving the swimming pool, the framing being that play is acceptable behaviour when with children. P10 referenced the matter of gender stereotyping and how it can impact play, 'it's something like

the male toxicity... kids develop that you know I'm a boy, you're a girl'...' (P10). Evidence suggests that gender stereotyping is common across educational systems in different cultures (Pacáková et al., 2016) and is reinforced through toys (Chick et al., 2002; MacNaughton, 2006), influenced by teachers (Robinson & Diaz, 2016) and the physical play space (Børve & Børve, 2017). Thus, gender stereotyping indoctrination affects children from a young age and impacts their character development and psychological state—an interesting observation to consider when interpreting the participants' difference responses.

Psychological impact encompasses moods, feelings, cognitions and emotional responses to the intervention. If generated beforehand, intrinsic motivation (Deci & Ryan, 1985;) may increase motivation and interest (Isen & Reeve, 2005), 'It was something that I did actually quite look forward to,' (P8) highlights the motivated attitude towards the sessions. P2 journaled she 'wasn't really in the mood for this today, so many things to do!' However, the following week she was 'definitely more up for the activity... which probably helped my *enjoyment*' (P2) indicating how her psychological state impacted her motivation and experience. Forbes (2021) found play stimulated students' positive affect and motivation in undergraduate students, enriched their learning experience and increased motivation to learn more effectively (Deci & Ryan, 1985; Ryan & Deci, 2000). Andersen et al., (2022) speculate the experience of play is intrinsically motivating, reinforcing the notion of play being autotelic (Neale et al., 2018). Play diverts from the present (Brown & Vaughan, 2010) and creates a state of flow (Nakamura & Csikszentmihalyi, 2002) evident in the theme presence. Play reduces stress and decreases negative emotions (Magnuson & Barnett, 2013; Chang, Qian & Yarnal, 2013). Our study verified these conjectures, encapsulated in presence. Describing physiological and psychological changes such as, 'switching off from daily life' (P7), 'I left the group feeling positive and energised' (P3), 'after the session I felt a lot more awake, you know I felt refreshed almost' (P1). Initial negative associations were replaced by positive sensations where (6/10) described a psychological shift (P1, P3, P4, P6, P7, P9) supporting the work of Chang, Qian and Yarnal, (2013) aligning with the Broaden and Build theory (Fredrickson, 2001). Additionally, the impact of playing an online board game corroborated Magnuson and Barnett (2013). The game boosted resilience, increased self-efficacy, created a sense of psychological safety and encouraged meaningful connections between online participants (Maresch & Kampman, 2022).

Edmondson (2002) stipulates that psychological safety: a shared belief as to whether it is safe to engage in interpersonal risk-taking in the workplace, is a crucial factor in organisational learning and change (Edmondson & Lei, 2014). Hartcher et al., (2022) studied ecological factors impacting teacher wellbeing, citing that positive relationships directly correlate with teacher wellbeing. When teachers feel connected to their environment and others, self-efficacy and job satisfaction may increase (Collie et al., 2012; Mehdinezhad, 2012). These effects impact physical health by reducing the allostatic load (physical reaction to stress) from oxytocin

production (Heaphy & Dutton, 2008; Ryff et al., 2001; Epel et al., 1998; Seeman et al, 2001; Kosfeld et al., 2005). These findings align with participants experiences, where participants vocalised the impact of working together 'talking with P8 helped me vocalise, where as if I was on my own, all those thoughts would be in my head and you know the idea if you start thinking negative thoughts, it goes in that downward spiral' (P6). Panksepp (2009) identified play neural circuitry in the mammalian brain that directly affects the emotional systems, relevant to relationships. Brain affectivity was referred to by several participants (P6, P8, P10), 'whatever's going on chemically in your brain, you're getting those release of chemicals...you get into the mood and you start to enjoy it' (P6). Playfulness and mindfulness activate the body's parasympathetic nervous system to prepare it for learning (Wang & Aamodt, 2012), creating pathways for new ideas, as well as contemplate future possibilities (Boyatzis et al., 2013). As such, play opens metaphorical doors for idea generation (creativity), upskilling and boosting personal and professional growth, developing new connections and relationships among other benefits which was identified in the theme of possibilities.

