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Evaluating the Efficacy of Expressive Arts-based Intervention on Rehabilitation for People with Gambling Disorder in Hong Kong : A Randomized-Controlled Trial

Tung Wah Group of Hospitals Even Centre

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東華三院平和坊
「運用表達藝術於賭博失調人士康復計劃」成效研究

Research Report by	Tung Wah Group of Hospitals Even Centre Centre on Behavioral Health, The University of Hong Kong
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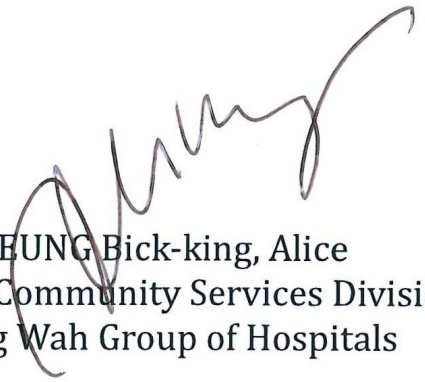
Gambling disorder is tremendously complicated situation, engendering widespread social issues and personal setbacks. While effects of gambling are usually portrayed in terms of family disputes and financial adversities, emotional distress of gamblers is a vital concern to be addressed in their recovery process.

We wish to express our gratitude to the Centre on Behavioral Health, The University of Hong Kong to provide their support in this project. My appreciation goes to Prof. Rainbow HO and her team in designing and conducting the evaluation study for this project. Gratitude is also extended to the staff of Tung Wah Group of Hospitals Even Centre for their efforts to make this program possible. Lastly, we would also like to thank the participants who have taken part in this evaluation study with their openness and courage.

We sincerely hope the result of this study will contribute to the development, application, and furtherance of the use of expressive arts in providing psychosocial support to those who are struggling with gambling problems in Hong Kong.



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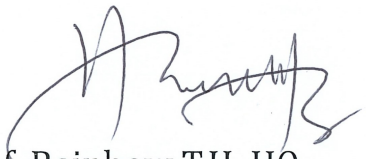
Acknowledgements (Centre on Behavioral Health, HKU)

Addictions have a strong link to difficult emotions such as anxiety and shame. The use of arts can benefit individuals with addictions by expressing and channeling these difficult emotions into creativity and catalyst for growth. Expressive arts intervention provides individuals a creative space that helps explore and provide them with insight into possible cues that may influence their behavior. The creative process is also a transformative journey that enhances individual's self-efficacy and control, to reduce their gambling desires and actual gambling behaviors, and to cultivate the psychological strengths of empathy, acceptance of our own limitations, and a sense of common humanity.

This evaluation study is the first of its kind in Hong Kong; and the findings broaden our visions in the potential of using creative expression as a platform for those who are faced with the challenges of gambling to transform and thrive. Sowing the seed, and it will flourish. This is a one step forward for those who believe in the transformative power of arts; and it is a giant leap forward for many who are languishing amidst of gambling problems.

This collaboration would not have been possible if without the support of the Tung Wah Group of Hospitals Even Centre, who initiated the project in 2018. We are also indebted to the generous financial support of Tung Wah Group of Hospitals. We are grateful for those individuals who have participated in this program, and those who have genuinely shared with us their journey of transformation.



Prof. Rainbow T.H. HO
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Chapter 1
Overview

1.1 Overview

Tung Wah Group of Hospitals (TWGHs) Even Centre initiated a project utilizing Expressive Arts-based intervention on rehabilitation for people with gambling disorder. The project aimed to explore the efficacy of an Expressive Arts-based program in reducing gambling desires and actual behaviors, enhancing gambling-related self-efficacy, self-control, as well as in managing stress among people with gambling disorder. With years of experience in conducting behavioral health and Expressive Arts Therapy related research across different populations, the Centre on Behavioral Health (CBH) was responsible for the evaluation of the efficacy of such Expressive Arts-based program in supporting people with gambling disorder.

The evaluation study adopted a mixed-method, non-blind, 2-arm randomized controlled study, relying on both quantitative and qualitative data. Quantitative measurements were taken in form of paper-and-pencil, self-administered assessment packet complied by the study team at 3 separate time points; whereas qualitative data were collected through focus group interviews with group participants. The purpose of the quantitative data was to obtain information to shed lights on the efficacy of the Expressive Arts-based intervention in managing gambling-related cognitive-behavioral responses. Focus group interviews aimed at obtaining fine-grained information regarding the group process, and their subjective experiences with the Expressive Arts-based intervention group.

This report summarized the overall findings of the quantitative and qualitative data analysis, and respective results were presented in the subsequent sections of the report.

1.2 Background

Gambling has been a popular form of recreation in the Chinese community. Gambling activities, such as Mark Six Lottery, social gambling, horse racings, gaming activities in Macau casinos and football betting are the most popular among Hong Kong citizens (Cheng et al., 2008). A local survey indicated that almost 6 out of 10 Hong Kong Chinese citizens had taken part in gambling activities during a one-year period (The Hong Kong Polytechnic University, 2017). The issue of problem gambling warrants professional attention in Hong Kong. Firstly, the number of gamblers and problematic/ pathological gamblers has been steadily increasing because of the proliferation of the gambling industries in Macau and Singapore, as well as the emergence of online gambling platforms. Secondly, gambling offers alluring opportunities for entertainment, and escape from stress, as well as quick solution to financial problems, and to establish social contacts (Tse et al., 2012). However, in the game of gambling, disappointment and failure are guaranteed more often than success for many; this sets up the possibility of a vicious cycle compromising stress, gambling, disappointment, more stress, and more gambling; and eventually recreational gamble gaming becomes problem gambling (Oei & Raylu, 2007, 2009; Tse et al., 2012). And thirdly, the negative consequences of gambling are multi-faceted.

Based on the aggregate data of gambling-related service seekers (N=8,050) rendered by the Tung Wah Groups' Hospitals (TWGH), a large majority of them (64.9%) indicated having financial problem because of gambling, and almost 80% of them having incurred debts over 50,000 or above (Tung Wah Group of Hospitals Even Centre, 2021). The same user-based survey also illustrated that problematic gambling does not only impact on personal financial arrangement, but its deleterious impacts also spillover to the other psychosocial spheres of the individuals, such as emotional distress (66.8%), development of psychopathology (26.8%), work-related problems (24.3%), as well as disruption in relationships with family (59.7%) and friends (28.1%). Therefore, there is imminent need to develop evidence-based support programs to help people with gambling problems cope.

Most existing treatment modalities are within the behavioral, cognitive and cognitive-behavioral spectrum; while some others are psychodynamic, and multimodal in nature (Pallesen, Mitsem, Kvale, Johnsen, & Molde, 2005).

In Hong Kong, services to pathological gamblers are primarily provided by non-governmental organizations (NGOs), for example, the Tung Wah Groups Hospital's Integrative Centre on Addiction Prevention and Treatment, the Even Centre, the Caritas Addicted Gamblers Counseling Centre. Like the West, existing services to gamblers draw heavily on the principles of cognitive-behavioral therapies, cognitive therapies, motivational interviewing, as well as family-based interventions. The use of creative arts in addiction rehabilitation has become attracted attention from mental health professionals in the West, little is known about its efficacy in the local context.

The above review gives pointers to at least two possible service gaps to gamblers in Hong Kong. First, the essence of the cognitive-behavioral therapies lies in the ability of the recipients' verbalization of thoughts and feelings during the intervention process. Individuals suffering from gambling disorder, and other forms of addictive behaviors, are likely to be very vulnerable, well-defended, and highly resistant to counseling; and thus, mixed resulted were reported in the existing literature, and fair compliance rates were reported (approximately 26% dropout rates) (Zhang & Everts, 2012). It is plausible to expect that it is the same for Chinese, due to the need of public face management of Chinese, together with the difficulties in articulating their emotions and inner thoughts using verbal language. These cultural hindrances to psychotherapy make it difficult for people with gambling problems to seek professional help.

Second, existing services are remedial, rather than preventive, in nature. Preventive measure has the advantage of reducing medical service expenses, and minimizing the psychosocial impacts of gamblers. In view of the above-mentioned hindrances to gambling counseling, there is a need of an intervention modality that would facilitate expression of emotions and inner thoughts in a safe and less intrusive manner, which put emphasis on individuality and building resilience.

To address these service gaps, a person-centered preventive measure, which is also holistic in nature, is worth considering, such as the use of creative arts-based intervention. Creative arts-based therapy is a holistic form of healing through the creation of arts. The use of creative arts zeroes in on four points: expression, imagination, active participation and establishing a mind-body connection. It can help a person use self-expression of art work to discover unspoken personal issues and to release feelings. It is because understanding what a person is feeling and how those feelings impact their

actions is vital to modify behavior in the future. When combined with traditional talk-only therapy, or other behavioral modification techniques, creative arts-based intervention helps an individual to recognize what is going on inside their emotions and though process so they will be better equipped to lean new methods for coping with them (Gordon, 2013).

Over the past decades, accumulating evidence demonstrated the potential effectiveness of the use of arts in the process of recovery from addiction (Adelman & Castricone, 1986; Wilson, 2000). The use of creative arts provides a non-judgmental platform to get in touch with the inner self and can provide a form of expression for feelings that cannot be easily identified or put into words. Through helping the patients connect with his/ her more authentic self, the expressive arts therapies provide an opportunity to create new experiences beyond habitual and painful emotional (and behavioral) patterns. Thus, the use of creative arts fosters a renewed ability to relax gambling.

1.3 Objectives

The primary objective of the study is to explore the efficacy of an Expressive Arts-based program in reducing gambling desires and actual behaviors, enhancing gambling-related self-efficacy, self-control, as well as in managing stress and alleviating positive moods among people with gambling problem. The secondary objective of the study is to develop an evidence-based practice emphasizing on the therapeutic use of expressive arts for gamblers.

1.4 Hypotheses

It is expected that, when compared with those participants in the wait-list control group (i.e. receiving treatment as usual), participants of the Expressive Arts-based Intervention Group will report the following gains:

(a) Reduction in desires in gambling, and gambling behaviors;
(b) Improvement in gambling self-efficacy, and in exercising self-control;
(c) Alleviation of anxiety and depressive symptoms, as well as;
(d) Enhancement of self-esteem.

1.5 Significance

The study is the first scientific study of the application of therapeutic use of expressive arts for problem gambling in Hong Kong. We genuinely believe that the results of the study will shed lights on the prospects of the application of expressive arts-based intervention as a feasible and efficacious option to gambling problems. The program is also the first-of-its-kind, with emphasis on the prevention. The findings of the present study may have profound implications in terms of the planning, design, and implementation of gambler support services in Hong Kong, and worldwide.

Chapter 2
Research Methodology

2.1 Study Design and Data Collection

The study adopted a randomized controlled experimental design, with focus group interviews to supplement the quantitative data. Participating respondents were surveyed on a paper-and-pencil questionnaire packet at baseline (T_0), post-intervention (T_1), and 3 months after intervention (T_2). A subset of randomly picked participants (N=10) were also invited to take part in a focus group interview (approximately 90 minutes) based on a semi-structured interview protocol. The focus group interview was audio-taped for transcription and qualitative data analysis. The group sessions, and all data collection were conducted between 2018 and 2019.

Eligible participants are: (a) Chinese, aged 16-65, living in Hong Kong, who are able and willing to give informed consent; (b) capable of understanding the Chinese language; (c) have symptoms fulfilling the diagnosis of gambling disorder in DSM-IV-TR (American Psychiatric Association, 2000); (d) show no evidence of current or past schizophrenia, bipolar disorder, manic episode, or developmental disorder; (e) not currently on active medication or other forms of psychological interventions.

In the randomized controlled study, participants were randomly assigned to either the (i) intervention group in which they took part in the Expressive Arts-based program, or (ii) wait-list control group in which they were offered the opportunity to participate in an Expressive Arts-based intervention group or its equivalent upon completion of all assessment time-points. All participants were invited to participate in the research study on voluntary basis, and written informed consent was obtained prior to all data collection and randomization.

The focus group interviews were conducted by members of the research team from the Centre on Behavioral Health, the University of Hong Kong. A semi-structured interviewing protocol was developed to facilitate data collection. The interview was conducted by an experienced researcher from the team who was familiar with mixed methods study design, as well as the program design. The interviewer was assisted by a research assistant, and the interviews were audio-recorded, and transcriptions were produced by an independent research assistant, who is proficient in Chinese.

The Expressive Arts-based intervention program was designed specifically for the target populations (i.e. gambling populations) and was conducted by an intern who completed three-year training in Expressive Arts Therapy: The Person-Centered Approach. It aimed at helping the participants to: 1) understand the nature of addiction and its connection with self; 2) become aware of the urges; 3) understand effective coping skills, and; 4) increase their motivation for change. Participants randomized in the intervention group received 8 weekly sessions of Expressive Arts-based intervention lasting 120 minutes each.

2.2 Measurements

For evaluating the effectiveness of the Expressive Arts-based intervention program, a blend of locally validated and self-constructed measurements in Chinese was adopted as outcome measures.

(a) *Problem Gambling Behaviors*

Severity of gambling behaviors were captured by Problem Gambling Severity Index – Chinese Version (PGSI-C) ((Loo, Oei, & Raylu, 2011). The 9-item scale was rated on a 4-point Likert Scale, ranging from 0 (Never) to 3 (Almost Always). The scale categorized individuals into four levels of severity of non-problem gambling, low level of problem, moderate level of problem (with some negative consequences), and problem gambling with negative consequences. Higher score indicated greater risk of developing gambling problem.

(b) *Perceived Gambling Self-Efficacy*

The extent the participants could refrain from gambling was assessed by the participants' ratings on the Gambling Self-Efficacy Questionnaire – Chinese (GSEQ-C). The 16-item scale was rated on a scale ranging from 0 (No confident at all) to 100 (Very confident) and it yielded 7 gambling-related subs-scales (May, Whelan, Steenbergh, & Meyers, 2003). The higher the scores, the higher the level of confidence in abstinence from gambling activities in a specific context.

(c) *Mood Status*

Participants' mood status was assessed by the Hospital Anxiety and Depression Scale (HADS), Chinese version, on a 4-point Likert Scale (ranging from 0-3) (Leung, Ho, Kan, Hung, & Chen, 1993). The 14-item inventory was developed to provide clinicians an acceptable, reliable, valid and easy-to-use practical tool for identifying and quantifying depression and anxiety. The inventory yielded the Depression subscale and the Anxiety subscale, composing of 7 items each. The higher the score in each of the subscale, the higher the level of symptoms represented by the subscales. The Chinese version of HADS had been widely adopted in local clinical studies, and demonstrated good reliability across different samples.

(d) Self-Esteem

Self-esteem was measured by the Chinese version of Rosenberg Self-Esteem Scale (RSE), which was the most widely used measure of self-esteem (Tsang, 1997). The measurement was administered on a 4-point Likert Scale (ranging from 1 to 4), and the summation of all 10 items yielded a total score reflecting the overall self-esteem. A higher score indicates a higher level of self-perceived self-esteem.

(e) Demographics

Participants' socioeconomic background, such as gender, age, marital status, education attainment, occupation, monthly income, amount of debts incurred, would also be assessed as potential confounding variables in the data analysis.

(f) Semi-Structured Interview Protocol.

A semi-structured interview protocol was developed by the team collaboratively with the inputs from the staff of Tung Wah Group of Hospitals (TWGHs) Even Centre. Interviews were audio-recorded for data analysis.

2.3 Data Preparation

All data input was entered on a spreadsheet (provided by the research team at the Centre on Behavioral Health, The University of Hong Kong) by a helper at TWGHs Even Centre. All participating respondents were assigned a participant code on the dataset. The dataset was then converted into SPSS 23.0 for data management, data processing and data analysis, which was conducted by the research team at CBH.

Before data analyses were conducted, missing data were identified by the research team at CBH. Respondents with the entire pre-test or post-test data missing would be excluded from further data analysis. In addition, the assumption of sample homogeneity was also assessed before data analysis. Chi-Square analysis was conducted for categorical variables, while independent sample t-tests were conducted for all continuous variables. Moreover, internal reliability of the outcome measures was indexed by the Cronbach's alpha (α) (Table 1).

For the focus group interviews, audio recordings of the interviews were reviewed, and transcriptions were produced by a research assistant from the research team. To preserve the integrity of the transcriptions, an independent research staff from the team, who had no prior involvement in the program, and the quantitative study, performed the data transcriptions. Transcriptions were done on a word processor, and the transcripts were loaded into the software NVivo 12.1 for further data analyses.

2.4 Data Analysis

To evaluate the efficacy of the Expressive Arts-based program, between-group changes in cravings-related self-control, gambling-induced distress, cravings-related distress, cravings-related impairment, efficacy in handling family issues, gambling self-efficacy, self-esteem, problem gambling severity and mental health were measured. Repeated measure analysis of variance (ANOVA) and Bonferroni post-hoc tests were conducted to compare between-group changes across time, and partial Eta squares (η_p^2) were calculated to indicate effect size of the findings; partial Eta squares of .01, .06, and .14 indicated small, medium, and large effect size respectively. For all findings, we adopted the conventional cut-off for statistical significance of *p*-value smaller than or equal to .05. All quantitative data analyses were performed on IBM SPSS Statistics 23.0.

To explore the efficacy and the personal experience of the participants in the intervention program, thematic analysis was adopted to identify themes that emerged from the data; codes were assigned to these themes and were re-organized to generate meaningful information to supplement the quantitative data generated from the randomized controlled trial. All qualitative data analyses were conducted using the software NVivo 12.1.

Chapter 3
Results of Quantitative Study

3.1 Participants

A total of 82 adults with symptoms of gambling disorder were invited to participate in the Expressive Arts-based intervention program and its evaluation study. 14 sets of data were excluded from data sample due to (1) refusal in participating in the program evaluation, (2) unavailability to attend the program sessions, and (3) substantial incomplete or missing data from the collected questionnaires. Hence, only 68 sets of data were included in the final data analysis (Intervention group=34; Control group=34). Table 2a showed the demographic profile of the participants in both intervention and control groups.

The majority of participants in both groups were males (N=60; 88.2%). The mean age of the intervention group was 43.79 (*SD*=11.3), while that of the control group was 42.41 (*SD*=13.14). Around 47% of the participants (N=32) were married and the rest were either not married, divorced, separated, widowed or cohabited, except a single participant preferred not to reveal his/her marital status. Most of the respondents were employed (N=61; 89.7%). In both intervention and control groups, more than half of the respondents belonged to lower-middle-income group with a monthly salary of $15,001 - $35,000 (N=18; 52.9%).

Participants' education level varied within the intervention group. All the participants (N=34) had attended secondary education, with some of them quitted during junior secondary education (N=8) and some quitted during senior secondary education or upon completion of secondary education (N=10). About 41.2% of participants reached post-secondary level or university level (N=14), and 5.9% even attended graduate school or above (N=2). Similar education background was found in the control group. The majority of control group participants attained secondary education (N=32; 94.1%). Among them, some quitted during junior secondary education (N=5) and some quitted during senior secondary education or upon completion of secondary education (N=20). Only 20.6% reached post-secondary level or university level (N=7).

Gambling-related background of the participants was recorded (Table 2b). The mean ages of gambling onset among the participants in the intervention group and the control group were 24.00 (*SD*=12.76) and 21.12 (*SD*=8.48) respectively. Common gambling activities they participated in the past two

months included casino, horse race betting, sports betting, mahjong, stocks and futures. In the intervention group, the mean of average monthly expenses on gambling activities was $35,023.53 (*SD*=$73,286.13). In the control group, the mean of average monthly expenses on gambling activities was $68,738.82 (*SD*=$262,558.26). Our results also showed that around 70.6% of the participants reported having a debt problem.

3.2 Summary of Findings

Repeated-measure ANOVAs were conducted to assess the efficacy of the Expressive Arts-based intervention. The pre- and post-intervention differences based on the outcome measures for both intervention and control groups were presented in Table 3.

Significant *time x group* interaction effects were found in terms of cravings-related self-control, $F(2,132)=6.73$, $p=.002$, gambling-induced distress, $F(2,132)=4.20$, $p=.017$, cravings-related distress, $F(2,132)=7.37$, $p=.001$, and cravings-related impairment, $F(2,132)=9.62$, $p=.001$, except the efficacy in handling family issues. According to Bonferroni post-hoc tests, the intervention group ($M=8.09$, $SD=2.47$) showed significantly greater improvement in self-control at T_2 when comparing to control group ($M=6.68$, $SD=2.48$) at the same time point, $p\leq.05$. Yet, such significant difference was not found between intervention group and control group at T_1 ($p=.14$). Similar patterns of results were observed after conducting Bonferroni post-hoc tests for the levels of gambling-induced distress and cravings-related distress. Level of gambling-induced distress was significantly reduced in the intervention group ($M=3.12$, $SD=3.22$) comparing with the control group ($M=4.68$, $SD=3.09$) at T_2 ($p\leq.05$), but not at T_1. For the level of cravings-related distress, the difference between intervention group and control group at T_2 was marginally significant, $p=.05$.

Whilst no significant difference between the intervention and control groups was spotted in terms of cravings-related self-control, gambling-induced distress and cravings-related distress at T_1, there were significant differences between the two groups in terms of cravings-related impairment at both T_1 and T_2, $p\leq.05$. At T_1, the intervention group ($M=3.15$, $SD=3.10$) had a significantly lower self-rating in cravings-related impairment than the control group ($M=4.71$, $SD=3.10$). At T_2, again, the self-rating made by the intervention group ($M=2.97$, $SD=3.16$) significantly differed from that made by the control group ($M=4.88$, $SD=3.50$).

In terms of the perceived gambling self-efficacy, *time x group* interaction effects were present in 2 out of 7 relapse category items, namely physical discomfort, $F(2,132)=5.49$, $p=.005$, and testing personal control, $F(2,132)=4.31$, $p=.015$. Under the category of physical discomfort, the post-hoc tests suggested that participants in the intervention group ($M=87.35$,

SD=18.96) had significantly greater confidence in refraining from gambling than those in the control group (*M*=72.94, *SD*=27.80) at T_1, $p \leq .05$. Such gambling self-efficacy remained significantly high among participants in the intervention group (*M*=87.06, *SD*=17.67) when comparing to those in the control group at T_2, $p \leq .05$.

Based on the results of the post-hoc tests, the level of confidence in abstinence from gambling activities was significantly higher in the intervention group (*M*=77.35, *SD*=24.16) than that in the control group (*M*=56.47, *SD*=27.95) at T_1 when one is concerned with testing personal control at, $p \leq .05$. At T_2, such difference in gambling self-efficacy between the intervention group (*M*=75, *SD*=24.28) and the control group (*M*=59.71, *SD*=33.26) continued to be significant, $p \leq .05$.

Furthermore, *time x group* interaction effects were significant in terms of self-esteem, $F(2,132)=6.28$, $p=.002$, and problem gambling severity, $F(2,132)=3.61$, $p=.030$. Bonferroni post-hoc tests showed that the respondents in the intervention group (*M*=6.50, *SD*=6.46) scored significantly lower in Problem Gambling Severity Index (PGSI) than those in the control group (*M*=9.50, *SD*=5.23) at T_1, $p \leq .05$. Regarding changes in mood status, time x group interaction effect was only found in relation to depression, $F(2,132)=4.38$, $p=.014$.

Chapter 4
Results of Focus Group Interviews

4.1 Participants

A randomly selected subset of participants (N=10) was invited to take part in a focus group interview conducted by the research team at the Centre on Behavioral Health, the University of Hong Kong. Participants of the focus group interviews were all males.

4.2 Themes emerged from the Focus Group Interviews

What was intriguing to the research team was that no participant could identify specific art form(s) that was (were) the most prominent in promoting the changes they had experienced during the group. On the contrary, it was the process of art-making and the group participation attributing to the changes. Two overarching themes were identified from the focus group interviews: potential gains from the group participation, and the perceived mechanism of changes using expressive arts.

Participants shared that the use of expressive arts helped facilitate the process of **awareness of emotions**. Engaging in experiential activities composing of different art modalities, they were given the opportunities to reorient their attention towards their inner experience. A participant explicitly shared that awareness of his own emotions allowed him to acquire a better self-understanding. Two participants shared that:

> *"During the art creation process, I have the chance to get in touch with my emotions, both good and bad ones. The process helps to remind me of my wrongdoings, so that I won't make the same mistakes again" (Participant G1).*

> *"And now I have better understand of <u>why</u> I am so into gambling… and from that understanding, I can do something to help relieving my gambling urge" (Participant D1).*

Participants also shared that they found awareness of emotions helpful as precipitating factor to their gambling disorder; while some others opined that awareness of emotions served as cue for them to stop-and-think, and to reflect on their own (gambling) behaviors. Participants particularly found visualization useful in helping them to acquire better awareness of their own emotions; experiential activities, such as body-map drawing, helped them to establish better connection with their inner experience, and to represent themselves in a visual manner.

The participants shared that the Expressive Arts-based intervention group provided them a platform for **expression of emotions**. The safe and supportive group setting allowed them to express their emotions (anxiety, fear, sadness, guilt, shame and grief) to others. The expression of emotions in an open, non-judgmental, and supportive environment allowed the participants to acquire alternative ways to meet with difficult emotions they encountered in daily life. Participants particularly found the art creation process, such as writing lyrics to capture their personal experience in gambling, helpful in facilitating emotions expression.

> *"In the past, I was not good at expressing myself [out of shame]. But after joining the group, I began to speak up and expression my own feelings more often, because I know there are people like me, too" (Participant C1).*

> *"The process of art creation allows me to express how I feel without the need to talk too much… and it helps to make abstract feelings more concrete" (Participant I1).*

Although the finding was non-significant in the quantitative study, the personal sharing of the participants added an additional dimension in the potential benefits of the group in helping gamblers to restrain themselves from engaging in gambling activities at times of experiencing difficult emotions. Further study would be needed to further explore the effectiveness and the underlying mechanism by which the use of expressive arts helped expression of negative emotions among persons with gambling issues.

The group setting was also instrumental in cultivating **a sense of common humanity** among the group participants. Common humanity referred to the awareness that we were not alone in failures, setbacks, or mishaps in life. Common humanity acknowledged human vulnerabilities and instilled in us a sense of connectedness with each other through the common experience of these vulnerabilities. Neff (2003) hypothesized that common humanity was one of the core building blocks of emotional resilience. Participants identified three major components of the group that might be helpful in helping them to connect with each other during the group process: (1) non-judgmental attitude of the group facilitator, (2) common experience among the group members, and (3) the authentic presence of each other during the group process.

> *"The connection is two-fold: on one hand, when I shared my story, I found that there are scenarios which are even worse… and when other people share their successful stories on gambling recovery, it inspired me and instilled hope for me" (Participant C1).*

> *"I felt a strong sense of connectedness and achievement within the group" (Participant A).*

In addition, participants shared that the group helped **broadening perspective** towards gambling issues. Using arts as a medium, all participants shared that they managed to perceive gambling problems from the perspective of their loved ones. Such broadening of perspective initially resulted in a heightened sense of guilt, shame, and depressed feelings; nevertheless, participants regarded that broadened perspective helped them to make better choice related to their participation in gambling activities.

> *"I realized how much harm and suffering I have caused to my family… in the past I would blame them for not supporting me when I was doing what I need to make money for them… I used to feel angry, but now I feel guilty for what I have done to them" (Participant B2).*

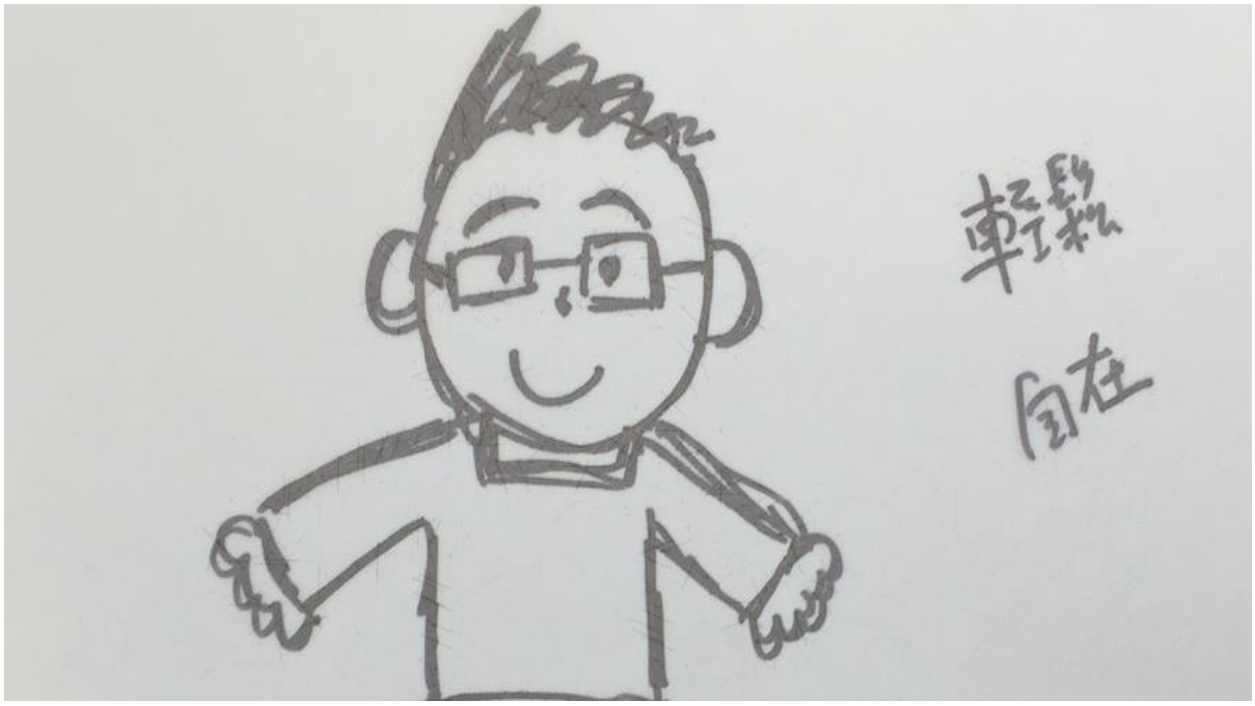
Participants' personal experience was consistent with the Health Belief Model on behavioral change (Buglar, White, & Robinson, 2010). The model posited that an evaluation of the potential risks of engaging in certain behaviors might well serve as a red-flag to withdrawing ourselves in potentially health-degrading behaviors.

Whilst most participants regarded the program as helpful and self-transforming, they shared with the research team that they needed additional support in reconciliation with their family members. They expressed **the needs of others' acceptance**, especially their loved ones during and after rehabilitation for gambling disorder. For instance, one of the participants shared that:

> *"It made me feel bad when relatives, or family members declined my phone calls when I tried to establish connection with them… they thought that I was going to borrow money from them again… that made me feel lonely…" (Participant B2).*

Their yearning for acceptance from family members was also reflected in the quantitative data in which it did not report any significant impact on their efficacy in handling family issues (Table 3).

Chapter 5
Discussion



5. Discussion

The innovative Expressive Arts-based program initiated by TWGHs Even Centre had shown promising contributions to the psychosocial well-being of adults with gambling issues. First of all, results of this empirical study showed that, when compared with the control condition, participants in the Expressive Arts-based intervention group showed significant improvements on craving-related impairment, and efficacy in managing physical discomfort as well as issues on personal control. Improvements were found at post-treatment, and at 3-month follow-up; although the control group showed minimal improvements across time points. The application of Expressive Arts-based interventions, thus, was found an effective option to facilitate coping with craving-related impairments, and to enhance coping efficacy in coping with physical and self-control issues in the context of gambling issues. Secondly, when compared with those who are in the control condition, participants of the Expressive Arts-based intervention group showed significant improvements in problem gambling severity at post-intervention; although the level of severity reported no differences between the groups at 3-month post-intervention (6-month from baseline).

The findings implied that the Expressive Arts-based program has contributed to the speeding up of recovery trajectory for people with problem in gambling, while it took more time for those who received no additional support to achieve meaningful reduction in gambling severity. Furthermore, the Expressive Arts-based program was also found effective in improving craving-related self-control and gambling-induced distress at 3-month post-intervention, when compared with the control condition. Although participants in the Expressive Arts-based intervention group and the control condition showed progressive improvements on these outcome indicators, stagnation in improvements were found only in the control group, while participants in Expressive Arts-based intervention group continued to show progressive improvements, indicating the additional benefits of the Expressive Arts-based program in helping individuals cope with gambling problems.

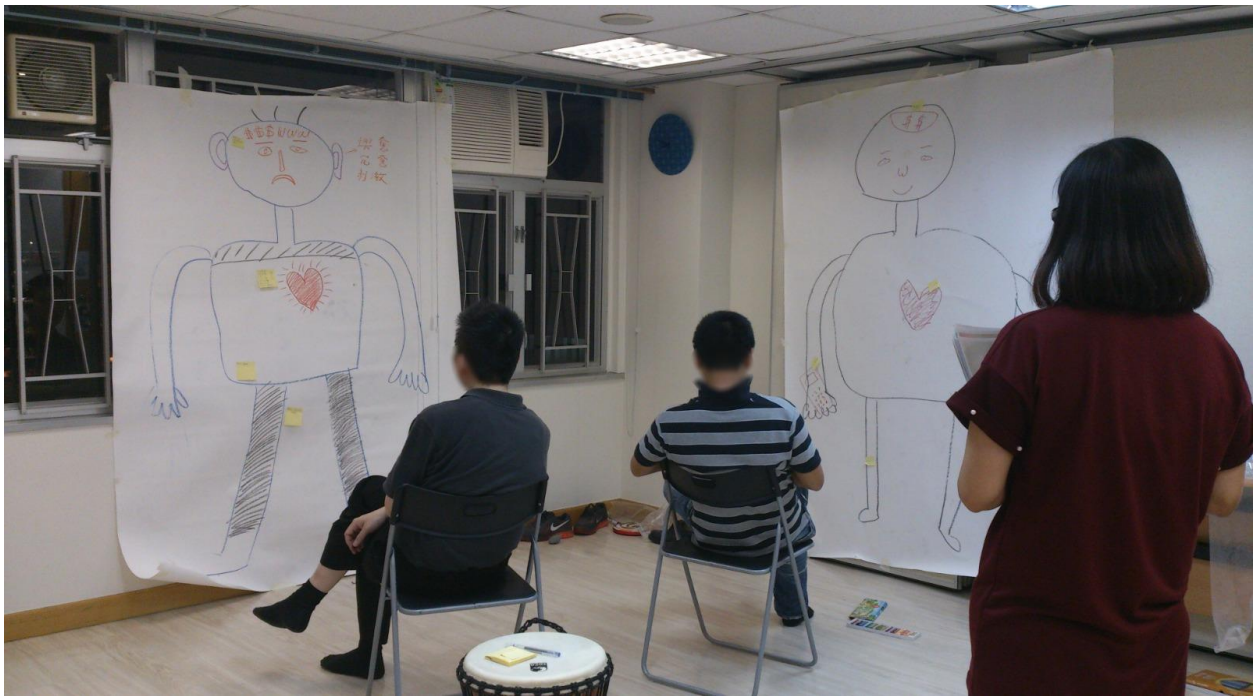
Overall, the quantitative findings of the study indicated that the Expressive Arts-based program showed effectiveness in (i) enhancing self-efficacy in managing physical and self-control for individuals with gambling issues and reducing cravings-related impairment at both post-intervention and at 3-month follow-up; (ii) speeding the mitigating gambling severity for gamblers, and; (iii) facilitating continual improvements in improving self-control and reducing distress. And thus, Expressive Arts-based program was found a safe, reliable, and effective alternative in gambling rehabilitation by reducing symptoms related to gambling, and in building strengths and resource to support continual improvements across time and to buffer against relapse commonly seen in other formats of psychotherapies or intervention strategies for people with gambling problems (Battersby, Oakes, Tolchard, Forbes, & Pols, 2008).

In addition, focused group interviews with the participants also revealed additional evidence to support the use of Expressive Arts-based intervention as an evidence-based practice for gambling issues. Qualitative data suggested that the creative group process has been found effective in enhancing (i) awareness of emotions, (ii) expression of emotions, (iii) a sense of connectedness, and (iv) broadening problem-solving repertoires of those who are struggling with gambling problems. In particularly, the participants emphasized on their needs for acceptance from family members and friends; future intervention problem should consider devoting emphasis on the inter-personal dimensions of gambling recovery as gamblers struggle against gambling problems and their debilitating psychosocial sequels. Furthermore, focus group interviews suggested that the process of art-making in a non-judgmental environment and the group participation planted the seeds of changes among the participants, rather than a particular/ specific art form. And thus, there was an imminent need for professional trainings in the integrative use of arts. The findings leaned further support of the use of Expressive Arts-based intervention as a holistic intervention to gambling disorder. The findings also highlighted the notion that it was a corrective experience that happened in the group, rather than a given modality that was attributable to the positive changes reported by the participants.

Nevertheless, participants in the Expressive Arts-based intervention group did not show significant improvements in terms of mental health status (i.e. anxiety and depression), as well as self-esteem; although participants reported trends of improvement on these parameters. While these indicators were also cited as protective factors against gambling issue, further research would be needed to understand the underlying mechanism of how Expressive Arts-based intervention worked on adults with gambling disorder. Such exploration would further enhance our understanding of the value of expressive arts as a medium of change.

There were a few limitations of the present study that might warrant our attention. Firstly, the participants in the research study were predominantly males (and were non- proportionately distributed when comparing with the actual gender distribution of problematic gamblers in Hong Kong). Such potential sample bias may compromise the ability to generalize the findings of the present study to adults with gambling disorder in general. Findings of the present study seemed to suggest that the use of expressive arts as therapy was effective in helping *male* gamblers to cope. In view of this, further study was required to explore the effectiveness of expressive arts when working with female gamblers, and to see if the results of this study could be replicated among them.

Appendix



A.1 Tables

Table 1. Internal reliability of quantitative measurements (Cronbach's Alpha, α)

	Cronbach's Alpha (α)
1. Gambling Self-Efficacy (GSEQ)	
1a. Unpleasant emotions	.650
1b. Physical discomfort	.652
1c. Pleasant emotions	.720
1d. Testing personal control	.865
1e. Urges and temptations	.764
1f. Conflict with others	.773
1g. Pleasant times with others	.781
2. Rosenberg Self-Esteem Scale (RSE)	.755
3. Problem Gambling Severity Index (PGSI) – Chinese	.857
4. Hospital Anxiety and Depression Scale (HADS)	
4a. Anxiety	.820
4b. Depression	.715

Table 2a. Demographic profile of participants in intervention and control groups

	Intervention Group (N = 34)		Control Group (N = 34)	
Demographic Characteristics	**N**	**%**	**N**	**%**
Gender				
Male	31	91.2	29	85.3
Female	3	8.8	5	14.7
Age				
Mean (S.D.)	43.79	11.30	42.41	13.14
Marital status				
Married	18	52.9	14	41.2
Not married	8	23.5	10	29.4
Divorced	4	11.8	5	14.7
Separated	1	2.9	1	2.9
Widowed	0	0	3	8.8
Cohabited	3	8.8	0	0
Prefer not to say	0	0	1	2.9
Income group (monthly salary)				
$15,000 or less	12	35.3	11	32.4
$15,001 - $35,000	18	52.9	19	55.9
$35,001 - $50,000	3	8.8	1	2.9
$50,001 or more	1	2.9	3	8.8
Education Level				
Primary	0	0	2	5.9
Secondary 1 - Secondary 3	8	23.5	5	14.7
Secondary 4 – Secondary 5	8	23.5	16	47.1
Secondary 6 – Secondary 7	2	5.9	4	11.8
Post-secondary diploma	7	20.6	4	11.8
University	7	20.6	3	8.8
Graduate school or above	2	5.9	0	0
Employment status				
Unemployed	2	5.9	0	0
Retired	1	2.9	0	0
Between jobs	1	2.9	0	0
Self-employed	4	11.8	1	2.9
Full-time	24	70.6	30	88.2
Part-time	1	2.9	1	2.9
Student	1	2.9	0	0
Family caregiving	0	0	2	5.9
Religion				
Buddhism	5	14.7	3	8.8
Catholicism	1	2.9	1	2.9
Christianity	8	23.5	3	8.8
Not applicable	20	58.8	27	79.4

Table 2b. Gambling-related background of participants in intervention and control groups

	Intervention Group (N = 34)		Control Group (N = 34)	
Gambling-related background	**N**	**%**	**N**	**%**
Age of gambling onset				
Mean (S.D.)	24.00	(12.76)	21.12	(8.48)
Gambling activities participated in the past two months				
Casino	7	20.6	8	23
Horse race betting	15	44.1	13	38.2
Sports betting	16	47.1	13	38.2
Mahjong	5	14.7	8	23.5
Mark six	8	23.5	14	41.2
Stocks and futures	3	8.8	0	0
Others	4	11.8	2	5.9
Facing a debt problem				
Yes	24	70.6	24	70.6
No	10	29.4	10	29.4
Having other addictions				
Yes	5	14.7	4	11.8
No	29	85.3	30	88.2
Having insomnia in the past two months				
Yes	15	44.1	16	47.1
No	19	55.9	18	52.9
Being diagnosed with mood disorder[#]				
Yes	7	20.6	12	35.3
No	27	79.4	22	64.7
Receiving psychiatric medication				
Yes	3	8.8	7	20.6
No	31	91.2	27	79.4
Receiving psychotherapy				
Yes	11	32.4	10	29.4
No	23	67.6	24	70.6

[#]Main types of mood disorder include major depressive disorder, anxiety disorder and bipolar disorder.

Table 3. Baseline (T_0), post-intervention (T_1) and 3-month follow-up (T_2) differences in outcome variables for both intervention and control group.

	Intervention Group (n = 34)			Control Group (n = 34)			Time x Group		Effect size
	T_0 *M (SD)*	T_1 *M (SD)*	T_2 *M (SD)*	T_0 *M (SD)*	T_1 *M (SD)*	T_2 *M (SD)*	F(2, 132)	*p*-value	(η_p^2)
1) Cravings-related self-control	4.94 (2.98)	**7.68^ (2.47)**	**8.09^* (2.47)**	5.76 (2.74)	6.85 (2.09)	**6.68* (2.48)**	6.73	**.002**	.09
2) Gambling-induced distress	6.68 (2.63)	**3.24^ (3.07)**	**3.12^* (3.22)**	5.85 (2.69)	**4.38^ (3.04)**	**4.68* (3.09)**	4.20	**.017**	.06
3) Cravings-related distress	6.35 (2.87)	**2.76^ (2.79)**	**2.88^# (3.11)**	5.35 (2.80)	**4.06^ (2.74)**	**4.35# (2.95)**	7.37	**.001**	.10
4) Cravings-related impairment	7.09 (3.01)	**3.15^* (3.10)**	**2.97^* (3.16)**	5.79 (2.96)	**4.71* (3.10)**	**4.88* (3.50)**	9.62	**.001**	.13
5) Efficacy in handling family issues	4.65 (2.59)	6.24 (2.76)	6.91 (3.15)	4.97 (3.08)	6.21 (2.57)	6.06 (3.04)	1.55	.217	.02
6) Gambling Self-Efficacy (GSEQ)									
a) Unpleasant emotions	53.09 (27.50)	78.24 (22.66)	77.35 (24.56)	45.88 (28.51)	59.85 (28.22)	60.74 (30.08)	1.95	.147	.03
b) Physical discomfort	72.94 (25.76)	**87.35^* (18.96)**	**87.06^* (17.67)**	76.76 (24.46)	**72.94* (27.80)**	**72.94* (25.53)**	5.49	**.005**	.08
c) Pleasant emotions	65.88 (28.62)	86.47 (18.07)	83.24 (16.65)	63.24 (27.49)	73.53 (22.68)	73.82 (28.18)	1.13	.328	.02
d) Testing personal control	51.18 (30.73)	**77.35^* (24.16)**	**75.00^* (24.28)**	49.41 (28.49)	**56.47* (27.95)**	**59.71* (33.26)**	4.31	**.015**	.06
e) Urges and temptations	39.12 (31.47)	72.06 (26.03)	72.65 (28.64)	36.47 (29.84)	55.59 (26.54)	57.35 (31.17)	2.34	.100	.03
f) Stressors	55.39 (25.05)	75.78 (21.99)	77.16 (23.86)	52.94 (24.44)	63.43 (21.90)	64.31 (25.89)	2.39	.095	.04

	Intervention Group (n = 34)			Control Group (n = 34)			Time x Group		Effect size
	T_0 *M (SD)*	T_1 *M (SD)*	T_2 *M (SD)*	T_0 *M (SD)*	T_1 *M (SD)*	T_2 *M (SD)*	**F(2, 132)**	***p*-value**	(η_p^2)
g) Pleasant times with others	74.12 (23.37)	83.24 (19.81)	82.94 (19.47)	72.35 (29.96)	75.59 (23.12)	72.94 (26.12)	.86	.427	.01
7) Self-Esteem (RSE)	24.47 (4.69)	**27.53^ (4.29)**	**28.76^ (4.61)**	25.85 (4.18)	26.97 (2.90)	26.76 (3.77)	6.28	**.002**	.09
8) Problem Gambling Severity (PGSI)	16.12 (6.76)	**6.50^* (6.46)**	**6.53^ (7.66)**	14.47 (5.38)	**9.53^* (5.23)**	**8.29^ (7.02)**	3.61	**.030**	.05
9) Mental Health (HADS)									
a) Anxiety	9.88 (5.24)	7.29 (4.61)	7.15 (4.72)	9.32 (4.28)	9.03 (3.97)	8.68 (4.56)	2.45	.090	.04
b) Depression	9.94 (4.55)	**7.41^ (4.22)**	**7.26^ (4.65)**	8.24 (3.53)	7.76 (3.57)	8.26 (4.19)	4.38	**.014**	.06

Bonferroni post-hoc test

*** Between-group significant results**

 # Between-group marginally significant results

^ Within-group significant results when compared to T_0

A.2 Questionnaires

參加者編號：_____

東華三院平和坊
香港大學行為健康教研中心
問題賭博表達藝術小組評估 - 問卷(T_0)

第一部份：個人資料

年齡：_____ **性別：** ☐ 男 ☐ 女

婚姻狀況：
☐ 未婚 ☐ 同居 ☐ 已婚 ☐ 分居 ☐ 離婚 ☐ 喪偶

個人每月平均收入：
☐ $5, 000 或以下 ☐ $5, 001 - $15, 000 ☐ $15, 001 - $25, 000
☐ $25, 001 - $35, 000 ☐ $35, 001 - $45, 000 ☐ $45, 001 - $50, 000
☐ $50, 001 - $55, 000 ☐ $55, 001 - $60, 000 ☐ $60, 001 或以上

教育程度：
☐ 從沒接受教育 ☐ 小學程度 ☐ 初中 (中一至中三)
☐ 高中 (中四至中五) ☐ 預科 (中六至中七) ☐ 大專程度
☐ 大學程度 ☐ 研究院或以上

就業狀況：
☐ 無業 ☐ 退休 ☐ 待業 ☐ 自僱 ☐ 全職受聘
☐ 兼職受聘 ☐ 照顧家庭 ☐ 學生 ☐ 領取綜援/ 傷殘津貼

宗教信仰：
☐ 佛教 ☐ 天主教 ☐ 基督教 ☐ 猶太教 ☐ 回教 ☐ 不適用
☐ 其他 (請註明：_____)

第二部份：與賭博行為有關的背景資料

開始賭博年齡：_____

過去的兩個月內，你曾參與的賭博項目 (可選多項)：

☐ 賭場 ☐ 賭馬 ☐ 賭波 ☐ 打麻雀 ☐ 六合彩 ☐ 股票期貨

☐ 其他 (請註明：_____)

過去的兩個月之內，每月平均花費在以上賭博活動方面的開支共： $_____

現在是否面對債務問題? ☐ 否 ☐ 是，總金額：$_____

(破產個案請列明年份：_____)

你現在是否面對其他成癮問題? ☐ 否 ☐ 是 (請列明:_____)

在過去的兩個月你是否有失眠問題? ☐ 否 ☐ 是 (請列明：_____月)

你現在有否被診斷為情緒病患者? ☐ 否 ☐ 有，診斷為：抑鬱症/ 焦慮症/ 躁狂抑鬱 (刪除不合適用者)

其他 (請註明:_____)

你現在有否接受精科藥物治療？ ☐ 沒有 ☐ 有 (請註明藥物種類：_____)

你現在有否接受其他心理輔導？ ☐ 沒有 ☐ 有

請依照你現時的情況回答下列的各項，並圈選出最能代表你的分數：

你對賭癮的控制能力

完全有能力 10 9 8 7 6 5 4 3 2 1 0 完全無能力

賭博問題引起的個人情緒困擾程度

非常困擾 10 9 8 7 6 5 4 3 2 1 0 毫不困擾

賭癮困擾你的程度

非常困擾 10 9 8 7 6 5 4 3 2 1 0 毫不困擾

賭癮對你的影響程度

非常嚴重 10 9 8 7 6 5 4 3 2 1 0 非常輕微

你處理「因賭博問題而受影響的家庭關係」之信心

非常有信心 10 9 8 7 6 5 4 3 2 1 0 非常沒信心

第三部份：與賭博行為有關的心理因素

(1) 自我掌控能力

請小心閱讀下列句子，並在其右方圈上適當的數字，來表示你在不同情況下，對控制自己賭博的信心。		完全無信心					絕對有信心
我可以控制唔去賭，當我 ……							
1.	當我感到失望或挫敗時。	0	20	40	60	80	100
2.	當我與家人發生衝突不和時。	0	20	40	60	80	100
3.	當我睡眠不足時。	0	20	40	60	80	100
4.	當我與朋友發生衝突不和時。	0	20	40	60	80	100
5.	當我覺得有自信心時。	0	20	40	60	80	100
6.	當我享受我所做的事並想有更好的感覺時。	0	20	40	60	80	100
7.	當我有一天賭輸了，想擇日再賭以追回輸掉的錢時。	0	20	40	60	80	100
8.	當我身處的地方有其他人在賭博時。	0	20	40	60	80	100
9.	當我不肯定自己在賭博上的控制能力，並想試驗一下自己是否能控制得到時。	0	20	40	60	80	100
10.	當事情的結果令我感到生氣時。	0	20	40	60	80	100
11.	當我與朋友一起覺得很舒服鬆弛，並想一起有更開心的時間時。	0	20	40	60	80	100
12.	當我覺得身體不適時(如胃痛等)。	0	20	40	60	80	100
13.	當我與朋友外出旅遊或公幹，並想有更多樂趣和享受時。	0	20	40	60	80	100
14.	當我的朋友提議一起去賭博時。	0	20	40	60	80	100
15.	當我突然間有賭博的意慾時。	0	20	40	60	80	100
16.	當我想証明自己可以多賭幾次而都不失控時。	0	20	40	60	80	100
17.	當我覺得苦悶或無聊時。	0	20	40	60	80	100
18.	當我有財政壓力或財政出現困難時。	0	20	40	60	80	100
19.	當生活上出現一些轉變或危機時。	0	20	40	60	80	100
20.	當我不想去面對某些問題時。	0	20	40	60	80	100

(2) 個人的自尊感

請按照你對以下句子的感覺，圈出適當的數字。		十分同意	同意	不同意	十分不同意
1.	總括來說，我對自己感到十分滿意。	1	2	3	4
2.	有些時候 ，我會覺得自己完全沒有用。	1	2	3	4
3.	我感到自己已有些優點。	1	2	3	4
4.	我能夠把事情做得和其他人所做到的一樣好。	1	2	3	4
5.	我覺得自己沒有什麼可以值得引以自豪。	1	2	3	4
6.	有些時候 ，我真的感到自己完全沒有用。	1	2	3	4
7.	我感到自己是一個有價值的人，而我的價值起碼不比別人差。	1	2	3	4
8.	我希望我能夠對自己有更多的尊重。	1	2	3	4
9.	總括來說，我傾向感到自己是失敗的。	1	2	3	4
10.	我抱著積極的態度面對自己。	1	2	3	4

(3) 行為模式

請利用你過去「兩個月」中的賭博經歷來回答以下問題。		從沒	有時	大部分時候	幾乎總是
1.	你有沒有下過超出你能力可承受的賭注?	0	1	2	3
2.	你需要藉由下更大的賭注來得到你所想要的興奮程度嗎？	0	1	2	3
3.	當你賭博後，你會為贏回以前的輸掉的錢而在另一天繼續進行賭博嗎？	0	1	2	3
4.	你會為得到賭博的錢而去借錢或賣東西嗎？	0	1	2	3
5.	你有沒有覺得你可能在賭博上存在問題？	0	1	2	3
6.	賭博曾給你帶來過健康問題嗎？包括壓力或焦慮？	0	1	2	3
7.	有沒有人曾指責過你的賭博行為或告訴你你有賭博問題，無論你認為這是正確的還是錯誤的？	0	1	2	3
8.	你的賭博行為曾給你或你的家庭帶來過經濟問題嗎？	0	1	2	3
9.	你有沒有對於自己的賭博方式或當你賭博時所發生的事感到過內疚？	0	1	2	3

(4) 情緒狀態

請閱讀下列每題，並「✓」出最接近你過去一星期的情緒狀況。請不要花太多時間考慮你的答案，你對問題的立刻反應，往往比反覆思量來得更準確。

1. 我感到神經緊張：
   - ☐ 大部份時候感到
   - ☐ 很多時候感到
   - ☐ 有時候、間中感到
   - ☐ 完全不感到

2. 我依然享受我以前享受的事物：
   - ☐ 肯定和以前一樣
   - ☐ 有點不及以前
   - ☐ 只及以前小許
   - ☐ 和以前差得極遠

3. 我有一種驚恐，好像有可怕的事情會發生：
   - ☐ 很肯定有，而且相當厲害
   - ☐ 有，但不太厲害
   - ☐ 有少許，但不令我擔心
   - ☐ 完全沒有

4. 我能看到事物有趣的一面並且會心微笑：
   - ☐ 和以前一樣
   - ☐ 有點不如以前
   - ☐ 肯定不如以前
   - ☐ 完全不能

5. 煩惱的念頭在我腦海中浮現：
   - ☐ 絕大部份時候
   - ☐ 很多時候
   - ☐ 有時候，但不太常
   - ☐ 只是間中

6. 我感到高興：
   - ☐ 完全不感到
   - ☐ 不時常感到
   - ☐ 有時候感到
   - ☐ 大部份時候感到

7. 我能安坐並感到鬆弛：
   - ☐ 肯定能夠
   - ☐ 通常能夠
   - ☐ 不時常能夠
   - ☐ 完全不能

8. 我感到缺乏衝勁，整個人都慢下來：
   - ☐ 差不多全部時候
   - ☐ 非常多時候
   - ☐ 有時候
   - ☐ 完全沒有

9. 我有一種忐忑不安的驚恐（十五十六的感覺）：
   - ☐ 完全沒有
   - ☐ 間中有
   - ☐ 相當多時候有
   - ☐ 很常有

10. 我對自己的儀容已失去興趣：
    - ☐ 肯定失去
    - ☐ 比我應該關心的少
    - ☐ 可能比我以前關心的少
    - ☐ 我像以前一樣關心

11. 我感到不能安靜，像要不停地走動：
    - ☐ 很強烈
    - ☐ 相當強烈
    - ☐ 不太強烈
    - ☐ 完全沒有

12. 我對未來的事抱有熱切期望：
    - ☐ 和以前一樣
    - ☐ 較為不如以前
    - ☐ 肯定不如以前
    - ☐ 絕無僅有

13. 我突然感到驚惶失措：
    - ☐ 非常多時候
    - ☐ 相當多時候
    - ☐ 不太多時候
    - ☐ 完全沒有

14. 我能享受喜歡的書、電台或電視節目：
    - ☐ 經常能夠
    - ☐ 有時候能夠
    - ☐ 不常能夠
    - ☐ 絕少能夠

~ 問卷完成，感謝你的參與 ~

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