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#260218-100607 "Use of LEGO® Serious Play® and other working approaches in youth in Hong Kong," the International Journal of Game-Based Learning (IJGBL)

Abstract: This research explores the possibility of providing a general guideline for the use of LEGO® Serious Play® (LSP) in youth work and examining the experiences of the frontline youth workers in Hong Kong who have adopted LSP to engage youngsters, who have been experiencing enormous socioeconomic challenges in different aspects. A 12-session workshop applied into social training for Special Educational Needs (SEN) secondary students within 12 sessions was held with the major objective of enhancing their communication skills. All sessions were divided into three parts - introduction, utilization and expression. Most participants' ability in oral description and word usage had been improved upon completion of the workshop, and they have more motivation and initiation in communicating with others in the group. LSP could thus be proven as a useful method in the SEN workshop in terms of establishing rapport and relationships, expressing the participants' thoughts, as it has provided an alternative for trainers to support the kids concern. Apart from LSP, this research has also found that other approaches such as snorkeling, adventured-based counseling and Cognitive Behavioural Therapy (CBT) could also be effective approaches adopted by practitioners to support the young people.

Keywords: LEGO® SERIOUS PLAY®; LSP; Youth Development; Creativity; Resilience; Problem Solving; Career Planning

1. Introduction Youth Challenges

The youth (or adolescents) are one sixth of the world population (World Health Organization, 2017b). Globally, 21st Century youth commonly suffer from low motivation, lack of life goals, intense competition, low self-esteem, juvenile delinquency, and limited upward mobility. According to the World Health Organization (2017a), several concerns on major health issues related to youth such as mental health, alcohol and drugs, tobacco use, and early pregnancy and childbirth, have also been addressed.

The larger context of youths in Hong Kong

The wellbeing, prospects and views of the young people in Hong Kong have been the concerns of policymakers, social service providers and the young people themselves in the past two decades since the transfer of Hong Kong's sovereignty from Britain to China in 1997. Hong Kong has undergone a poignant economic restructuring in which the upward social mobility of less well-off groups is stagnated in growing competition in education and employment. Ever since the outbreak of the Umbrella Movement in 2014, problems related to youths have drawn more attention from the public. Some people blamed the insufficiency of youth work for causing the outbreak of this largest popular political movement in Hong Kong's history, and suggested to allocate more resources to them (Wong et al., 2016). This section will explore the whole picture of Hong Kong youths in the challenges and uncertainties for the Hong Kong youths in the aspects of inequality in education, and unfavorable employment situations.

Educational inequalities

The key concern of educational inequality in Hong Kong is the intergenerational transmission of

economic and cultural disadvantages from parents to their children, which have been proven by previous studies on differences between families with more access to economic and cultural resources and families with limited access. For example, Ip (2014) found that in 2001 and 2011, the positive impact of family economic and cultural resources was significant on the enrollment of young people in both local and overseas university degree programmes. Young people whose parents have lower income and educational attainment were found to have fewer opportunities in receiving university education than their counterparts whose parents were of higher income and educational attainment. The youths of parents with lower income and educational attainment tend to face higher levels of inequality and more disadvantages. Chiu and Lee (2016) pointed out that family socioeconomic status could make difference to how well they could achieve in that subject. In the long run, the government should adequately increase the number of subsidized university spaces to enable more Hong Kong youths to attain university education, and to lower their burdens in educational expenses, especially for those youths from grassroots families (Ip & Chiu, 2016).

Unfavorable employment situations of the youths

Over the decade or so, the youths in Hong Kong have been suffering from low wages, limited choices in the job market, and working poverty in 2014, the unemployment rates for the age 15-19 and 20-24 cohorts were two to three times higher than the overall unemployment rate of Hong Kong. At the same time, the wage level for the 15-19 cohort dropped in 2013. These have revealed that the wage level of young people is continuously under pressure in the job market, and that will affect their ability to become economically independent (HKFYG, 2015). In fact, Hong Kong's economy has been improving in recent years, but young people are still encountering a lot of hindrances in job seeking and workplaces. However, Yu and Zhong (2012) pointed out several flaws associated with Hong Kong's workfare and employment support programmes that might not tackle youths' needs and challenges. They found that many youth participants of the schemes could not earn enough to support a reasonable standard of living, that could bring them into the scenario of "working poverty". Accordingly, they would lose interest in working under the workfare schemes and re-enter the social security net. These workfare schemes supposedly introduced to empower the youth would thus become ineffective. Moreover, these schemes had encouraged employers to only hire participants of the workfare schemes rather than making more positions available to create a long-term and sustainable working environment for young people in need (Yu & Zhong, 2012). The government thus has an unshrinkable responsibility in formulating a better policy to facilitate youth's career development and life planning (Ip & Chiu, 2016).

Generally speaking, the review of literature reveals that the education and social service sectors in Hong Kong have been working hard in setting up intervention programmes and measures to tackle the difficulties that young people are facing in different aspects aiming to equip and empower them to be more confident on the way to face future challenges and developmental needs. The government fails to connect these youths and the labour market and match them with the fields and positions that are suitable to them. Also, many of these youth interns are not well trained or well treated by employers. The following section briefly describes the efforts of different approaches that have been implemented to support the youths in facing the challenges.

Different working approaches in tackling youth problem

To help young people, many different interventions have been applied to engage them in preventative education, developmental training, and remedial treatments. Such approaches have included adventure-based training, sport programs, arts programs, narrative therapy, cognitive behavioural therapy, and volunteering for community services.