Within the theme of possibilities, situates people and personal/ professional growth. Baker and Ryan (2021) explored how infusing play and playfulness into a teacher research community produced improved awareness and perception of using play and playfulness within the classrooms, professional growth through acquiring new skills, and developing a more playful mindset within their professional capacity (Baker & Ryan, 2021). P5 displayed awareness of his students as learners citing, 'it's hard like for us as an adult and we know more things than the kids right, and it's still really difficult for us...just very interesting to be from the student's perspective to play these games'(P5). Similarly, Liang et al., (2020) studied the effects of a Professional Learning Community (PLC) on teacher wellbeing with Chinese teachers, particularly on teacher self-efficacy (TSE). They found that TSE positively supported hedonic and eudaimonic well-being, cementing previous research findings (Skaalvik & Skaalvik, 2007). Teachers with higher self-efficacy experienced less work-based stress, burnout and anxiety. As job demands, stress and burnout are causing teachers to leave the profession (de Oliveira Silva D. F. et al., 2021; Benevene et al., 2020; Kotowski, et al., 2022; Xiong et al., 2020), play may provide a reparative buffer against adverse symptoms.

Our findings signify how participants upskilled through new challenges, enhanced relationships with colleagues, expanded their creative skillset and reported feeling de-stressed and energised. Whilst TSE was not measured a factor in this study, the findings imply that a play-based intervention may increase TSE through upskilling, facilitating new learning, enhancing relationships with colleagues (see possibilities), decreasing stress and anxiety, buffering against burnout, all enjoyed through a play-based intervention.

Play may attend to the needs of creative learners, neuro-diverse individuals, differing personality types, and other learning styles. Forbes found that tertiary students who partook in experiential play as a mode of

learning, reported feeling safe in a warm, inclusive classroom. Students were encouraged to bare their vulnerabilities and be their true selves. In addition, reducing their fear of failing and increasing their motivation to learn (Forbes, 2021). In this study, hands-on, constructionist activities (Papert & Harel, 1991) were intentionally created, emphasising diversity, inclusion and equality to all participants. The effects of play are demonstrated in innovative companies where it has promoted positive attitudes, behaviours and social outcomes (Schmidt & Rosenberg, 2014; Brown, 2009; Burke; 2016), such as LEGO Group, Google Inc., and IDEO LLC (West, Hoff & Carlsson, 2014). This study adopted the Social Constructivist Learning Theory (Vygotsky, 1978), positioning that learning and knowledge gain are active processes within a social context. People, collaboration and developing collegial relationships was fundamental to the participants learning process. The sub-theme of people, confirms the pro-social element of play as highlighted in previous research (Berscheid, 2003; Seligman, 2011; West, Hoff & Carlsson, 2013). Whilst play may seem inclusive for some, recent literature examining university students diagnosed with autism spectrum disorders (ASDs) have reported how social challenges have been documented as inhibiting and anxiety-inducing, creating heightened stress and anxiety in social situations (Accardo, 2017). Additionally, they reported difficulties in making and maintaining friendships (Gelbar et al., 2015; Jackson et al., 2018), struggled to manage emotions (White et al., 2016).

Teamwork drives organisational success (Wheeler & Passmore, 2020), fostering working relationships between teachers is an essential element of the school culture. The participants felt dutiful towards teammates, 'people used their initiative to try to help in the group' (P6). Social support is a strong predictor of resilience following times of crisis (Saltzman et al., 2020), and uniting people may contribute to overall wellbeing. Introducing work-based play for adults requires sensitivity, ensuring that it does not distract from task load or objectives. Dennis (2014) reported workplace interventions may provoke resistance from staff if masqueraded as forced fun. In the current study, all participants were willing volunteers and were not coerced in any capacity.

The master themes initially appear independent; however, influence and interdependence exist. Perception can influence possibilities. For example, P4 had 'never really thought about adult play' explaining how her perception of self, had changed, 'I didn't really see myself as a coder'. Successfully upskilling herself (personal growth) initiated a ripple effect resulting in 'fun and giggles, just what you need after a long day' (pleasure). To deconstruct a comment by P3, 'but it's practicing those skills of, like trying and failing and trying again (pressures) and keeping on trying making it work, (personal growth) and it feels good, like learning a new skill does feel good' (pleasure). Resilience ensured she overcame pressure, achieve personal growth through construction of new learning, and experienced position emotions.

As is evident, these themes are interdependent. Despite initial resistance to participate, P2 wrote 'my group worked well together with all support, encouragement and good ideas, so that made it more fun.' The

collaborative, communicative nature of the play activities, or 'conversational learning' (Baker et al., 2005, p.412) expedites learning in a group play session. The possibilities created through the play-based collaborative challenge, diverted her from her 'busy-ness' resulting in engagement (presence), developing and producing enjoyment (pleasure) and an overall positive experience (pleasure). The permeating effect of play is deeper-rooted than may primarily appear.

Limitations

This study had several limitations, which, if addressed, may help advance further research in adult play. Firstly, the homogenous sample population was purposefully intended to examine the teacher's subjective experience. However, results cannot extend beyond this sample. Replicating the study using a more representative sample of the general population could provide exciting results. Another limitation is the data analysis during the research process is susceptible to influence from assumptions, personal biases and experiences of the researcher (Mays & Pope, 2000) which influences their analysis of the data. Despite attempts to mitigate this through reflexive practice, the researcher, as an integral part of the analysis, cannot be overlooked. Further studies may consider using quantitative approaches to generate impartial, objective and deterministic data.

The short duration of this study is noteworthy. As longitudinal data is nascent, future studies may observe the effects of adult play over a longer duration, to compare the findings. Finally, the replicability of this study warrants attention as it would be impossible to replicate the study exactly. Future studies may focus on a prescriptive model which can be replicated amongst control groups to ensure standardisation across all participating samples. Finally, this research included Chinese and ex-pat participants. The findings did not yield any difference in the impact of play between the Eastern and Western cultures. One explanation might be that all are employed in a multicultural environment and maybe have a unified culture of sorts within an organisational context. Research across different contexts and cultures to examine consistency of results (Baker & Ryan, 2021) would be interesting to investigate the effect of play across cultures and within varying workplace settings.

Conclusion

Improving teacher well-being is complex, subjective, contextual, multifaceted and multidimensional (Spence, 2015). Play and playfulness remain elusive and arduous to define and conceptualise. Despite the lack of empirically approved assessments and congruous definitions, this study proposes participating in play-based activities produces a range of positive benefits, and may contribute to the overall well-being of teachers. The Broaden and Build theory (Fredrickson, 2001) proposes that playfulness helps develop and retain mental and physical resources, enhancing resilience. In turn, this may buffer against adversity, job demand issues and

prevent burnout. Results demonstrated how play improved psychological wellbeing through positive emotions, replenishing energy and decreasing stress, supporting Fredrickson's theory. Social support is a strong predictor of resilience following times of crisis, such as the pandemic and Hong Kong's change in National Law in 2020. These results indicate how play improved social wellbeing by stimulating collaboration and enhancing work-place relationships.

The permeating effect of play ripples into other aspects of life and the interdependence of these rewards is manifold. Despite life's societal, gender, cultural, parenting and professional challenges, these findings suggest that those who permit themselves the opportunity to play may be rewarded with unlimited potential and possibilities. Considering this, the field of adult play is worthy of further attention and investigation, specifically when applied as a positive psychology intervention within work-place settings.

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Appendix A

Overview of Activities

Week 1- Fashion Fiasco

Challenge: To create a fashion masterpiece under the guise of your secret theme.

Skills used: Creativity, collaboration, teamwork, problem solving, communication

Resources: PowerPoint slides, newspaper, tape, scissors, mystery theme cards

Instructions: One player from each group chooses a mystery card. Players look at the theme and have to nominate one person as the model, whilst the other two players design and make the costume out of newspaper.