Adventure-based training

Adventure-based training is proven to encourage positive development in young people. Moote

and Wodarski (1997) reported that 16 of the 19 studies had proved the positive impact of adventure-based counselling approach on the participants. It can enhance the physical, social and intellectual growth of the participants significantly. Carlson, & Cook (2007) found that the self-efficacy, social responsibility and confidence of seriously ill adolescents can be enhanced and developed through adventure-based counselling.

Sport programs

Fraser-Thomas, Côté, & Deakin (2005) addressed that sport programs for youth can decrease the risk of problem behaviours such as delinquency and drug use and foster positive youth development including competence, confidence, character, connections, and compassion/caring. Gould & Carson (2008) reviewed that people's life skills could be acquired through sports.

Arts programs

Art has been used as a means to engage youths in many places. For example, in Chicago, children and youth's sense of belonging and trust can be developed through art-programs (Sutherland, Waldman, & Collins, 2010).

Narrative therapy

Freeman, Epston, & Lobovits (1997) expressed the important influences of narrative therapy for children and their families. Through narrative approaches, the children can control their tempers, channel their frustration and face fears.

Music

Engaging youth through music is found to be especially successful with youth at risk in some regions such as Hong Kong. Rap music is beneficial for empowering youth as well as lifespan development (Travis, 2013).

Cognitive behavioural therapy

Cognitive behavioural therapy is commonly used for different targets. A study from Cohen, Mannarino, Kliethermes, & Murray (2012) proposed practical strategies for applying Trauma-Focused Cognitive behavioral therapy to help youth with complex traumas as many suffered from regulation problems in areas like cognition, attachment, and perception.

Volunteering for community services

Volunteering for community services is another common approach to inspire positive development in the youth (Ling, 2018). A local study from Ling & Chui (2016) reported that students who were involved in volunteer services had a higher sense of personal and social responsibility and is more willing to volunteer. Students can learn different things with different level satisfaction according to their roles involved in community service (Ling & Chui, 2018). Another study from Meinhard & Foster (2006) stressed that volunteer community service programs can enhance students' self-esteem.

The approaches that we have mentioned above can bring various benefits to young people to certain extents, according to the observation and assessment of researchers. Apart from the plethora of options available, there has been an increasing popularity in the use of LEGO® Serious Play® (LSP). It is the core working approach that we are going to explore in this article.

2. Literature Review

2.1 What is LEGO®?

LEGO® is a line of plastic construction toys that are manufactured by The Lego Group. It was invented by carpenter Ole Kirk Christiansen in 1932 in Denmark, and further developed and promoted around the globe since then. LEGO® has different sizes and shapes such as ordinary bricks and Duplo®, which are suitable for nearly every age group to play. The major characteristic of LEGO® bricks

is that they are interlocking, which means they are structured to be combined or dissembled without using another medium of connection such as glue (Said, Roos, & Statler, 2001). Moreover, they are composed of different colours and featuring bricks such as mini-figures, Mindstorms® and Technics® which allow ideas to be expressed through construction of models. (Lauwaert, 2008)

2.2 LEGO® SERIOUS PLAY®

LEGO® SERIOUS PLAY® methodology is built upon a process which rooted deeply from LEGO®. It originated in 1996 and was invented by two professors, Johan Roos and Bart Victor, while the LEGO® Group was searching for alternative ways to save their endangering business. They believed that the process of giving meaning and installation of values from the model building process can elicit the potentials and hidden connections between elements. The related strategies were named LEGO® SERIOUS PLAY® (Lissack, 1999). The LEGO Group has especially designed four sets of bricks for adopting this methodology, namely the window exploration bag, starter kit, identity and landscape kit and connections kit. Each kit has its own number and choice of bricks for different purposes. The guidelines for LEGO® SERIOUS PLAY® are open source, yet in order to become a certified facilitator, one has to attend the certificate facilitator courses and buy the needed materials to conduct LEGO® SERIOUS PLAY® workshops.

LEGO® SERIOUS PLAY® workshops can be summarized by the following sequence that is indicated in Figure 1:



It all starts with a skill test, to warm up and break through the mental barriers by building models through simple model copying. Then questions will be posted by the facilitator to the participants. The questions will be related to the specific topics and interests of the workshop. Participants will be allowed limited time to construct their models with full access to the materials given. Sharing will be facilitated after each round of construction to ensure 100% involvement. The cycle repeats until the facilitator does not have further questions. Reflections and feedbacks will be consolidated and at last, participants will be asked to create a short bring home message after each session (Nolan, 2010; Peabody, 2015).

2.3 Philosophy of LEGO® SERIOUS PLAY®

Suitable for everyone

LEGO is designed for every person aged 0 -99. There is no background or age limit to joining a LSP workshop as long as there is a problem, and the potential participants are motivated to deal with it.

No formula fits for all

Every brick fits perfectly with one another, no matter what their sizes, shapes and colours are. The dot-pattern of LEGO® brick has never been changed. Although each box set has a different combination of bricks designated for building a particular model, everyone can create whatever they like with bricks without a manual. There are no standard patterns or protocols to follow in dealing with problems as problems can come in any forms and levels. Participants have to search for his/her own resources that seem fit and useful in formulating solutions to the problems (Carey, Philippon, & Cummings, 2011).

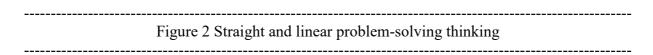
Participants know themselves best

People seek help when they have a problem yet do not know how to solve it (Dexter, 2011). It is believed that the participants of LSP workshops have the ability and resources to solve the problems

and yet are looking for solutions to unleash the potentials (Rosinski, 2003). The answers of the problems have to be found by the participants, no solutions will be provided by the facilitator in any form (Lam, 2016; Whitworth et al., 1998).

Straightforward paths to goals seldom exist in reality

Every model building process begins with the combination of any two bricks with hands, the ideas in the mind have to be worked out through hands and experiments. Throughout the LEGO® model building process, people may change and improvise the way they build when they spot or sense something different. In real life, different plans are made to achieve different goals. Some may think problem-solving is a linear process (i.e. There are steps to follow and it is possible to have a perfect plan at the beginning of solution brainstorming as shown in Figure 2).



In reality, plans usually have to be modified or changed as unexpected circumstances will arise during the course of solving problems. The situation is similar to hiking up to the mountaintop, it is easy to draw a straight line from the map, but it is never the case when you actually follow the trail. The phenomenon is even more prominent when the goal is big, that the time frame aims for a more distant future, or when the level of complexity is high. This type of solution generation process is called Plan-Do-Plan-Do process and illustrated in Figure 3 which is more realistic and practical in solving problems.



In recent years, LSP facilitators in Hong Kong have applied LSP to youth work for a wide range of programs that focus on creativity, resilience, career planning, problem solving, and stress management amongst other life skills. They found that the use of LSP was an effective medium for engaging youths due to its unique qualities such as its toy-like aesthetic which gives a sense of accessibility and familiarity. Those qualities provide a projective space for their imagination allowing the youth to model, and then make sense of, the world through LEGO[®]. This gives LSP an edge to gain traction in all manners of youth work.

This report explores this trend by providing a general guideline for the use of LSP in youth work and gathering the frontline experiences of youth workers who have used LSP to effectively engage their youth. The suitability of LEGO® compared to other materials, the pros and cons, and additional advices will be presented as reference materials for other youth workers considering LSP for their work. The experience of frontline youth worker and trainers will be presented in the following section.

Applications of LEGO® SERIOUS PLAY® on Youth I. LEGO® SERIOUS PLAY in Creativity Training

The Government of the Hong Kong Special Administrative Region (HKSAR) stated in a publication that "Creative industries are important economic drivers for Hong Kong. They help to increase the innovation capacity of the economy and can be a powerhouse for future economic growth" (Hong Kong Government of Special Administrative Region, 2016b).

The Innovation and Technology industry is one of the key economic areas that the Government seeks to further develop. Some policies and initiatives have been taken by the Government to promote and support the industry.

Establishment of Innovation and Technology Bureau

Formally established on 20 Nov 2015, the Innovation and Technology Bureau (ITB) is responsible for formulating holistic policies relating to innovation and technology. A 500-million Technology Voucher Programme (TVP) was launched in Nov 2016 on a pilot basis under the Innovation and Technology Fund (ITF) to subsidize Hong Kong small and medium enterprises (SMEs) for developing technological solutions to improve productivity or upgrade their business processes.

Schools in Hong Kong do not favor the cultivation of creativity

The HKSAR Government is putting much effort into motivating creative industries and supporting the innovative development of businesses (Hong Kong Government of Special Administrative Region, 2016a). So where do the talented people come from? Does our education system train students' creativity? Hong Kong students have been provided sufficient resources, but they are not encouraged to think critically. A research led by Professor Samuel Leong, Head of Department of Cultural and Creative Arts at the Education University of Hong Kong (former name: The Hong Kong Institute of Education) raised a concern that Hong Kong's workforce lacks creativity. Securing a sustainable and creative future for Hong Kong appears to be challenging. Responding to the problem, more schools are entrusting external parties to provide creativity training to teachers and students.

LEGO® SERIOUS PLAY® can unleash Creativity

If one wants to find a training program with not only creative tools, but also content that can facilitate creativity, there are not many choices available. LEGO® SERIOUS PLAY® (LSP) is a new methodology which can facilitate thinking, communication and problem-solving technique. It is suitable for individuals, teams and organizations.

By using 3D LEGO® models, participants can free up their brain capacity for idea generation and innovation thinking. "Thinking by Doing" is the basic principle of LEGO® SERIOUS PLAY®. It can lead to breaking habitual thinking patterns, unleashing creativity, and creating a safe and open environment that allows people to formulate and develop new ideas.

Design Thinking with LEGO® SERIOUS PLAY®

LEGO® SERIOUS PLAY is a methodology to facilitate the thinking and discussion process, so sometimes it would be beneficial to adopt it with another theory to deliver training on a specific topic. Design thinking is one of the supporting theories when we deliver creativity training. The linkage between Design Thinking & LEGO® SERIOUS PLAY® can be as demonstrated:

- 1. Analyze and solve problems,
- 2. Create value in limited resources,
- 3. Facilitate constructive dialogue and
- 4. Develop a set of simple guiding principles

Design Thinking is a design methodology that provides a solution-based approach to solving problems. It is extremely useful in tackling complex problems that are ill-defined or unknown, by understanding the human needs involved, by re-framing the problem in human-centric ways, by creating many ideas in brainstorming sessions, and by adopting a hands-on approach in prototyping LEGO® and testing. Understanding these five stages of Design Thinking will empower anyone to apply the Design Thinking methods in order to solve complex problems that occur around us —in our companies, in our countries, and even on our planet. The Process of Design Thinking is indicated in Figure 4.

Figure 4: Process of Design Thinking
Reference: www.nngroup.com/articles/design-thinking

Creative means interact with young people

1. LEGO® Mini Figure

It is an ice-breaking game, which can let the participant get ready to use LEGO® for learning and engage with other teammates. Through the game of "Rock-paper-scissors", the participants will exchange the parts of LEGO® Mini Figure. The mission is to make as many complete LEGO® Mini Figures as possible.

This is a mini game using LEGO® figures which can let the participants engage with others easily in a fun environment to bring out the importance of innovative mindset and team work, and facilitate the participant to understand the Key Motivation Factor for innovation.

Learning Points

- Better outcomes emerge from team cooperation rather than competition
- In order to see the big picture, one should broaden their views from an individual angle to a team angle
- The Key Motivation Factor for innovation will be explained to the participants in order to let them understand the tendency of how they are motivated.

2. LEGO® SNOW SCREW Game

By using LEGO® to create new perspective, participants can differentiate creativity from innovation. All participants act as the Manager cum engineer of a snow mobile company to design their snow mobile model.

- Description Imagination (new Model: Make sense of the world)
- Creative Imagination (new Product: See what is not there)
- Challenge Imagination (new Market: Use destructive imagination)

Learning Point

- Responsibility of innovation: How to become a creator of their career rather than a victim of the environment.
- People tend to blame the policy, the company, the supervisor, and the customers instead of learning how to respond to those issues with active actions and be the person in charge of the results.
- This section is to facilitate participants to shift the responsibly from the others to themselves.

II. LEGO® SERIOUS PLAY® in Career planning

Career planning is another crucial area of youth work in response to the fast-changing environment. In Hong Kong, the Education Bureau promotes career skills training or career planning workshops. The aim of career planning is to enable the youth to explore and understand the job market, setting clear and attainable goal for their career, and to prepare them to make decisions on their own choice of career. LEGO® SERIOUS PLAY® is an effective tool to carry out career planning with youths in four key aspects, namely self-understanding, goal setting, career preparation and understanding of external factors.

LEGO® SERIOUS PLAY® methodology can be adopted to elicit self-understanding by building and debriefing an individual model. During a LSP workshop on career planning, youths will be asked at an early stage to build a model to describe themselves. They can use any form and any number of LEGO® bricks to construct their model representing their strengths, personality and characteristics. The facilitator will invite the participants to explain how the personal traits are identified in the model. Next, the facilitator can post questions to further enrich the self-understanding experience by asking follow-up questions, such as what skills or talents they want to equip themselves with or if there is any improvement they want to make on the model. This move can raise the youth's awareness of their

inner resources and self-images.

Next, the facilitator will invite the participants to build another model of their future career. Each youth is first asked to imagine an image of his/her most wanted job and then build the model representing it. Youths will be required to build the model in detail and explain why they want to be in that career. The facilitator will ask and supplement necessary information about particular jobs to enrich the participants' knowledge of them.

Upon completion of the two separate models (the individual and the most wanted job), it is time to connect them together. There are three moves in the LEGO® SERIOUS PLAY® methodology for making linkages. The first one is "spacing". The participants will be asked to place their two models with the estimated distance which represents the actual gap separating the future and current status. After settling the spacing, the participants are asked to build "agents" which are factors that may affect the accomplishment of the career they want. There is no limitation on the number of agents, but they will be required to follow the "spacing" rule which means they have to estimate how far or close these factors are. Youths will be asked to explain these agents and modify the spacing if needed. Finally, the last move is "linkage". The youths will be asked to connect different agents and models together with the bricks or materials they think best represent the actual linkage between them. The facilitator will ask the youths to test and experience the tensions of the linked models.

LEGO® SERIOS PLAY® enables youths to visualise and experience their career planning by actual building and linking of models. It is far more effective than educational talks or traditional career skills training with paper and pencils.

III. LEGO® SERIOUS PLAY in the Counselling

Counsellors need to facilitate expressions during counselling session. However, counsellor like Mountford (2009) proposed that clients who have experienced post-traumatic stress, lose-lose choices, bereavement, and childhood deprivation are not always ready to collapse into conditions of worth issues. It is suggested that debilitating conditions of worth are associated with much client distress (Mountford, 2009) which might hinder the process in counselling. When the counselling setting moves to the local Hong Kong context, participants are reluctant or not capable of expressing their feelings within groups or individual sessions.

In order to facilitate the counselling process, tools are always used to enhance the possibilities of counselling. Marleen Diekmann Schoemaker & Guus van der Veer (2003) experienced that drawing diagrams may help to visualize the person involved, coins and buttons can also be used, but they have learned to work with DUPLO® or LEGO®. The LEGO® mini figures come in numerous forms and facial expressions, with different hair and skin colors which make representation easy, e.g. parents, their neighbors, etc. (Schoemaker & Guus van der Veer 2003). In this case, LEGO® acts as another language for clients to use during the counselling process. It is always easy to use because no cost is involved in alteration or modification in the model. It is also easy to use as symbols and metaphors. Campbell & Ungar (2004) also suggested that LEGO® blocks are similar to the nature of narrative career counselling as they either can be assembled or reassembled in multiple ways.

How LEGO® SERIOUS PLAY® facilitate the counselling process?

LEGO® SERIOUS PLAY® is a facilitation method originally designed to enhance business performance through building with LEGO® bricks in 2010. However, the Window Exploration Bag in LEGO® SERIOUS PLAY® includes elements that are essential to the counselling process. The Window Exploration Bag is designed for one person to use in order to learn the basic principles and skills

of the LEGO® SERIOUS PLAY® method. It consists of a small selection of standard bricks representing multiple colours and shapes, special bricks and mini figure parts. To be exact, it comprises of transparent bricks, flag, mini figure, kinetic part, flower and plant-alike bricks which are usually used as projection of one's inner thoughts.

During the beginning of the counselling process, a participant will always be invited to use the Window Exploration Bag to build a tower randomly. Later on, the counsellor will invite the participant to give meaning to the tower, for example, using it to introduce him/herself or convey his/her feeling on that day. Later on, the participant will be invited to use the same set of LEGO® to build a model to represent his/her personality. The representation always starts with simplicity and low ambiguity. By repeating the process, participants generally can become familiar with the representation process within one session. LEGO® is used as a symbol and tool to deepen the conversation. If the following session is after a week or so, it will be very useful to use the same Window Exploration Bag as warm up and go back to the previous conversation if needed. Counsellors can make use of the colours, shapes, positions, sizes and used parts as an opening to further explore the inner thoughts of participants, but can never only rely on the model to understand a person.

LEGO® SERIOUS PLAY® is not only applicable to individual counselling, it also works in group work. During group work, it is always hard to create a common ground for participants to express their thoughts and feelings. The diversity and nature of LEGO® and the composition in the Window Exploration Bag create an easier way for counsellors to open and deepen conversations. Thus, it is useful in the counselling room for counsellors to further explore interpersonal and intrapersonal issues.

IV. Students with special educational needs - Using LEGO® SERIOUS PLAY in Hong Kong

As previously described, the LEGO® SERIOUS PLAY® is designed for the business model initially. Through a series of methods and materials in LEGO® SERIOUS PLAY®, business performance can be enhanced. The most fascinating fact is that people can explore themselves and their relationships with others and the world, as well as gain awareness of the possibilities through LEGO® SERIOUS PLAY® materials and methods. Simultaneously, the LEGO® SERIOUS PLAY® methodology also applies to different types of people such as children, adolescents, adults, couples and the elderly. However, there are few studies supporting its effectiveness in official writing in Hong Kong.

SEN characteristics

In Hong Kong, major types of Special Educational Needs (SEN) include hearing impairment, visual impairment, physical disabilities, intellectual disability, attention deficit/ hyperactivity disorder (ADHD), autism spectrum disorders (ASD), speech and language impairment, as well as specific learning difficulties. In schools, students with SEN may perform with functional limitations resulting from their physical or psychological conditions. For example, they may have difficulties in communication with schoolmates or in acquirement of knowledge or skills in studying. The Hong Kong Education Bureau Department (EBD) provides special arrangements for students with SEN in examinations and assessment accommodations (2015). Apart from special arrangements, school and the EBD also provides a variety of training and materials for SEN students in order to ensure the generation of a better environment in growth and personal development (2004).

The following section records and illustrates the effectiveness of the LEGO® SERIOUS PLAY® methodology workshop applied into social training for Special Educational Needs (SEN) secondary students within 12 sessions. The aim of this training was to enhance their communication skills.

Background of Contents of training

Participants included a group of 10 secondary students who were below aged 15 with both genders. Most of them were diagnosed with ASD or ADHD. All participants had been referred by teachers who reported that students had problems in behaviours, including difficulty in playing with others, failure to interact, or not understanding social communication. Due to their behavioural problems, they had failed to establish normal and healthy relationships with others in their school life. The workshop aimed to assist them in establishing their personal communication patterns gradually and enhancing their motivation and initiation of learning. Two therapists were recruited for the workshop. One was a speech therapist and another was a therapist with LEGO® SERIOUS PLAY® facilitation qualification. They were responsible for designing and conducting the workshop.

Methods

Using LEGO® bricks as materials, it was a radical, innovative, experiential process designed to enhance participants' performance. It was believed that participants could utilise and contribute to the discussion, the decision and the outcome by using the LEGO® bricks. All sessions were divided into three parts - introduction, utilization and expression. "Introduction" was about introducing oneself to others. And part two was about utilizing LEGO® to build different models of specific topics. The last part "expression" was about describing the models and sharing opinions with others. Through the 12 sessions, participants had the challenges of establishing and enhancing their new patterns to communicate and exchange ideas with others.

Results

The whole assessment was conducted and observed by therapists in an on-going process of all sessions. Initially, participants appeared to have little motivation in expressing their thoughts or used inappropriate words to describe their thoughts. However, changes in participants' behaviours and relationships were observed after they had completed the training. Most participants' ability in oral description and word usage had been improved. And they were observed to have more motivation and initiation in communicating with others in the group, as well as commitment in play and work environments.

Implications in future

Using the LEGO® SERIOUS PLAY® methodology in the workshop for SEN students, positive changes of participants were observed but some limitations still existed. LSP was proven to be a useful method in the SEN workshop in terms of establishing rapport and relationships, expressing the participants' thoughts. Under the concept of "learn from play", participants enjoyed learning different communication skills for building relationships with others through playing. However, this workshop was by no means an official research to testify the effectiveness of LEGO® SERIOUS PLAY® for SEN kids. In the future, it is believed that more opportunities will arise for more studies and research on the effectiveness and efficiency of LEGO® SERIOUS PLAY® in different fields.

Applications of other approaches on Youth

Apart from LEGO® SERIOUS PLAY®, three approaches including snorkeling, adventure-based training and CBT in working with youths in Hong Kong will be introduced.

I. Application of Snorkeling in developing youth in Hong Kong What is snorkeling

Snorkeling is a water activity. It is like swimming that one floats and moves on the surface of the water, but the person is equipped with a diving mask and a snorkel, sometimes with swim fins as well. Most of the time, people do snorkeling because they want to observe marine lives their natural habitats.

Every summer youth centres in Hong Kong organize numerous activities covering different aspects, such as sports, music and arts, to recruit youngsters. Among sports activities, snorkeling is always one of the favorite choices for both youngsters and the organizers.

Benefited by suitable weather and environment, there are a number of seashores in Hong Kong where we can find coral reefs. Though some of the coral reefs areas were significantly destroyed during the industrial development period in 1970s – 1980s, with increasing environmental protection efforts, setting up of government policies as well as the diminishing of the industrial economy, it is found the coral reef habitats in Hong Kong have been greatly improved in the past 20 years.

Seashores are easy to access in Hong Kong, with some of them within a 45- minute ride from the nearest towns. Because coral reefs live in the swallow water, participants can easily observe the coral reefs and different creatures by snorkeling. In Hoi-ha Marine Park, one of the most popular snorkeling spots in Hong Kong, the coral reefs area is just beside the pier, that one can just jump into the water and find those corals.

Snorkeling is not complicated. Participants do not need to go through a lot of different training in order to start having fun with it. Newcomers can learn and master basic skills within an hour, even if they are not good swimmers.

More importantly, snorkeling can benefit our youngsters in many ways:

- i. Building confidence by new experiences using diving mask and snorkeling, breathing with the mouth instead of the nose, observing marine lives, communicating with hands and body language (as it is impossible to talk wearing face-masks) etc. are all new experiences to youngsters. They can learn and build up confidence by having more successful experiences.
- ii. Exploration and curiosity participants do a lot of exploration. They move along the seashore and look for different creatures including some potentially dangerous ones. They never know what they will observe until they actually set eyes on them.
- iii. Breaking through the comfort zone for starters, snorkeling needs courage. They will have a lot of breakthroughs in the whole journey.
- iv. Learning communication and cooperation as they cannot talk with their face masked, participants have to discuss their plan before snorkeling and need to communicate by hand signals or body language during the process.
- v. Learning to protect the environment With the fascinating experience and beautiful photos taken, participants firmly remember the process. Most of the time, environmental protection concepts will be taught during snorkeling activities. The more they know of the beauty of the natural environment, the more they will be concerned about protecting it.
- vi. Enhancing parent-child relationship Parent-child snorkeling activities can be organized. It is a good time for the family to communicate, cooperate and gain memorable experience together.
- vii. Good for health like other sports, snorkeling is beneficial to both physical and mental health.
- viii. Career snorkeling is a very good start point for diving sports. And some youngsters who started learning water sports by snorkeling have become diving instructors eventually.

II. Application of adventure-based training in addressing youth problem

Adventure-based training is commonly adopted to address youth problems and foster positive youth development. A local study showed that school children who were participating in adventured-based training programs were reported to have fewer depressive symptoms, lower anxiety level and stronger self-esteem (Li, Chung & Ho, 2012). Their study supported that adventure-based training can promote the psychological well-being of school children in Hong Kong effectively. Another local study from Lo, Wong, and Ma (2005) found that the self-confidence and team spirit of immigrant youth can be enhanced through adventure-based training, with physically challenging and group problem-solving

exercises. They can try to break through their limitations. Shek & Ng (2015) expressed that the combination of adventure based counselling and voluntary training and services can address the psychosocial needs of the adolescent.

Some secondary schools and several camp sites managed by NGOs in Hong Kong had their own facilities such as climbing walls and ropes courses that can allow people to experience adventure-based training (Beames, & Brown, 2005).

Several concepts such as challenge by choice and comfort zone would be commonly used when the trainers provided adventure-based training or counselling to the young people. The quality of the program design and trainer drew attention from the practitioners and researchers (Beames, & Brown, 2005, Shek & Ng, 2015).

III. Application of CBT in addressing youth problem

A study showed that adolescents with a negative problem orientation tend to view a problem as a "threat" to wellbeing (Cheng & Lam, 1997). They tend to blame themselves for causing the problems, lack confidence in solving the problems, and have a wrong belief that problems are so difficult to solve and there are no other possible alternatives that might be generated to solve the problem (Kwok & Shek, 2009).

Many agencies in Hong Kong have tried to put their effort in building the youths' problem solving skills for better resilience. They use different strategies for providing interventions to youth as well as their parents. One of the most common means is Cognitive Behavioural Therapy (CBT) or Cognitive Therapy (CT). CBT or CT is adopted in preventing different youth problems such as suicidal attempts, gambling problems, mental health and substance abuse (Wong, Ng, Ip, Chung, & Choi, 2017; Wong, 2011; Wong, 2013). The frontline social workers have applied findings such as the Beat Drug Fund, Community Chest and Hong Kong Jockey Club Charities Trust to launched different projects using CBT to tackle the uprising youth problems. Although different projects have their own target service recipients and objectives, they usually follow similar sequences in setting up the treatment protocols.

Firstly, the basic concept of CBT and the "ABC" cycle, which is antecedent, beliefs and consequences, will be introduced. This basic concept is illustrated by the social worker and then the youths are invited to construct their personal scenarios. This step is to enhance the awareness towards their own emotion responses and to empower the youths that they can change their behaviour by adopting other beliefs. Next, youths are asked to identify the root causes of their problems, which may be an exaggerated automatic thought. Upon defining the causes, they are invited to generate possible alternatives. During this stage, the youths can be very creative and are free to generate their ideas without boundaries. After the brain storming process, youths are asked to evaluate each idea on whether they are practical and effective in solving the problem. Finally, they are asked to practice the generated solutions and feedback on the next session.

Several agencies like the Hong Kong Council of Social Services, The Hong Kong Jockey Club Centre for suicide Research and Prevention and Caritas Hong Kong have uploaded their CBT treatment protocols in helping different needed youths to enhance their problem solving ability (Wong & Sun, 2003; Wong, 2013).

Conclusion

Hong Kong might not be the best place for the young people to respond to the difficulties with sufficient confidence and resilience. They are facing educational inequalities such as insufficient university places for all eligible secondary school graduates, the impact of intergenerational transmission

of socioeconomic disadvantages, and undesirable career prospects and working environment such as low wages, ineffective employment support programmes, and unfavorable requirements on previous work experiences. Based on the above examples in Hong Kong, LEGO® SERIOUS PLAY® can be applied in different areas of such as creativity, counselling, career planning and special educational needs. It is an effective and innovative tool for different trainers and practitioners to facilitate changes in youth and address their needs and problems.

For the sake of sustainable development of LEGO® SERIOUS PLAY®, more platforms for discussion and experience sharing among the trainers should be launched and developed. In addition, further empirical research should be conducted to assess the impact of LEGO® SERIOUS PLAY® on youth and other target groups both quantitatively and qualitatively.

LEGO® is one of the most influential and well-known products in the world. LEGO® has its special attributes that can attract young people. The establishment and development of LEGO® SERIOUS PLAY® provided one more option for trainers. According to the practice experience of certified trainers, LEGO® SERIOUS PLAY® is a useful and effective tool to respond to the needs of the youth. Apart from LEGO® SERIOUS PLAY®, this article also highlighted the importance of using adventure-based training, snorkeling and Cognitive behavioural therapy to address youth problems and develop potentials of the young people in Hong Kong.

Reference:

- Beames, S., & Brown, A. (2005). Outdoor education in Hong Kong: Past, present and future. *Journal of Adventure Education and Outdoor Learning*, 5(1), 69-82.
- Carey, W., Philippon, D. J., & Cummings, G. G. (2011). Coaching models for leadership development: An integrative review. *Journal of Leadership Studies*, *5*(1), 51-69. doi:10.1002/jls.20204.
- Carlson, K. P., & Cook, M. (2007). Challenge by choice: adventure-based counseling for seriously ill adolescents. *Child and adolescent psychiatric clinics of North America*, 16(4), 909-919.
- Chan, D. W. (2001). Reframing Student Counseling from the Multiple-Intelligences Perspective: Integrating Talent Development and Personal Growth. *Asian Journal of Counselling*, 8(1), 69-85.
- Cheng, S., & Lam, D. (1997). Relationships among Life Stress, Problem Solving, Self-Esteem, and Dysphoria in Hong Kong Adolescents: Test of a Model. *Journal of Social and Clinical Psychology*, 16(3), 343-355.
- Cohen, J. A., Mannarino, A. P., Kliethermes, M., & Murray, L. A. (2012). Trauma-focused CBT for youth with complex trauma. *Child abuse & Neglect*, 36(6), 528-541.
- Chiu, S. W. K., & Lee, T. L. (2016). General education, academic achievement and class. In S. W. K. Chiu, J. Ip, & H. Li (Ed.). *Restless youth: Observations of the situation of younger generations in Hong Kong*. Hong Kong: Chung Wah Books (In Chinese), pp. 18-36 (In Chinese).
- Dam, R. & Siang, T. (2017). 5 Stages in the Design Thinking Process. Retrieved from https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process
- Dexter, J. (2011). An introduction to coaching. Los Angeles, CA: SAGE.
- Fraser-Thomas, J. L., Côté, J. & Deakin, J. (2005). Youth sport programs: an avenue to foster positive youth development. *Physical Education and Sport Pedagogy*, 10(1), 19-40.
- Freeman, J. C., Epston, D., & Lobovits, D. (1997). *Playful approaches to serious problems: Narrative therapy with children and their families*. New York: WW Norton & Company.
- Gould, D., & Carson, S. (2008). Life skills development through sport: current status and future directions. *International Review of Sport and Exercise Psychology*, *1*(1), 58-78.
- HKSAR EDUCATION BUREAU. (2004). *Information Sheets on Homework and Assessment Policies*. Retrieved from http://www.edb.gov.hk/en/curriculum-development/major-level-of-edu/special-educational-needs/supporting-resources/index.html

- HKSAR EDUCATION BUREAU. (2015). Special Arrangements for Internal Examinations for Students with Special Educational Needs. Retrieved from http://www.edb.gov.hk/attachment/en/curriculum-development/major-level-of-edu/special-educational-needs/supporting-resources/SpecialExamArrangement_(eng)_29012013.pdf
- Hong Kong Government of Special Administrative Region. (2016a). *Government Support for Innovation & Technology*. Retrieved from https://www.gov.hk/en/residents/communication/government/innovation.htm
- Hong Kong Federation of Youth Groups (HKFYG). (2015). *Youth trends in Hong Kong 2015*. Hong Kong: Author (In Chinese).
- Hong Kong Government of Special Administrative Region. (2016b). *Hong Kong: The Facts Creative* Industries. Retrieved from https://www.gov.hk/en/about/abouthk/factsheets/docs/creative_industries.pdf
- Kwok, S., & Shek, D. (2009). SOCIAL PROBLEM SOLVING, FAMILY FUNCTIONING, AND SUICIDAL IDEATION AMONG CHINESE ADOLESCENTS IN HONG KONG. *Adolescence*, 44(174), 391-406.
- Lam, P. (2016). Chinese culture and coaching in Hong Kong. *International Journal of Evidence Based Coaching and Mentoring*, 14(1), 57-73.
- Lauwaert, M. (2008). Playing outside the box—on LEGO toys and the changing world of construction play. *History and Technology*, 24(3), 221-237.
- Li, H. C., Chung, O. K., and Ho, K. Y. (2012). Effectiveness of an adventure-based training programme in promoting the psychological well-being of primary schoolchildren. *Journal of Health Psychology*, 18(11) 1478–1492.
- Ling, W. H., & Chui, W. H. (2016). Students' Willingness for Future Volunteering in Hong Kong. *Voluntas*, 27(5), 2311-2329.
- Ling, W. H., & Chui, W. H. (2018). The relationship between the roles of adolescent volunteers and their levels of volunteer satisfaction: A case study of Hong Kong. In E. Balashov (Ed.), *Volunteering: Attitudes, Social Influences and Gender Differences* (pp. 65–83). New York: Nova Science Publishers, Inc.
- Ling, W. H. (2018). Volunteering and participation in community service among secondary school students in Hong Kong. *The Hong Kong Journal of Social Work, 52*, 87–98.
- Lissack, M. (1999). *The Next Common Sense Mastering Corporate Complexity through Coherence*. Melbourne: Nicholas Brealey Publishing.
- Lo, T. W., Wong, S. W., and Ma. K. (2005). Supportive services for immigrant youths in Hong Kong Strategies and outcomes. *Journal of International Social Work, 48*(4), 441-453.
- Meinhard, A., & Foster, M. (2006). The impact of volunteer community service programs on students in Toronto's secondary schools. *The Philanthropist*, 20(1), 1-15.
- Marleen, D. S. & Guus van der. V. (2003). An extra language in counselling and training. *Intervention*, 1(2), 36-39.
- Moote, G. T., & Wodarski, J. S. (1997). The acquisition of life skills through adventure-based activities and programs: A review of literature. *Adolescence*, 32(125), 143-167.
- Mountford, C. P. (2009). Dr. Rogers and the Lego Spaceship: Towards a Teachable Focusing-Oriented Person-Centred Theory. *Self & Society*, 35(5), 7-17.
- Nolan, S. (2010). Physical Metaphorical Modelling with LEGO as a Technology for Collaborative Personalised Learning.
- Ip, J. (2014). The expansion of university spaces and inequalities in education: The situation of Hong Kong, 2001-2011. In S. W. K. Chiu, H. H. M. Hsiao & P. S. Wan (Ed.). *Near neighbours: Issues in Taiwan and Hong Kong societies*. Hong Kong: Hong Kong Institute of Asia-Pacific Studies, CUHK, pp. 79-107 (In Chinese).
- Ip, J., & Chiu, S. W. K. (2016). "Downward" youths? Objective conditions and subjective feelings. In S. W. K. Chiu, J. Ip, & H. Li (Ed.). *Restless youth: Observations of the situation of younger generations in Hong Kong*. Hong Kong: Chung Wah Books (In Chinese), pp. 54-67 (In Chinese).

- Purton, C. (2004). *Person-Centred Therapy The Focusing Oriented Approach*. Basingstoke and New York: Palgrave Macmillan.
- Rosinski, P. (2003). Coaching across cultures new tools for leveraging national, corporate and professional differences. Yarmouth, Me.: Yarmouth, Me.: Niholas Brealey Pub.
- Travis, R. (2013). Rap Music and the Empowerment of Today's Youth: Evidence in Everyday Music Listening, Music Therapy, and Commercial Rap Music. *Child and Adolescent Social Work Journal*, 30(2), 139-167.
- Said, R., Roos, J., & Statler, M. (2001). LEGO speaks. Imagination Lab Foundation.
- Shek, D. T. L., & Ng, C. S. M. (2015). Evaluation of programs for adolescents with greater psychosocial needs: Experience from Hong Kong. *International Journal of Child Health and Human Development*, 8(2), 193-205.
- Sutherland, J., Waldman, G. & Collins, C. (2010). Art Therapy Connection: Encouraging Troubled Youth to Stay in School and Succeed. Journal of the American Art Therapy Association, 27(2), 69-74.
- Whitworth, L., Kimsey-House, H., House, H., Sandahl, P., Sandahl, P., & House, H. (1998). *Co-active coaching*: Davies-Black Publishing Palo-Alto, California.
- World Health Organization. (2017a). *Adolescents: health risks and solutions Fact sheet*. Retrieved from http://www.who.int/mediacentre/factsheets/fs345/en/ on 1.9.2017.
- World Health Organization. (2017b). *Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation*. Retrieved from http://www.who.int/maternal child adolescent/topics/adolescence/framework-accelerated-action/en/ on 1.9.2017.
- Wong, D. F. K., & Sun, S. (2003). *Emotional management and mental health*. Hong Kong: Hong Kong University Press (In Chinese).
- Wong, D. F. K., Ng, T. K., Ip, P. S. Y., Chung, M. L., & Choi, J. (2017). Evaluating the Effectiveness of a Group CBT for Parents of ADHD Children. Journal of Child and Family Studies. doi:10.1007/s10826-017-0868-4
- Wong, F. K. D. (2011). Cognitive Behavioral Group Treatment for Chinese People with Depressive Symptoms in Hong Kong: Participants' Perspectives. International Journal of Group Psychotherapy, 61(3), 438-459. doi:10.1521/ijgp.2011.61.3.438.
- Wong, D. F. K. (2013). *Managing parents' emotions Theory and application of Cognitive Behavioral Therapy*. Hong Kong: City University of Hong Kong Press (In Chinese).
- Wong, H., Zhang, Y., Ho, J., & Ng, S. L. (2016). Looking at the changes of youth living from youth quality of life indices. In S. W. K. Chiu, J. Ip, & H. Li (Ed.). *Restless youth: Observations of the situation of younger generations in Hong Kong*. Hong Kong: Chung Wah Books (In Chinese), pp. 78-92 (In Chinese).
- Yu, S. W. K., & Zhong, Z. (2012). A response to the negative impacts of capitalist governments on social welfare for capitalism "Workfare" schemes for youths in the United Kingdom and Hong Kong. In The Centre for Youth Research and Practice, Hong Kong Baptist University (Eds.). *The situation of the young people: New thoughts on social work.* Hong Kong: Red Corporation Limited, pp. 65-81 (In Chinese).