*Making Time :*30 mins

Presenting Time: 10 mins to present your fashion piece. Each group guesses the other group's theme!

Group 1 x 3	Astronaut
Group 2 x 3	Chef
Group 3 x 4	Bee Keeper

Mystery Cards:

Safari Guide



Bee Keeper



Astronaut



Week 2 - Coding (Indi) Challenge

Objective - Indi has to do a full circuit around various classroom objects. Teachers will not know the colour scheme and must problem solve to work it out.

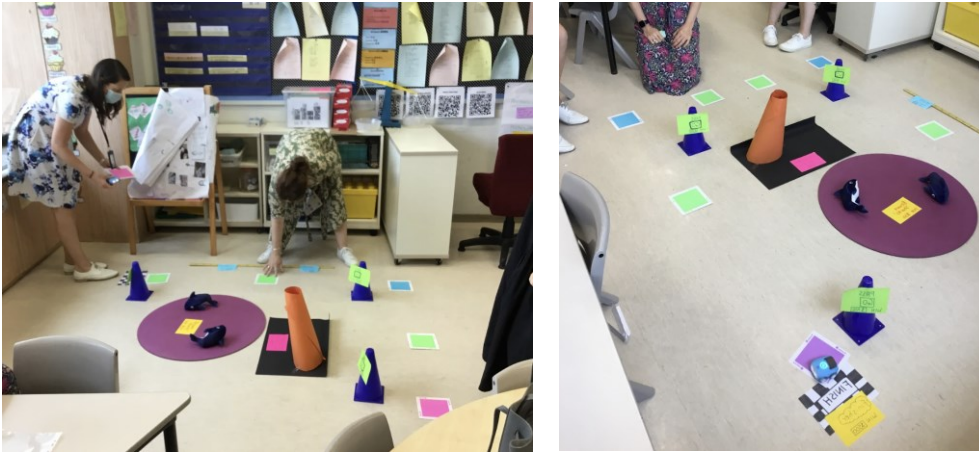
Groupings: 2 x groups of 5.

Resources: Teachers receive 30 colour cards (from the Indi package) per group.

Slides:

**CLASSROOM
'ROAD TRIP'**

TASK:
NAVIGATE YOUR CAR AROUND THE CLASSROOM
BE CAREFUL TO MIND ANY
DO NOT ENTER THE
OR YOU WILL FORFEIT
REMEMBER TO COLLECT BONUS
SPECIAL STATIONS



Week 3 - Playdoh Pictionary (Playdoh-tionary)

Objective: players are set into two teams of equal numbers. Each play chooses a secret card then has to make the object as stated on the card within 1 minute. Players must not speak. Teams compete to guess the most amount of correct guesses.







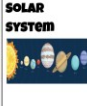




Slides:



HOW TO PLAY.

1. Team A nominates their 1st playdoh maker (PM)
2. The PM chooses 1 card from John's mystery envelope, sneakily look at the card but does not show anyone. The PM cannot speak!
3. PM has 1 minute to make the playdoh creation. John will time.
4. After one minute Team A can make ONE guess. If they guess correct they score 5 points. If they do not guess correct, Team B has a guess - if correct they score 5 points.
5. Teams continue to alternate guessing until there is a winner... first guess = 5 points, second guess = 4 points, third guess = 3 points etc.
6. The PM can only speak once the answer has been guessed. If no one guesses then 0 points.
7. Team B nominates their 1st playdoh maker and repeat the process.

Object Cards: (Sample)

GIRAFFE 	FLAMINGO 	RHINOCEROS 	XYLOPHONE 
SCOOTER 	PORCUPINE 	SOLAR SYSTEM 	ROLLER COASTER 
DOMINOES 	PLATYPUS 	SUBMARINE 	AIR PURIFIER 

Week 4 – Summer Quiz

Objective: partner work, communication, speed recall, fun

Groups: players worked with a partner to answer the 20 Summer Quiz questions. Fasted player to answer on the iPad scored the point.

Slides:

