香港青年協會
the hongkong federation of youth groups

Department of Social Work and Social Administration
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Healthy Transition – Preventive and Educational Program for Substance Abuser with Mental Health Issues (BDF180024)

Research Report on Risk Assessment Tool of Mental Health and Drug Abuse Behaviors among Youth

and

Effectiveness of the Treatment Protocol of Strength-based Cognitive Behavioral Therapy

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Sponsored by the Beat Drugs Fund

禁毒基金
BEAT DRUGS FUND

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I. Project background

In recent years, adolescents' emotional and mental health problems have become more serious. Some young people have misunderstood that the use of certain illicit drugs could relieve their emotional distresses, and do not realize that prolonged consumption of illicit drug could, in fact, induce negative emotions and poor mental health, resulting in a possible dual diagnosis of substance use and mental illness.

The Hong Kong Federation of Youth Groups (HKFYG) Youth Crime Prevention Centre has always been pioneering the development of innovative methods and strategies in preventing and treating youth people with drug abuse and mental health problems. In 2019, the Centre implemented a three-year project of “Healthy Transition – Preventive and Educational Program for Substance Abuser with Mental Health Issues” which was sponsored by the Beat Drugs Fund. Referring to an evidence-based counseling program developed in the United States, the project used a four-layer intervention strategy called NITT-HT, which includes comprehensive outreach services, early identification and assessment services, mental health education and training and professional counseling training, to identify young people aged 10-35 with "high-risk/existing/current drug use" or/and "mental/emotional distress" and to comprehensively assess the needs of these young people. This project also provided "Strength-based Cognitive-behavioral Therapy" to treat young people with a dual diagnosis of drug addiction and mental health issues through its services of "mental health educational and counseling", "vocational training and positive life training" and "family-based psychotherapy and medical support". These programmes aimed to relieve young people’s emotional distress and to help them build a healthy and positive life.

Our team collaborated with Professor Daniel Fu Keung Wong and his team from the Department of Social Work and Social Administration at The University of Hong Kong to validate localized assessment tools for at-risk youth with a dual diagnosis of mental health problems and drug abuse, and to develop a Strength-based Cognitive Behavioral Therapy (SBCBT) intervention protocol to help this group of adolescents. However, during the COVID-19 pandemic, the intervention of both treatment and control groups adopted a hybrid approach to ensure continuity of services while adhering to the public health guidelines set by HKSAR government. This hybrid model included both face-to-face and online modes of service delivery. Face-to-face sessions were conducted with strict safety measures in place, such as wearing masks, washing hands with sanitizers and maintaining social distancing, to protect both social workers and clients. Online sessions were facilitated through various digital platforms, such as

Zoom, FaceTime and WhatsApp video calls, allowing for flexibility and broader reach, particularly for clients who were unable to attend in person. The intervention involved a dedicated team of social workers who adapted to the changing circumstances by leveraging technology and innovative methods to maintain engagement and provide treatments to youth. A total of 11 social workers actively participated in the experimental group to deliver counselling services, while an additional 15 social workers participated in the treatment-as-usual (TAU) service, ensuring that each client received personalized and consistent support.

This project had screened 1,800 young people aged 12-24, provided mental health education to 360 young people with mild to moderate mental or emotional distress and/or high-risk of drug abuse, and provided counseling service using Strength-based Cognitive Behavioral Therapy for 91 young people with a dual diagnosis of mental health and drug use problems. A clinical research study was carried out concurrently by Professor Wong and his team to examine the effectiveness and credibility of the intervention. Data was collected by the HKFYG through the Youth Crime Prevention Centre's units, including district youth outreaching social work teams, an overnight outreaching service for young night drifters and a community support service scheme. Results and implications of this project have been shared with social workers of all sectors through this research report.

Prevalence, societal and personal costs of substance use disorders

Globally, the World Health Organization (WHO) estimated that 5.5% (270 million people) of the population aged 15-64 years had used psychoactive drugs, and about 12.9% (35 million people) are estimated to have substance use disorders, resulting in 0.5 million drug-abuse-related deaths per annum. Meanwhile, WHO underscored the emergence of cannabis consumption. The global annual prevalence of consuming cannabis is about 2.5% of the world's total population (about 147 million people). Compared with other popular drugs such as cocaine (0.2%) and opiates (0.2%), there is an increasing trend in the consumption of cannabis (World Health Organization, n.d.). In Hong Kong, the total number of reported local drug abusers in 2021 increased by 4% when compared with 2020 (The Central Registry of Drug Abuse, The Government of the Hong Kong Special Administration Region, 2022) The figure showed a significant increase among young drug abusers aged under 21, from 607 drug users to 873 (increased 44%). The Action Committee Against Narcotics (ACAN) (The Government of the Hong Kong Special Administration Region, 2022) found that, in 2021, young people consumed cocaine and cannabis the most, and there was a 33% increase in reported cannabis users and a 47% increase in the reported cocaine abusers when compared with 2020.

Dual diagnosis: co-occurrence of substance use disorders and other psychiatric disorders

Dual diagnosis refers to the co-morbidity of substance use disorders and psychiatric disorders, such as schizophrenia, depression, and anxiety disorders (Hughes et al., 2008; Iudici, Girolimetto, Volponi, & Eletto, 2020). A nation-wide survey in the USA reported substance use disorders associated with higher probability of having any DSM-5 mental disorders (B. F. Grant et al., 2016). The association between drug abuse and internalizing disorders was further evidenced in 22 studies (Lai, Cleary, Sitharthan, & Hunt, 2015). Furthermore, Currie et al. (2005) found that 16.1% of depression patients had substance use disorder. They suggested that depressed patients are more vulnerable to substance use disorders. Brady and Sinha (2005) also emphasized the risk of co-morbidity, as depression individuals are more likely to develop substance use disorders, and substance use disorder patients are more vulnerable to the development of depression. Regarding schizophrenia, Swofford, Scheller-Gilkey, Miller, Woolwine, and Mance (2000) report 55% of schizophrenia patients experienced drug abuse. Although nicotine and alcohol were reported as the most prevalent substance abused by schizophrenia patients, cannabis use is associated

with worse clinical consequences (Volkow, 2009). Comparing schizophrenia patients with and without cannabis abuse, Rais et al. (2008) found a significantly higher rate of neurobiological deterioration among patients with cannabis abuse. It is postulated that the mentioned psychiatric disorders and substance use disorders share similar bio-psycho-social risk factors and possibly-overlapped pathological mechanism (Kendler, Prescott, Myers, & Neale, 2003; Nemeroff, 2016; Volkow, 2009), therefore, leading to a high comorbidity.

The cost of a dual diagnosis – co-morbid substance use disorders and mental illness – is a critical issue for the youths, their families, and the society. In the U.S., the financial cost of substance misuse problems, related to illegal drugs, alcohol, or prescribed medications, was $420 billion annually (McLellan, 2017). A study found that families of substance use disorder patients are more vulnerable to prolonged poverty and intergenerational poverty transmission (Lund et al., 2019). Commonly, substance abusers' life quality is closely related to the consumption frequency and doses of the substance, the higher frequency of drug taking, the lower productivity and become prolonged poverty (Lund et al., 2019). In outreach social work service of the HKFYG, young people who suffered from substance use disorders lose their life goals and are unable to construct their future.

A need for local assessment tools and treatment protocol

A significant portion of substance abuse youths who are highly entrenched in both substance abuse behaviors and mental health issues are less responsive to interventions. Stewart and Conrod (2008) developed the mutual maintenance model to illustrate a vicious cycle between anxiety disorder and substance use disorder symptoms. Substance-induced anxiety enhances anxiety disorder symptoms and creates a need for self-medication with psychoactive drugs. The subsequent substance use disorder symptoms provoke the next stage of substance-induced anxiety, resulting in a continuing, vicious cycle. When mental health services are offered, young patients with dual diagnosis showed less improvement and poorer functioning compared with other patients (Baker et al., 2007). Moreover, Weaver et al. (2001) found that among 851 co-morbid patients, 20% were provided with substance misuse interventions, but only 5% were compliant.

It would be vital to provide prompt interventions before the high-risk youths are further entrenched in the vicious cycle between substance use and mental disorders. Thus far, in Hong Kong, there is no self-administered assessment tool that can identify the youths who are at high risk of developing a dual diagnosis. In this project,

assessment tools that are suitable to be used in the local context and can effectively distinguish high-risk youth from their peers who are without any drug or mental health issues would be developed.

Moreover, there is no standardized treatment protocol for youth who are at high risk of having a dual diagnosis. Since an abundance of evidence has supported the effectiveness of Cognitive Behavioral Therapy (CBT) in treating common mental disorders and substance use disorders alone (Carpenter et al., 2018; Cuijpers et al., 2013; McHugh, Hearon, & Otto, 2010), several later studies have examined the effectiveness of CBT in treating co-morbid depression and substance use disorders. A meta-analytic review analyzed 12 studies and found CBT-related therapies reduced depression symptoms and severity of substance use, with treatments varied from 9 to 24 weeks (Hides, Samet, & Lubman, 2010). To further investigate the effectiveness of CBT in the absence of pharmacotherapy, Hides, Carroll, et al. (2010) examined the effectiveness of CBT intervention in sixty dual diagnosed Australian patients aged 15-25 years. After receiving 10 sessions of individual CBT treatment, these young people reported significant improvements in both depression and substance dependence. Changes were found in their depression-related cognition, automatic thoughts and beliefs; and they were more able to cope with negative emotions and had decreased intention for self-medication with drugs.

Moreover, in the last decade, strength-incorporated CBT (strength-based CBT; SBCBT) has shown promising results in treating patients with chronic mental disorders. For example, SBCBT effectively improved the functioning of deficit schizophrenia patients, who were chronically asocial, unmotivated, and anhedonia (Granholm et al., 2020; P. M. Grant, Perivoliotis, Luther, Bredemeier, & Beck, 2018). Evidence also supported its effectiveness on patients with bipolar disorder (Jones et al., 2015). In this study, the effectiveness of a standardized SBCBT intervention for dual diagnosis youth would be examined.

Strength-based Cognitive Behavioral Therapy: An Overview

The meaning of strengths in recovery

There are a number of definitions of “strengths”. According to Jones-Smith (2014), “strengths” may be defined as attributes or traits that help a person cope with life or make life more fulfilling for oneself and others. These include at least 11 categories: (1) wisdom; (2) emotional strengths; (3) character strengths (e.g., courage); (4) creative strengths; (5) relational and nurturing strengths; (6) educational strengths; (7)

analytical and cognitive strengths; (8) economic and financial strengths; (9) social support strengths; (10) survival skills; and (11) kinaesthetic and physical strengths (Jones-Smith, 2014). When a person is aware of the presence of some or all of these attributes in him/herself, he/she can tap onto these attributes to develop a more meaningful and satisfying life. The identification and utilization of these strengths involve a process which is both culture- and context-specific (Jones-Smith, 2014). Our strengths convey to us what we value in life, what we have spent our time on, our preferences for the manner in which we engage our environment and what we do well in life. Based on a resilience framework, Padesky and Mooney (2012) define "strengths" as strategies, beliefs and personal assets that can promote the positive quality one is trying to build (i.e., resilience). The attributes being highlighted include: (1) good health and easy temperament, (2) secured attachment and trust in others, (3) interpersonal competence, (4) cognitive competence, (5) emotional competence, (6) the ability and opportunity to contribute to others and (7) meaning in life.

There is a great deal of similarities in the definitions of "strength" proposed by various scholars and practitioners. First, "strengths" are attributes that are present in an individual which can be used to build up a person. Second, the outcome of the utilization of one's strengths is idiosyncratic and depends on the objective set by the individual. It can include practical outcomes (e.g., getting a degree or certificate), psychological outcomes (e.g., self-actualization and meaning in life) and spiritual outcomes (e.g., spiritual revival). Third, "strengths" are applied in everyday life domains (i.e., including problematic areas) that are perceived as areas with potentials for growth. Lastly, "strengths" cover both internal and external resources (i.e., interpersonal resources included).

Integrating strength-based and cognitive-behavioral approaches

Theoretical consideration. As mentioned before, this strength-based approach emphasizes the exploration and utilization of personal strengths and external resources of the recovering person rather than focusing on the problem of the individuals. Ironically, CBT has traditionally and conventionally been perceived as a problem-oriented approach, focusing on a patient's problems and deficits. How can these two seemingly divergent approaches be meaningfully reconciled? In the literature, Padesky and Mooney (2012) have put forward a theoretical framework for their strength-based cognitive-behaviour approach. Based on a resilience perspective, they propose a four-step SBCBT model which includes (1) search for strengths, (2) construct a personal model of resilience (PMR), (3) apply the PMR to areas of life

difficulty and (4) practice resilience. Essentially, it follows similar rationales and directions of intervention found in any strength-based intervention model: developing goals, searching for strengths, helping the person to use their strengths to work through their areas of life difficulty.

However, there are a number of critical issues in the Padesky and Mooney model that require attention. First, concerning the concept of "strengths", there is a need to define more clearly what "strengths" means in a strength-based intervention approach. In the Padesky and Mooney delineation of their model, "strengths" appears to be defined as personal and interpersonal resources (e.g., Davis, 1999, as cited in Padesky & Mooney, 2012). However, as suggested by Jones-Smith (2014), "strengths" can be defined more broadly to encompass both internal strengths and external resources. The Jone-Smith definition has implications for a broader and a more comprehensive scope of assessment. Second, while there is no dispute over the emphasis on a search and development of strengths of an individual in a strength-based intervention process, the full expression of strengths can only be possible when certain conditions exist (e.g., a full recognition of a person's self-determination). In this regard, there is a need to deliberate the principles and conditions behind a strength-based CBT approach in intervention. Third, there is a lack of an emphasis on attention towards problems/obstacles in the Padesky and Mooney model because, as they suggested, "by choosing to search within relatively untroubled areas of a person's life, the strengths discovered are more likely to be adaptive and not linked to cognitive distortions or maladaptive behaviours" (Padesky & Mooney, 2012; p. 285) and that "people are generally more likely to hold distorted beliefs and maladaptive behaviour patterns in areas of difficulty than they do in areas where things go well in their life" (Padesky & Mooney, 2012; p. 285). What is at issue here is whether one can totally disregard the presence and influence of "distorted beliefs and maladaptive behaviour patterns" (or any other deficits) that are inevitably and fundamentally affecting one's attainment of goals. Take recovery in mental illness as an illustration, the recovery process, in the main, involves developing a person's strengths to establish a meaningful life, but it is also necessary to facilitate the person to understand and deal with his or her internal deficits and external limitations affecting his or her recovery. "Obstacles" and its successful resolution are part of the process of recovery and due attention has to be paid towards them. In our SBCBT model, "obstacles" and its successful resolution constitute an important stage of the 7-phase recovery process.

In this regard, conventional CBT provides a good theoretical framework with practical strategies for the person to understand and deal with his or her dysfunctional

response patterns and beliefs which act as obstacles to his or her goal attainment. Indeed, CBT intervention studies conducted by P. M. Grant, Bredemeier, and Beck (2017) revealed that dysfunctional beliefs (i.e., self-defeatist and asocial beliefs), in conjunction with neurocognitive impairment, impeded functioning among people with schizophrenia, and that SBCBT approach was able to reduce symptoms and improve overall functioning of people with schizophrenia. For example, workers using SBCBT can help the person in recovery understand their personal obstacles by facilitating him or her to identify his or her pattern of dysfunctional cycle of responses to stressful situational triggers. Workers can also facilitate the person to develop functional responses which become strengths that he/she can use to facilitate changes in the targeted and other issues in his/her life.

In our SBCBT model, theoretically, the main thread of the intervention process is still very much a strength-based approach, helping an individual develop meaningful personal life goals, facilitating him/her to derive action plans, encouraging him/her to identify and use on personal strengths and external resources to achieve the goals and finding ways of overcoming the personal and environmental obstacles to goal attainment. From the very beginning, the worker would have already adopted a strength perspective in working with the individual patient.

Practice consideration. In the literature, there exists a number of well-developed strength-based approaches that have been adopted for practice for people with mental health concerns. These include Strengths-Based Interventions (SBI), Illness Management and Recovery Programme (IMR) and Collaborative Recovery Model (CRM). While all of these approaches share similar characteristics of a recovery orientation: emphasizing a patient's strengths and personal growth; facilitate goal setting and goal attainment; and etc, these approaches have been criticized for their (1) lack of standardized protocol, with some approaches focusing on self-directed strengths orientation, and others leaning towards a rehabilitative orientation; and (2) a lack of a clear set of recovery-oriented intervention strategies, with some approaches having more specific strategies while others do not (e.g., Tse et al., 2016). From a practice point of view, many CBT techniques, which are structured and have well-developed procedures (e.g., worksheets and exercises), can be used or modified for use as strength-based intervention strategies. In our SBCBT approach, we use some of the conventional CBT techniques such as 'Situational Self-Analysis' and 'Dysfunctional Cycle Diagram' to facilitate a person to identify and be aware of his/her dysfunctional patterns of cognitive, affective, and behavioural responses, and to find out functional response patterns that are effective in attaining identified goals and

overcoming obstacles in the recovery process. Furthermore, in its original framework, CBT has already had developed concrete and specific techniques for goal formulation and implementation, these tools and techniques can be readily adapted to the SBCBT model to help people with mental illness formulate concrete plans to achieve their goals. In addition, CBT tools and techniques can be further modified to become strength-focused and be applied at different stages of our seven-stage SBCBT model. For example, at the stage of identifying and exploring resources, "Life Review Exercise", which was originally used to understand a patient's development of dysfunctional core beliefs, can be adapted to explore a patient's internal and external resources which can help him or her overcome life difficulties in the past. At the stage of developing tasks for the achieving goals, behavioural experiments and exposure can be used to encourage patient to try and gain new positive and successful experiences in life. Yet, at the stage of continuous evaluation, "Piggy Bank" technique can be applied to help a patient record his or her positive experiences and be used as evidence to help patient build up a "New Me".

Seven phases of SBCBT for people in mental health recovery

Under our SBCBT model for people in mental health recovery, an individual will go through 7 phases of the recovery process. At each phase, different SBCBT strategies and techniques can be deployed to help a person with mental illness (Table 1). Table 1 provides an overview of the phases and the phase-relevant strategies and techniques.

The homework exercises under the SBCBT model include 'Review of Positive life events' (人生正面大事回顧), 'Self Reflection on Work-Life Balance' (均衡生活自省篇), 'Re-planning on Life Goal' (重整生活目標) and etc. Those homework and professional practice are applied in the SBCBT counselling process, to emphasize the exploration and utilization of personal strengths and external resources of the recovering person rather than focusing on the problem of the individuals. The main thread of a strength-based approach is to facilitate an individual develop meaningful personal life goals, derive action plans and find ways of overcoming the personal and environmental obstacles.

Table 1. The Seven phases of SBCBT for people in mental health recovery

Phases of service	Techniques and tools
Phase I: Instilling hope and motivation to change The intervention component in this phase is to create a sense of curiosity in understanding the person's needs, which might increase the person's desire and motivation to change when the person is treated respectfully. The lens of validation will instil a sense of hope.	1. Relationship building 2. Motivational interviewing • Validation • Normalization • Be curious 3. Detecting dysfunctional responses in life situations • Situational Self-Analysis Exercise • Identify negative automatic thoughts • Emotion Thermometer
Phase II: Identifying needs	1. Helping the patient to understand his/her circumstances • Dysfunctional and Functional Cycle Diagrams 2. Identifying interests and aspirations of the person with mental illness • Life Priorities Game
Phase III: Formulating and developing goals	1. Identifying short-term and long-term goals • Personal Strengths Assessment Form • Brainstorming • Pie Chart • Life Goal Formulation Chart 2. Evaluating the relative importance of the goals and their attainment feasibility
Phase IV: Exploring internal strengths and external resources The component of the Phase IV is to explore the person's strengths, internal and external resources.	1. Identifying the internal and external resources of the person with mental illness (see appendix B). • Personal Strengths Assessment Form • Life Review Exercise • Internal and External Resource Inventory
Phase V: Setting up tasks, strategies, and plans in achieving the goals	1. Prioritizing goals • Encouraging the person's participation in the setting up and execution of the strategies • The 5-Strategies 2. Behaviour approach to overcoming cognitive blind sport • Behaviour Experiment
Phase VI: Identifying individual or environmental barriers to achieving goals	1. Creating new experience to changing cognitive schemas and dysfunctional behavioural responses

Phases of service	Techniques and tools
	• Developing and staging the new experience 2. Identifying rigid dysfunctional values and rules in life • Costs and Benefits Analysis • Rewriting one's dysfunctional rules
Phase VII: Engaging in continuous review and feedback	1. Reviewing and consolidating lessons learned • Old Me/New Me Exercise • Piggy Bank Technique

Research objectives

Two objectives were targeted in the current study. First, it intended to develop a new risk assessment tool to assess the needs and problems of the young drug abusers (aged 12-24 years) with mental health problems, including psychological distress (anxiety and depression), physical health, drug taking attitude, life quality, self-control, self-esteem, and behavioral inhabitation ability. Second, it attempted to evaluate the effectiveness of a strength-based cognitive behavioral therapy in helping young people with a dual diagnosis in the community setting. Clients were recruited from the Healthy Transition Programme, a three-year anti-drug programme (2019-2022) sponsored by the Beat Drugs Fund and operated by the Youth Crime Prevention Centre of Hong Kong Federation of Youth Groups.

II. Validation study on risk assessment tools of mental health and drug abuse behaviors among youth

Research aims and hypotheses

The objective of this part of the study was to develop and validate (dimensionality, reliability, and validity) risk assessment tools for young people with a dual diagnosis of mental health problems and drug use in Hong Kong.

Research method

Procedures and participants

This study employed a cross-sectional research design. The sampling process adopted the purposive sampling method. The survey participants included adolescents with and without a dual diagnosis of mental health and drug use problems (the Scale Development Group vs Comparison Group). All survey participants were recruited from the Youth Crime Prevention Centre's units, which include district youth outreaching social worker teams, an overnight outreaching service for young night drifters, and a community support service scheme.

Adolescents would be included in the Scale Development Group if they (1) were aged 12-24; (2) could understand written and spoken Chinese (Cantonese); (3) had a dual diagnosis of mental health problems and drug use problems; (4) were mentally stable, without severe psychotic symptoms and suicidal thoughts, and could complete the questionnaire independently when participating in the research study.

Adolescents would be included in the Comparison Group if they (1) were aged 12-24; (2) could understand written and spoken Chinese (Cantonese); (3) had no mental health problems and drug use problems; (4) were mentally stable, without severe psychotic symptoms and suicidal thoughts, and could complete the questionnaire independently when participating in the research study.

Data analysis method

Evaluation of the dimensionality. An evaluation of dimensionality aims to test whether the questionnaire structure is consistent with the theoretical structure. Confirmatory factor analysis (CFA) was used for dimensionality evaluation. The software Mplus 7.0 was used to conduct CFA.

Examining the reliability. Reliability refers to the consistency of the measurement of a scale under repeated identical conditions. The reliability coefficient (Cronbach's α) was calculated to determine the consistency across items in the developed scale. An alpha coefficient of 0.60 or more has usually been regarded as a threshold for

acceptable reliability (Henson, 2001). The software SPSS was used to calculate Cronbach's α.

Examining the validity. Validity represents to what extent the scale authentically measures the latent dimension it aims to evaluate. This study employed criterion-related validity and convergent validity for the validity evaluation. The software SPSS was used for analyzing the validity test.

Criterion-related validity represents whether the questionnaire can theoretically separate groups with different criteria. This study examined whether the questionnaire effectively separates adolescents with a dual diagnosis of mental health and drug use problems from the general population of adolescents. Independent sample t-tests were used to test the criterion-related validity.

Tests of convergent validity focus on examining correlations between scales theoretically related to the developing scale. This study examined the relationship between the developing scale, the self-esteem scale (Rosenberg, 1965), and the behavioral inhibition/ activation scale (Carver & White, 1994).

Measurement tools

The assessment tools were used to assess depression, anxiety, and beliefs and attitudes toward substance abuse.

Depression. Depression was measured by the 21-item Beck Depression Inventory (BDI; Beck, Steer, & Carbin, 1988; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). It was scored on a 4-point Likert scale, and a higher score indicated a higher level of depressive symptoms. The Chinese version was validated by Zheng, Wei, Lianggue, Guochen, and Chenggue (1988).

Anxiety. Anxiety was measured by the 21-item Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988; Beck & Steer, 1990). It was scored on a 4-point Likert scale, and a higher score indicated a higher level of anxiety symptoms. The Chinese version was validated by Leung (2001).

Beliefs and attitudes of substance abuse. It was measured by the 24-item Beliefs and Attitudes of Substance Abuse Inventory (BASAI; Fok & Tsang, 2005). BASAI is a 24-item scale for measuring beliefs and attitudes toward substance abuse. It consists of 3 subscales – belief about the substance, attitude towards substance abuse, and anti-drug information. A 4-point Likert scale was adopted in this scale (1= most positive beliefs and attitudes towards drug abuse; 4= least positive beliefs and attitudes towards drug abuse). The final score was calculated by averaging the scores of all items. A lower score in BASAI indicated more positive beliefs and attitudes toward substance abuse.

Research result

Participant

Data were collected from two groups of young people aged 12-24, Scale Development Group included 153 young people with a combined drug abuse history and mental health problems, and the Comparison Group included 304 young people without these two conditions.

Evaluation of the scale

Confirmatory factor analysis (CFA). CFA was conducted to check the construct validity of BASAI. We have dropped 8 items with a low factor-loading. Instead of the original 3-subscale structure, a better model fit was found from a one-factor model (χ^2 = 318.93, RMSEA = .116, CFI = .83, TLI = .80, SRMR = .064, AIC = 4882.50). We suggested modifying it into a 16-item scale without separating it into subscales. The results and factor loading of CFA are presented in Figure 1.

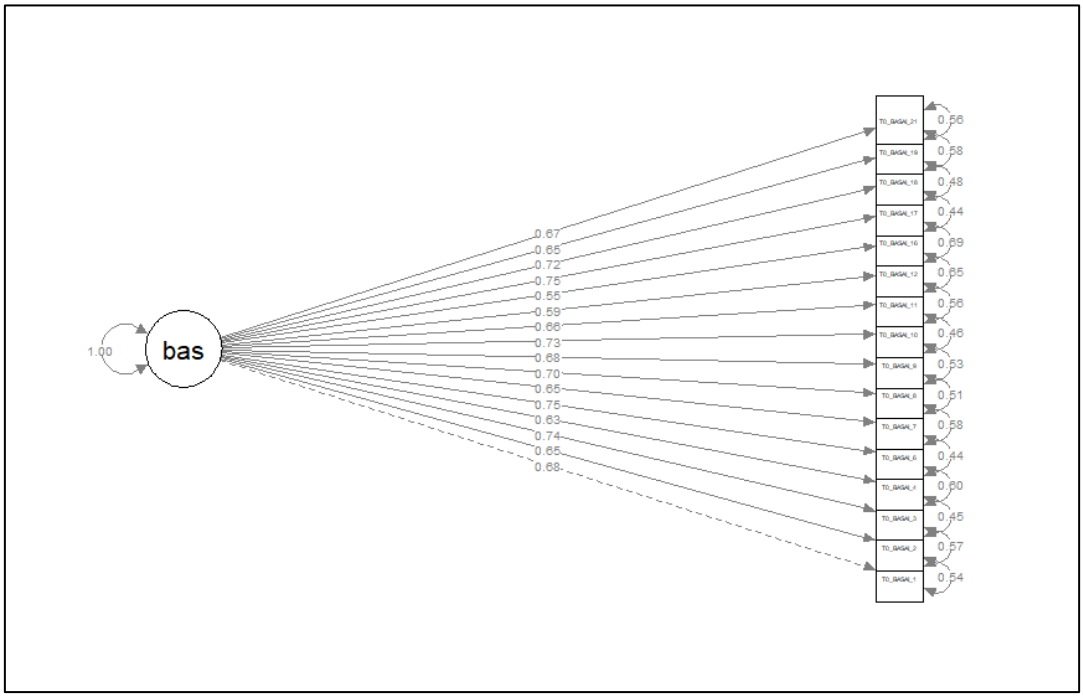


Figure 1. Confirmatory factor analysis of 16-item Beliefs and Attitudes of Substance Abuse Inventory (BASAI) in a one-factor model (data of Scale Development Group used in this analysis)

Convergent validity and reliability. The reliability and correlations of all variables are presented in Table 2. Reliabilities of the scales in this assessment tool and all other scales were high, with Cronbach's α ranging from 0.66 to 0.92. Most of the variables

were significantly correlated and in the predicted directions. BDI was negatively correlated with Q-LES-Q-18 (Ritsner, Kurs, Gibel, Ratner, & Endicott, 2005) and positively correlated with the Rosenberg self-esteem scale (SES) (a high score indicated low self-esteem). BAI was positively correlated with SES and the behavioral inhibition scale. BASAI was positively correlated with self-control and negatively correlated with behavioral activation scale – reward responsiveness and fun-seeking subscales. The results supported the convergent validity of this assessment tool.

Table 2. Correlations and reliability of variables (data of Scale Development Group used in these analyses)

Variables	1	2	3	4	5	6	7a	7b	7c	7d
BDI	(.86)									
BAI	.49**	(.91)								
BASAI	-.03	.03	(.92)							
QLESQ18	-.42**	-.09	.08	(.91)						
Self-Control	-.02	-.02	.31**	.02	(.78)					
SES	.39**	.17*	.12	-.37**	.09	(.83)				
BISBAS - BIS	.08	.19*	.15	.01	.11	.24**	(.67)			
BISBAS - BAS Reward Responsiveness	-.08	-.04	-.18*	.16*	-.28**	-.33**	.10	(.66)		
BISBAS - BAS Drive	-.06	.15	.04	.20*	-.12	-.15	.34**	.62**	(.74)	
BISBAS - BAS Fun Seeking	-.01	-.001	-.22**	.07	-.42**	-.06	.20*	.62**	.62**	(.66)
M	19.80	13.48	2.68	3.15	2.41	24.99	20.07	11.13	14.85	11.49
SD	8.68	9.90	0.59	0.65	0.30	4.26	2.85	1.91	2.22	1.99
Range	0 - 63	0 - 63	1 - 4	1 - 5	1 - 4	10 - 40	7 - 28	4 - 16	5 - 20	4 - 16

(BDI = Beck Depression Inventory; BAI = Beck Anxiety Inventory; BASAI = Beliefs and Attitudes of Substance Abuse Inventory; QLESQ18 = 18-item Abbreviated Quality of Life Enjoyment and Satisfaction Questionnaire; SES = Rosenberg Self-esteem Scale; BISBAS = The Behavioral Inhibition / Activation Scales. () = Cronbach's α.)

* $p < .05$; ** $p < .01$

Cut-off point. The clinical cut-off scores of BDI and BAI are as follows:

Inventory	Scoring
BDI	0 – 9: Normal 10 – 18: Mild to Moderate 19 – 29: Moderate to Severe 30 – 63: Severe
BAI	0 – 7: Minimal 8 – 15: Mild 16 – 25: Moderate 26 – 63: Severe

Referring to the above scoring, if BDI is higher or equal to 10, or BAI is higher or equal to 8, the young person is at risk in mental health problem.

Receiver Operating Characteristic Curve (ROC) analysis was conducted on BASAI to identify the cut-off score for the scale in groups with and without a dual diagnosis of drug and mental health problems. The accuracy could be indicated by the area below the curve. The best cut-off score is selected by the highest sum of sensitivity and specificity using the Youden's J index, which can be calculated by the formula (Youden's J = Sensitivity + Specificity - 1) (Youden, 1950). A higher Youden's J value indicates better cut-off value. By averaging the items of the BASAI score (BASAI score = sum of item scores / 16 questions), the suggested cut-off score (rounded to two decimal places) was 3.45 with its 95% confidence interval equals to [3.39, 3.52], as indicated by the largest Youden's J value of 0.73. A BASAI score lower than or equal to 3.45 indicates a higher drug abuse tendency. The area below the curve was .91. BASAI could significantly discriminate the scores of the normal and target group scores ($p < .001$). The sensitivity and specificity of the cut-off threshold (BASAI ≤ 3.45, 95% CI [3.39, 3.52]) were 0.86 and 0.87 respectively.

To screen the young people for intervention, the following criteria are suggested:

Problem	Criteria
Mental health problem	BDI ≥ 10 OR BAI ≥ 8
Higher risk for drug abuse	BASAI ≤ 3.45

If the scores fulfill both criteria, the young person is at risk for mental health and drug abuse problems. BDI ≥ 10 and BAI ≥ 8 indicate the presence of depression and anxiety issues respectively. BASAI ≤ 3.45 indicates that the young person has positive beliefs and attitudes towards the abuse of drugs.

Criterion related validity. The mean score and standard deviation (SD) of all scales are shown in Table 3. When comparing the participants in the high-risk group and low-risk group on mental health status, the high-risk group was more depressed, anxious, and had a higher tendency toward drug abuse. Moreover, the two groups were also significantly different in the scores of the abbreviated quality of life enjoyment and

satisfaction questionnaire, self-control scale, Rosenberg self-esteem scale, and fun-seeking subscale of the behavioral Inhibition /activation scale. The high-risk group was less satisfied in life, had a lower sense of self-control, and showed a higher tendency in fun-seeking.

Table 3. Mean, SD, and difference of Scale Development Group and Comparison Group

	BASAI > 3.45 (Low risk n=262)		BASAI ≤ 3.45 (High Risk n=169)			
Variables	Mean	SD	Mean	SD	t	Cohen's d
Assessment tool						
BDI	11.05	9.48	18.38	9.53	-7.83***	-0.77
BAI	6.82	8.14	12.64	9.36	-6.62***	-0.67
BASAI	3.90	0.13	2.59	0.45	36.63***	4.34
Other variables						
Q-LES-Q-18	3.64	0.64	3.14	0.62	7.99***	0.79
Self-Control	2.75	0.32	2.42	0.32	10.28***	1.01
SES	23.22	5.43	24.63	4.36	-2.96**	-0.28
BISBAS - BIS	19.92	3.49	19.54	2.80	1.25	0.12
BISBAS - Reward responsiveness	10.87	2.19	11.19	1.90	-1.57	-0.16
BISBAS - Drive	15.34	2.22	14.71	2.27	2.81**	0.28
BISBAS - Fun seeking	10.56	2.00	11.50	1.96	-4.78***	-0.47

(BDI = Beck Depression Inventory; BAI = Beck Anxiety Inventory; BASAI = Beliefs and Attitudes of Substance Abuse Inventory; Q-LES-Q-18 = 18-item Abbreviated Quality of Life Enjoyment and Satisfaction Questionnaire; SES = Rosenberg Self-esteem Scale; BISBAS = The Behavioral Inhibition / Activation Scales.)

** $p < .01$; *** $p < .001$

III. Study on effectiveness of the treatment protocol of Strength-based Cognitive Behavioral Therapy

Research aims and hypotheses

The current study aimed at developing and evaluating a treatment protocol of Strength-based Cognitive Behavioral Therapy (SBCBT) program for working with young people with mental health and substance abuse issues. We hypothesized that (H1) SBCBT would result in favorable treatment outcomes in all targeted variables as shown by pre-post intervention comparisons. These targeted variables included depression, anxiety, beliefs and attitudes of substance abuse, quality of life, drug use frequency in the past three months, drug avoiding self-efficacy, and resilience. Besides, we hypothesized that (H2) SBCBT would result in better improvement than the treatment-as-usual (TAU) control group in the following areas: depression, anxiety, drug-avoiding self-efficacy, and resilience.

Research method

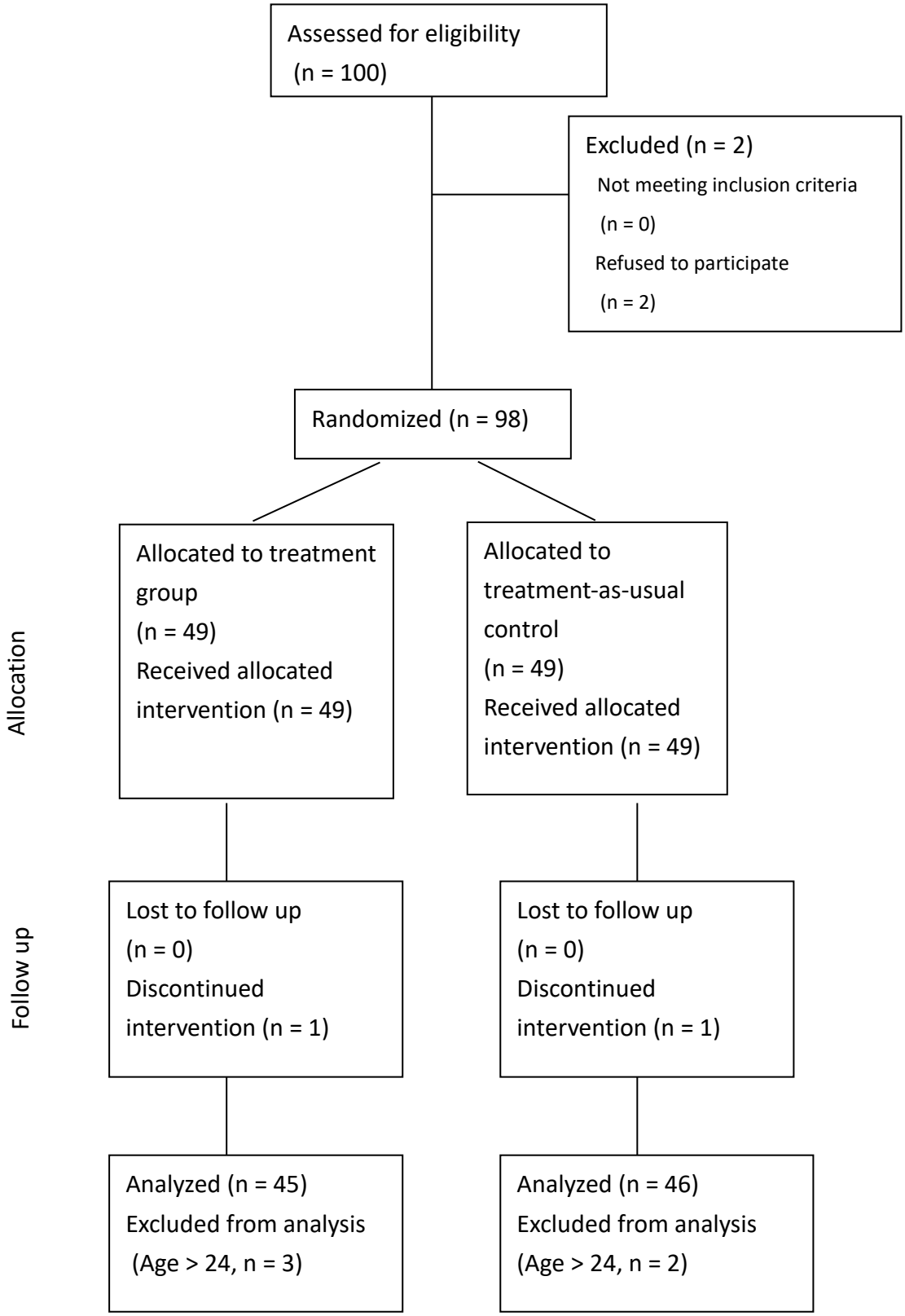
Procedures and participants

The study was conducted between September 2020 and May 2022. 91 participants were recruited by outreaching social workers of the Hong Kong Federation of Youth Groups (HKFYG). A screening questionnaire was administered to the invited youths before they could participate. The inclusion criteria were (1) aged 12 to 24 years at screening, (2) could understand written and spoken Chinese (Cantonese), (3) showed depressive symptoms (Beck Depression Inventory score >=10) or anxiety symptoms (Beck Anxiety Inventory score >=8) at screening, (4) had at-risk level of beliefs and attitudes towards drug abuse (Beliefs and Attitudes of Substance Abuse Inventory score <=3.45), (5) could finish the survey by oneself, and (6) had no acute psychotic symptom or suicidal ideation at screening and during the study period.

Participants were divided into the treatment group (n = 45) and treatment-as-usual control group (n = 46) using a block randomization method (figure 1). For every two participants recruited, the first participant was allocated to the experimental group, and the second participant was allocated to the control group. Pre-intervention and post-intervention data were collected by self-reporting surveys. Within 6 months, each participant in the treatment group underwent eight sessions of SBCBT. Meanwhile, each participant in the control group was provided with eight sessions of supportive counselling and career/schooling advice, which contained no SBCBT elements.

The Human Research Ethics Review Committee of the University of Hong Kong approved the study. Written consent to take part in the study was given either by participants aged 18 years or older, or by the parents of those younger than 18 years.

Figure 1. CONSORT diagram



Measures

Depression. It was measured by the 21-item Beck Depression Inventory (BDI; Beck, Steer, et al., 1988; Beck et al., 1961). It was scored on a 4-point Likert scale and a higher score indicated higher level of depressive symptoms. The Chinese version was validated by Zheng et al. (1988). Reliability in the current study was excellent (pre-intervention Cronbach's α = .90, post-intervention Cronbach's α = .94).

Anxiety. It was measured by the 21-item Beck Anxiety Inventory (BAI; Beck, Epstein, et al., 1988; Beck & Steer, 1990). It was scored on a 4-point Likert scale and a higher score indicated higher level of depressive symptoms. The Chinese version was validated by Leung (2001). Reliability in the current study was excellent (pre-intervention Cronbach's α = .92, post-intervention Cronbach's α = .93).

Beliefs and attitudes of substance abuse. It was measured by the 16-item Beliefs and Attitudes of Substance Abuse Inventory (BASAI; Fok & Tsang, 2005). Compared with the original, 24-item scale, eight items were dropped according to our CFA result in study 1. A 4-point Likert scale was adopted in this scale (1 = most positive beliefs and attitudes towards drug abuse; 4 = least positive beliefs and attitudes towards drug abuse). The final score was calculated by averaging the scores of all items. A lower score in BASAI indicated more positive beliefs and attitudes toward substance abuse. Reliability in the current study was good (pre-intervention Cronbach's α = .84, post-intervention Cronbach's α = .96).

Quality of life. It was measured by the 18-item Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q-18; Ritsner et al., 2005). It aimed to measure life satisfaction in five domains, including physical health, subjective feelings, leisure activities, social relationships, and medication. It was scored on a 5-point Likert scale and a higher score indicates higher satisfaction and enjoyment. The scale has been translated and used in Chinese populations with acceptable reliability (Cronbach's α > .70; D. F. K. Wong, Chan, & Lau, 2008; F. K. D. Wong & Poon, 2010). Reliability in the current study was good (pre-intervention Cronbach's α = .85, post-intervention Cronbach's α = .95).

Drug use frequency in the past three months. It was measured by the 13-item Beat Drugs Fund Evaluation Question Set No. 6 - Frequency of Drug Use in the Past 3 Months (Narcotics Division, 2020). The scale covered the usage frequency of thirteen kinds of substance, including marijuana, cocaine, heroin, ketamine, etc, whereas smoking and drinking were excluded. A higher score indicates more frequent drug use.

Drug avoiding self-efficacy. It was measured by the 16-item Beat Drug Fund Question Set 3 - Drug Avoidance Self Efficacy Scale (DASES; Martin, Wilkinson, & Poulos, 1995; Narcotics Division, 2020). A higher score indicates a higher self-efficacy in avoiding and restraining drug abuse. Reliability in the current study was good (pre-intervention Cronbach's α = .84, post-intervention Cronbach's α = .91).

Resilience. It was measured by the 25-item Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) and a higher score indicates greater resilience.

The Chinese version was validated by Yu and Zhang (2007). Reliability in the current study was good (pre-intervention Cronbach's α = .89, post-intervention Cronbach's α = .95).

Interventions

Treatment group participants were offered eight sessions of SBCBT, and control participants were given eight sessions of supportive counselling and career/schooling advice, which did not include any SBCBT elements. All the sessions were performed by registered social workers. To ascertain treatment fidelity, a total of 26 3-hourly supervision sessions of SBCBT in three stages were provided to the social workers by a qualified trainer from The University of Hong Kong who had two doctoral degrees in social work and clinical psychology separately. A total of 372 and 383 sessions were provided to the treatment group and control group respectively.

Statistical analysis

All analyses were performed using SPSS 26. First, descriptive statistics were calculated for all variables. Second, t-tests and chi-square tests were used to detect baseline demographic differences between the treatment and control groups. Third, independent sample t-tests were used to compare the baseline values of all targeted variables in the two groups. Fourth, within-group pre-post intervention changes were investigated using dependent sample t-tests, with effect sizes shown in Cohen's d. Fifth, to compare the effects of the interventions, a series of 2 × 2 (time × group) repeated-measure ANOVA were conducted.

Research result

Baseline analysis

Table 4 illustrates the background information of the participants at baseline. T-tests and Chi-square tests showed insignificant differences in all areas between the treatment group and control. In both groups, the mean age of participants was about 20 years. 50% to 60% of them were male; more than 80% were born in Hong Kong; 30% - 35% of them received grade 7 to 9 education, 37% - 49% received grade 10 to 12 education, and 20% to 25% had obtained at least a tertiary degree. About 60% of them were living in public housing, and 20% were living in private housing. In the treatment group, 50% were living in Kowloon, whereas 60% of participants in the control group lived in the New Territories. Most (70% to 80%) of them were living with family members.

Table 5 shows the means and standard deviations of variables at pre-intervention and post-intervention. Independent sample t-tests found no significant difference between two groups before the intervention. The two groups did not differ in depressive symptoms [t(89) = 1.05, p = .30], anxiety symptoms [t(89) = .79, p = .43], beliefs and attitudes of substance abuse [t(89) = 1.37, p = .18], physical quality of life [t(89) = .03, p = .97], subjective quality of life [t(89) = -.22, p = .83], leisure quality of life [t(89) = -1.13, p = .26], social quality of life [t(89) = -.09, p = .93], medication quality

of life [t(64) = .13, p = .90], drug-avoiding self-efficacy [t(89) = 1.08, p = .29], resilience [t(89) = -.87, p = .39], and drug abuse frequency in the past three months [t(89) = .56, p = .58].

Table 4- Demographic information of participants

	CBT	TAU control	Chi-square test/t-test
Age			.39
Mean (SD)	20.07(2.97)	19.83(2.96)	
Gender			1.32
Male	23(51.1%)	29(63.0%)	
Female	22(48.9%)	17(37.0%)	
Place of birth			.13
Hong Kong	39(86.7%)	41(89.1%)	
Mainland China	6(13.3%)	5(10.9%)	
Education			2.36
6th grade or below	0(0%)	1(2.2%)	
7th to 9th grade	14(31.1%)	16(34.8%)	
10th to 12th grade	22(48.9%)	17(37.0%)	
Post-high-school education	6(13.3%)	9(19.6%)	
Undergraduate program or above	3(6.7%)	3(6.5%)	
Family income			5.22
$10,000 or below	6(13.3%)	4(8.7%)	
$10,001 - $20,000	10(22.2%)	12(26.1%)	
$20,001 - $30,000	10(22.2%)	8(17.4%)	
$30,001 - $40,000	4(8.9%)	4(8.7%)	
$40,001 - $50,000	3(6.7%)	6(13.0%)	
$50,001 or above	0(0%)	3(6.5%)	
Unknown / Undisclosed	12(26.7%)	9(19.6%)	
Housing type			4.75
Public housing	25(55.6%)	27(58.7%)	
Village housing	1(2.2%)	4(8.7%)	
Private housing	11(24.4%)	10(21.7%)	
Subsidized sale flat	2(4.4%)	1(2.2%)	
Temporary / sub-divided housing	5(11.1%)	3(6.5%)	
Others	0(0%)	1(2.2%)	
Hostels	1(2.2%)	0(0%)	
Living district			5.97
Hong Kong Island	3(6.7%)	0(0%)	
Kowloon	23(51.1%)	17(37.0%)	
New Territories	19(42.2%)	29(63.0%)	
Living with			6.28
Family member(s)	33(73.3%)	38(82.6%)	

De facto partner(s)	0(0%)	3(6.5%)	
Friend(s)	4(8.9%)	2(4.3%)	
Alone	8(17.8%)	3(6.5%)	
Note. * p<.05, ** p<.01, *** p<.001			

Within-group analysis

Furthermore, in table 5, within-group pre-post intervention changes were examined by a series of dependent sample t-tests. Treatment group showed favorable changes in all targeted variables. There were significant decreases in depressive symptoms [$t(44) = -8.24$, $p < .001$, $d = -1.16$] and anxiety symptoms [$t(44) = -5.47$, $p < .001$, $d = -.71$], and improvement in beliefs and attitudes towards drug abuse [$t(44) = 7.21$, $p < .001$, $d = .92$]. Also, they reported increases in quality of life in all domains, namely, physical [$t(44) = 3.58$, $p < .01$, $d = .41$], subjective [$t(44) = 3.34$, $p < .01$, $d = .38$], leisure [$t(44) = 3.16$, $p < .01$, $d = .34$], social [$t(44) = 3.58$, $p < .01$, $d = .41$, and medication [$t(17) = 5.33$, $p < .001$, $d = 1.10$]. Their drug-avoiding self-efficacy [$t(44) = 6.87$, $p < .001$, $d = .90$] and resilience [$t(44) = 6.54$, $p < .001$, $d = .77$] had improved, and their drug abuse frequency [$t(44) = -3.39$, $p < .01$, $d = -.38$] had been reduced.

Meanwhile, the treatment-as-usual control group showed improvements in many but not all the targeted variables. They reported a decrease in anxiety symptoms [$t(45) = -2.03$, $p < .05$, $d = -.41$] and an improvement in beliefs and attitudes towards drug abuse [$t(45) = 4.15$, $p < .001$, $d = .55$], but no change in depressive symptoms [$t(45) = -1.67$, $p = .10$, $d = -.24$]. They also showed improvements in physical quality of life [$t(45) = 2.32$, $p < .05$, $d = .34$], social quality of life [$t(45) = 3.07$, $p < .01$, $d = .41$], drug-avoiding self-efficacy [$t(45) = 2.44$, $p < .05$, $d = .33$], resilience [$t(45) = 2.46$, $p < .05$, $d = .29$], and a decreased drug abuse frequency in the past three months [$t(45) = -2.16$, $p < .05$, $d = -.24$].

Time x group analysis

To compare the effectiveness of SBCBT against the treatment-as-usual control, time x group (2 x 2) ANOVA were performed. The results indicated that treatment group had larger decreases in depressive symptoms [$F(1,89) = 14.16$, $p < .001$, $\eta p2 = .14$] and anxiety symptoms [$F(1,89) = 7.61$, $p < .01$, $\eta p2 = .08$]. They also had a greater improvement in beliefs and attitudes towards drug abuse [$F(1,89) = 4.82$, $p < .05$, $\eta p2 = .05$], leisure quality of life [$F(1,89) = 6.18$, $p < .05$, $\eta p2 = .07$], drug-avoiding self-efficacy [$F(1,89) = 10.83$, $p < .01$, $\eta p2 = .11$] and resilience [$F(1,89) = 7.24$, $p < .01$, $\eta p2 = .08$]. These findings illustrated that SBCBT can holistically enhance the mental health and drug avoiding capacity of the at-risk youth, which were better than those found in the treatment-as-usual program.

Table 5- Between-group differences and time x group interaction effects

	Pre-intervention			Post-intervention						Time x group ANOVA	Partial eta-squared (η_p^2)
	SBCBT	TAU		SBCBT			TAU				
	Mean(SD) n = 45	Mean(SD) n = 46	Independent sample t-test	Mean(SD) n = 45	Dependent sample t-test	Cohen's d	Mean(SD) n = 46	Dependent sample t-test	Cohen's d		
Depressive symptoms	23.53(10.56)	21.11(11.45)	1.05	11.09(8.14)	-8.24***	-1.16	17.89(13.48)	-1.67	-.24	14.16***	.14
Anxiety symptoms	18.24(13.21)	16.28(10.48)	.79	7.69(8.29)	-5.47***	-.71	12.83(10.57)	-2.03*	-.41	7.61**	.08
Beliefs and attitudes of substance abuse	2.50(.39)	2.37(.53)	1.37	3.24(.70)	7.21***	.92	2.79(.69)	4.15***	.55	4.82*	.05
Quality of life											
Physical	2.52(.81)	2.51(.82)	.03	3.07(.76)	3.58**	.41	2.79(.83)	2.32*	.34	1.87	.02
Subjective	3.08(.57)	3.11(.69)	-.22	3.56(.82)	3.34**	.38	3.32(.80)	1.78	.25	2.05	.02
Leisure	2.91(.71)	3.08(.71)	-1.13	3.39(.78)	3.16**	.34	3.09(.90)	.13	.02	6.18*	.07
Social	2.80(.69)	2.81(.64)	-.09	3.33(.86)	3.58**	.41	3.20(.86)	3.07**	.41	.60	.01
Medication	1.79(1.12)	1.75(1.57)	.13	3.05(.87)	5.33***	1.10	2.81(.98)	1.71	.27	.95	.03
Drug-avoiding self-efficacy	72.11(17.30)	68.52(14.43)	1.08	91.76(16.53)	6.87***	.90	75.17(18.58)	2.44*	.33	10.83**	.11
Resilience	44.91(11.67)	47.02(11.40)	-.87	60.64(13.79)	6.54***	.77	53.30(15.77)	2.46*	.29	7.24**	.08
Drug abuse frequency (past 3 months)	32.53(60.99)	26.07(49.58)	.56	1.87(5.20)	-3.39**	-.38	9.80(18.30)	-2.16*	-.24	1.51	.02

Note. * p<.05, ** p<.01, *** p<.001
Cohen's d >= 0.5 indicating a medium effect size, >=0.8 indicating a large effect size.
Partial eta-squared (ηp2) >= .06 indicating a medium effect size, >= .14 indicating a large effect size.

IV. Discussion

Ideally, youths are bright and cheerful, exploring their career options, establishing relationships, and emerging into thriving adulthood. However, some youths are highly entangled with mental disorders and substance abuse behaviours, leading to impaired adolescence that might further limit their future quality of life. The transition from adolescence to adulthood is a critical period marked by substantial physical, emotional, and psychological changes. During this time, young people typically seek to define their identities, set life goals, and build the foundations for their future careers and personal lives. Unfortunately, for some, the dual presence of mental health issues and substance abuse disrupts this developmental progression, creating a host of challenges that can have long-lasting negative effects on their future developments.

The creation of a screening tool for assessing youth with a dual diagnosis of drug addiction and mental health problems

This project has developed a self-administered screening tool to identify youth who are at risk of having substance abuse behaviours. Along with the two mental health scales (i.e., BDI and BAI), these three instruments attempt to identify youth with a tendency towards a dual diagnosis of drug abuse and comorbid mental health issues. A sharing session about the use of the assessment tools (plus the effectiveness of SBCBT) was conducted for the public while the training and supervision of SBCBT had been provided for frontline registered social workers. In the future, agencies such as the HKFYG can use the manual to train social workers and other professionals to use SBCBT to work with their drug addicted clients.

With the combined use of our validated BASAI scale and the established mental health assessment instruments, social workers at the Youth Crime Prevention Centre of The Hong Kong Federation of Youth Groups and other agencies can use these scales to identify or screen for youth with a dual diagnosis of substance abuse and mental disorders in various youth services. The mental health assessments were widely adopted and well-validated locally and globally. To facilitate the utilization of the BASAI assessment tool we validated, our manual contains the screening tools and other questionnaires which could/would be distributed to agencies working with youth in Hong Kong, thus maximizing the utility of the screening instruments for youth with such a dual diagnosis.

The development of a manualized SBCBT intervention protocol for working with young people with a dual diagnosis

This project also has established an evidence-based, manualized intervention that enhances resilience and mental health, and reduces substance abuse issues in this particular group of youth with a dual diagnosis. In the intervention study, we aimed to investigate the impact of a strength-based CBT model on enhancing mental health and reducing drug-related issues among young people who were at high risk of substance abuse and mental health issues. This study pioneered by using a strength-based CBT approach to (1) build the strengths of individuals, helping them achieve a meaningful and goal-oriented life, thereby instilling hope and motivation, and (2) apply CBT concepts and techniques to overcome barriers to goal achievement and utilize CBT techniques throughout the 7 stages of our strength-based model. The findings support our hypothesis that SBCBT was more beneficial than the TAU control. Consistent with our hypotheses, young people with a dual diagnosis who received SBCBT showed significant improvements in mental health (reduced depression and anxiety symptoms) increased resilience, and reduction in drug-related outcomes (reduced tolerant beliefs and attitudes towards substance abuse, increased drug-avoidance self-efficacy) when compared to the TAU control group. This indicates that our SBCBT model can effectively address both mental health and drug-related challenges simultaneously. Our model appears to be capable of tackling the complex issue highlighted by the mutual maintenance model, which suggests that treating one disorder without addressing the co-occurring problem increases the risk of relapse in the treated disorder (Steward & Conrad, 2007).

The Partial eta-squared (η_p^2) results showed a large effect in reducing depressive symptoms and medium effects in decreasing anxiety symptoms and enhancing resilience among participants in the experimental group when compared to those in the TAU control group. These positive outcomes may be directly related to young people's better understanding and appreciation of personal and interpersonal strengths and the setting and achievement of meaningful life goals during the intervention. Unlike traditional CBT, strength-based CBT emphasizes exploring and leveraging one's internal and external resources, focusing on capabilities rather than weaknesses. As young people become more aware of their strengths, they may become more motivated to develop a sense of self-efficacy and a positive outlook in life, which help reduce negative mental health symptoms (such as depression and

anxiety) and promote resilience. The SBCBT intervention protocols are beneficial not only for substance abusers but also for helping professionals and their students by equipping them with practical tools to enhance resilience, emotional regulation, and overall well-being. For professionals such as educators, counselors, and healthcare providers, SBCBT training fosters a deeper understanding of how to support individuals overcome challenges and achieve personal growth, thereby creating a more supportive and effective learning or therapeutic environment. The clients can benefit from tailored interventions that focus on their strengths, helping them build confidence, set and achieve goals, and develop coping strategies for stress and adversity. Ultimately, SBCBT training promotes a positive, proactive approach to mental health and personal development, leading to improved outcomes for everyone involved.

SBCBT emphasizes strengths and resilience

A frequently asked question about the strength-based approach is: Since it focuses on building one's strengths and developing interests and goals, how does it manifest in the reduction of specific cognitive and behavioural dysfunctions that are typically targeted in conventional, deficit-based CBT for a particular illness or problem? From the perspectives of positive psychology and strengths, emphasizing the positive aspects of one's being is often sufficient enough to enhance resilience and overall happiness. For instance, Martin Seligman (2002) proposes that a person's well-being and happiness are founded on five core elements: positive emotion, engagement, relationships, meaning, and accomplishment. By concentrating on developing these five elements, an individual can attain happiness and a strong sense of well-being without necessarily focusing on correcting their deficits, such as dysfunctional thoughts and behaviors. While recognizing the deficits in individuals with severe mental illness or drug addiction, strength-based approaches aim to help individuals set meaningful life goals in aspects that are less affected by pathological symptoms. It also explores and develops internal strengths and external resources to achieve these goals. These views align with the strength-based CBT perspective proposed by Padesky and Mooney (2012), which suggests that by focusing on relatively untroubled areas of a person's life, the strengths identified are more likely to be adaptive and not linked to cognitive distortions or maladaptive behaviors. The strength-based approach to health and well-being encourages individuals, professionals, and clients to adopt a positive perspective to explore and utilize the clients' positive aspects. This approach shifts the

focus from "curing" the clients' deficits to building and leveraging their strengths and resources.

Therefore, resilience is the core and important construct in strength-based interventions. It depicts a process in which people actively and continuously solicit resources to steer through obstacles (Ungar et al., 2007). Different from the more traditional interventions that focused on deficit reduction, resilience-based interventions empower the clients by: (1) adopting a resilience orientation, shifting from a pathological and deficit focus to that of strengths and personal growth; (2) facilitating goal setting and goal attainment of the clients, which engenders hope and motivation; (3) emphasizing a collaborative change process, with the workers taking a facilitator role, and clients adopting a self-directed approach in identifying, developing and taking responsibility to fulfil their goals. It is an intervention that aims at identifying and building each individual's internal and external resources to result in the establishment of a meaningful life.

V. SBCBT in action: A case illustration

To illustrate how SBCBT works, particularly for youth with low motivation and dual diagnosis, a 24-year-old man who used cannabis as self-medication to alleviate his feelings of emptiness stemming from a broken romantic relationship was chosen. However, his quality of life, career, and relationship were significantly compromised. He often suffered from drug-induced anxiety due to cannabis and LSD overdose and the intense suicidal ideation after taking drugs. Besides, his frequent mood swings heavily affected his productivity at work and strained his relationships with peers and family members.

After receiving a referral from his friend, the social worker applied SBCBT to facilitate this young man to manage his negative emotions by cognitive changes and resilience building. In the early stages of the intervention, the social worker identified the patient's needs, including his cannabis-induced anxiety, depression related to his breakup with his girlfriend, and unstable family support from his siblings. The patient was living alone after his parents passed away several years ago and lacked proper support from prosocial friends. He usually smoked cannabis with peers and business partners, with increased frequency whenever he thought of his ex-girlfriend.

After gaining a deeper understanding of his needs, the social worker developed goals with the patient in the next stage of the intervention. Since he quitted his undergraduate program in Year 3 due to unmanageable stress from the breakup, he expressed a strong motivation to complete a university degree again. The social worker helped him identify his strengths in learning ability, economic support from siblings, and a clear academic goal. Consequently, he applied for an associate degree in the business field. He was in a better mood and had more self-confident when he tried to manage his personal development in both academic and new business pursuits.

As the patient needed family support in daily living, he moved back to his original home to live with his elder brother and sister. The new experience of living with siblings brought him positive experiences and disproved his worries about changes in life patterns and potential conflicts arising from differing values and habits.

When he had lived with his siblings for a few months and found that they were supportive, he stopped using cannabis at home and established a better daily routine and diet. During this transition period, he applied Five Strategies, such as stopping negative thoughts and distracting himself when stressed, to overcome the conflicts with his siblings. The social worker reviewed the patient's functional and dysfunctional cycles, which helped him recognize his increasing control over negative automatic thoughts and cognitive awareness. With continuous family and social support, he began exercising regularly, leading to improvements in his physical health. He had also started visiting a psychiatrist for medication to address his depression and substance-induced anxiety. Eventually, he ceased substance use, and his mental health significantly improved.

Illustrated by the case above, the patient discovered his personal strengths, identified both inner and external resources, and set short-term and long-term life goals. He also learned CBT techniques such as situational self-analysis, Identification of automatic thoughts, the five strategies for managing negative challenges, and self-awareness of functional and dysfunctional cycles. After eight sessions of SBCBT, he became capable of managing his substance use behavior and anxiety symptoms, re-establishing a positive life focused on career and educational aspirations. His family (siblings) relationship gradually improved when he started to openly share his needs with family members, leading to a better family routine. He also stopped using cannabis to appease his nostalgia for his ex-lover.

In our intervention, traditional CBT techniques were used to tackle the pathological factors such as dysfunctional beliefs and attitude towards drug use and negative emotions. On the other hand, strength-based components were applied to enhance the patient's quality of life and resilience, enabling him to have a more active and fulfilling life. When the patient's mental health, beliefs and attitudes improved in tandem with his quality of life, self-efficacy, and resilience, he developed an enjoyment-driven perspective and the perseverance to resist the drug temptation. Moreover, his interpersonal resilience such as family relationship was improved when he sincerely shared his problems with family members. This new experience further enhanced his self-efficacy and enabled his family to act as a collective shock-absorber that supports the patient in the future. When a patient is surrounded by an abundant personal and interpersonal resources, there is greater confidence in their ability to maintain a drug-free and thriving life.

Supported by the promising result in this study, it is worthwhile to promote and adopt Strength-based Cognitive Behavioral Therapy (SBCBT) in local youth services. It effectively alleviates mental health problems and reduce the risk of drug abuse among young people, thereby reducing the chances of developing a dual diagnosis. More importantly, SBCBT emphasizes the importance of resilience, which can protect high-risk youth from falling into the vicious cycle of self-medication in adversity. When our social workers work with the youths in this study, we found majority of them faced a range of adversities, such as problematic family relationships, parental divorce, neglect, a history of physical abuse, unstable parenting, sexual and relational trauma, and early school leaving. SBCBT is designed to recognize the strengths these individuals possess and to fortify their resilience based on available resources and situations, enabling them to better cope with the challenges in their environment (For a more detailed understanding of how SBCBT works, please refer to our handbook in Chinese, entitled'心渡歷情-預防雙重診斷教育輔導計劃 優勢取向認知行為治療輔導手冊'. The handbook includes sections on the introduction, intervention strategies, research findings, case studies, and tools related to SBCBT, and is developed for further training and hand-on use by trained social workers).

VI. Limitations

There are several limitations in the current study. First, there was no follow up assessment conducted to examine the effectiveness of the intervention three or six months after the completion of the intervention. Further studies may include a follow-up assessment to investigate the long-term impact of the intervention. Second, the current study did not collect qualitative feedback from the participants of the SBCBT intervention. Qualitative feedback allows the in-depth analysis of personal experiences and perceptions of the participants on SBCBT, which leads to further enhancement of the intervention protocol. Further studies may consider collecting qualitative data in addition to quantitative data. Third, the current study recruited service users within a project-based program conducted by the HKFYG. Participants were referred by peers, families, or organizations to the Health Transition for follow-up. The limited source of recruitment could affect the generalizability of the findings. Further studies with a larger scale and multiple, diverse sources of participant recruitment might be required to investigate the generalizability of our findings, including youth who are recruited by outreaching social service or those incarcerated due to crimes other than drug abuse. Fourth, the medication records of the participants were not retrieved and analyzed in the current study. Although randomization should theoretically have balanced out the effects of any past or present medical treatments received by the participants, future studies may investigate how the medical history and ongoing prescribed medication received by participants may potentially affect the findings. Fifth, since both SBCBT and the TAU control groups involved some treatments, the current study did not include a no-intervention control group (i.e., a “null” condition). Further studies may incorporate a no-treatment group in addition to the experimental and TAU control for a more comprehensive comparison. Sixth, the intervention study was conducted during the pandemic, and a basic randomization method was adopted to enhance the operational feasibility of the study. Although baseline analyses found no differences between the SBCBT group and the TAU control group, the assignment of participants to different groups may not represent robust randomization. Future studies should apply more robust and sophisticated randomization methods to ensure unbiased allocation of participants.

VII. Conclusion

Youth with a dual diagnosis are deeply entrenched in substance abuse and mental disorders, which detrimentally affect their current wellbeing and future quality of life. It is vital to identify these youth who are at risk of developing the dual diagnosis at an early stage. This allows practitioners to provide strength-based intervention that prevents the development of a vicious cycle of mental disorders and self-medication through drug abuse (i.e. mutual maintenance model). In the current project, we have validated a self-administered assessment tool that can effectively distinguish between high-risk youths and other typically developing youths. It was followed by a randomized controlled trial to support the effectiveness of a manualized Strength-based Cognitive-behavioral Therapy (SBCBT). The findings empirically have supported the use of a strength-based approach to help youths with mental health and drug abuse issues, demonstrating that they can overcome their difficulties by exploring and utilizing their strengths and resources with the assistance of mental health practitioners. It is recommended that strength-based approaches should be adopted in future treatments designed for youths with dual diagnosis of mental health issues and drug abuse problems.

VIII. Appendix A: Risk assessment tool of mental health and drug abuse behaviors among youth

香港青少年的心理健康與物質濫用風險評估量表

第一部分為本研究編制的青少年精神健康及吸毒問題風險評估量表，第二部分為過往三個月內的吸毒頻率量表，第三部分為戒毒自我效能感量表，第四部分為抗逆力量表，第五部分為基本資料收集。您將花大概三十分鐘完成本問卷。請仔細閱讀每個部分開始時的指示，並完成所有問答。答案無分對錯。請如實作答。

HT 職員專用		
填寫日期		
所屬單位		
研究編號		
填寫時間點	pre / post	
篩選分數 (前測時填寫)	BDI	
	BAI	
	BASAI (小數後兩位)	
Treatment (SBCBT) / TAU	T / TAU	

第一部分：青少年精神健康及吸毒問題風險評估量表

前測：如篩選問卷完成後即時填答調查問卷，或篩選問卷及此調查問卷填答的時間相隔不夠一個月，請由第 7 頁「生活質素和滿意度問卷」開始填答。如果兩者相隔一個月或以上，請完成全份問卷。

後測：請完成全份問卷

一、精神健康量表

以下的部分有二十一題以四句為一組的句子，請細讀每一組句子，然後自每組選出最能形容你在過去一個月（包括今天）而且最接近你感受的句子，並圈上句旁的數字。

1. 0 我不感到憂愁。
   1 我感到憂愁、悲哀。
   2 我時常感到憂愁、悲哀，又不能擺脫。
   3 我愁苦、不快樂，以致無法忍受。
2. 0 我對將來不怎麼失望。
   1 我對將來感到失望。
   2 我感到沒有什麼可以寄望將來。
   3 我感到將來毫無希望，而事情也不會好轉。
3. 0 我不覺得自己像個失敗者。
   1 我覺得我比一般人有較多失敗。
   2 當我回顧生命時，我只見到很多的失敗。
   3 我覺得自己是個完全失敗的人。
4. 0 我像以往一般享受所作的事情。
   1 我不享受以往常作的事情。
   2 我再不能從任何事情中取得真正的滿足。
   3 我對任何事情都感到不滿、煩悶。
5. 0 我不感到怎樣內疚。
   1 我有不少時間感到內疚。
   2 我大部份時間感到內疚。
   3 我無時無刻都感到內疚。
6. 0 我不覺得自己正被懲罰。
   1 我覺得自己可能會被懲罰。
   2 我預計自己將會被懲罰。

3 我覺得自己正在被懲罰。

7. 0 我對自己不感到失望。
1 我對自己失望。
2 我討厭自己。
3 我憎恨自己。

8. 0 我不感到自己比別人差。
1 我因自己的弱點及錯失而對自己諸多批評。
2 我無時無刻因自己的錯失而怪責自己。
3 我為每件發生的不如意事而怪責自己。

9. 0 我沒有任何自殺的念頭。
1 我有自殺的念頭，但卻不會實行。
2 我想自殺。
3 若有機會，我會自殺。

10. 0 我不比平常哭得多。
1 我現在比以前哭得多。
2 我現在時常哭。
3 以往我還能哭泣，不過現在想哭也哭不出來。

11. 0 我不比以往更感煩躁。
1 我變得比以前容易發怒或感到煩躁。
2 我任何時刻都覺得煩躁。
3 以往令我煩躁的，現在絲毫不再煩躁了。

12. 0 我沒有失去對別人的興趣。
1 我對別人的興趣比以前少了。
2 我對別人大大失了興趣。
3 我對別人完全失了興趣。

13. 0 我作決定的能力如以往一樣。
1 我比以往延遲作出決定。
2 我比以往更難作出決定。
3 我再不能作出任何決定。

14. 0 我不感到外貌比以前差。
1 我擔心自己看來老了、不吸引。
2 我感覺自己的外貌出現無法逆轉的改變，使我看來不夠吸引。
3 我相信自己樣貌醜陋。

15. 0 我能像以往一般的作事。
1 我要份外費神才能開始作事。
2 我要很辛苦催逼自己才可作事。
3 我什麼事也做不來。

16. 0 我的睡眠如平常一樣。
1 我沒有睡得像以前那麼好。
2 我比往常早醒一兩小時，而很難再入睡。
3 我比往常早醒數小時，而不能再入睡。

17. 0 我不比平常易感到疲倦。
1 我比以往容易感到疲倦。
2 我幾乎做任何事情都感到疲倦。
3 我疲倦得不能做任何事。

18. 0 我胃口沒有比平時差。
1 我胃口沒有以往那麼好。
2 我胃口比以往差很多。
3 我完全沒有胃口。

19. 0 最近我體重沒有下降。
1 我體重減了五磅以上。
2 我體重減了十磅以上。
3 我體重減了十五磅以上。
我在控制飲食來減低體重：(是)／(否)

20. 0 我不比平時多擔心我的健康。
1 我擔心身體的問題，如疼痛、腸胃不適、便秘等。
2 我很擔心我身體的問題，因而很難去想其他的事。
3 我非常擔心我身體的問題，因而不能去想任何其他的事。

21. 0 我並不發覺自己在性方面的興趣近來有任何轉變。
1 我對性的興趣比以往減低。
2 我現在對性的興趣已大大減低了。
3 我對性已完全失去興趣。

我們想知道這<u>一個月</u>以來，你在以下的健康狀況，受到多大的困擾。以下是一些句子形容你的身心狀況。

		完全沒有困擾	輕度困擾	中度困擾	嚴重困擾
1.	身體麻木或刺痛感	0	1	2	3
2.	身體發熱	0	1	2	3
3.	雙腳站不穩	0	1	2	3
4.	不能放鬆	0	1	2	3
5.	害怕最壞的事會發生	0	1	2	3
6.	頭昏眼花/昏眩	0	1	2	3
7.	心跳很大聲或太快	0	1	2	3
8.	心神不定	0	1	2	3
9.	害怕及擔心	0	1	2	3
10.	神經質	0	1	2	3
11.	窒息的感覺	0	1	2	3
12.	手震	0	1	2	3
13.	身體搖晃顫抖	0	1	2	3
14.	害怕失去控制	0	1	2	3
15.	呼吸困難	0	1	2	3
16.	害怕即將死亡	0	1	2	3
17.	恐懼	0	1	2	3
18.	消化不良或肚子不舒服	0	1	2	3
19.	暈倒或昏厥	0	1	2	3
20.	臉紅	0	1	2	3
21.	流汗(不是因為天熱)	0	1	2	3

二、濫用藥物的信念及態度問卷

以下是一些句子形容你對濫用藥物的信念及態度。如果句子很能表達你的感受請選 1 (很同意) ，同意請選 2 (同意) ，不同意便選 3 (不同意)，很不同意的話請選 4 (很不同意)，不適用的話請選 (Nil)。

		很同意	同意	不同意	很不同意	不適用
1.	我認為吸毒有助緩和緊張情緒。	1	2	3	4	Nil
2.	我認為吸毒不會危害健康。	1	2	3	4	Nil
3.	吸毒有助拋開煩惱。	1	2	3	4	Nil
4.	吸毒純屬個人選擇，並不會對他人造成影響。	1	2	3	4	Nil
5.	如我覺得苦悶不快，我會想嘗試吸毒。	1	2	3	4	Nil
6.	假若我吸毒，我也有信心控制對毒品的渴求。	1	2	3	4	Nil
7.	吸毒不會影響個人的思想和行為。	1	2	3	4	Nil
8.	我不相信毒品會導致上癮。	1	2	3	4	Nil
9.	偶爾吸食毒品對身心影響不大。	1	2	3	4	Nil
10.	吸食毒品不會損害記憶力。	1	2	3	4	Nil
11.	我認為毒品對大腦的影響只是暫時性。	1	2	3	4	Nil
12.	我認為吸毒是青少年一種普遍的嗜好。	1	2	3	4	Nil
13.	偶爾一次吸食毒品對身心影響不大。	1	2	3	4	Nil
14.	經朋友遊說之下，我認為可一試吸毒。	1	2	3	4	Nil
15.	假使我吸食毒品，也不過是玩玩而已。	1	2	3	4	Nil
16.	我對毒品感到很好奇。	1	2	3	4	Nil

三、生活質素和滿意度問卷

本部份的目的是想了解你在過去**一個月**，以下的感覺及行為出現的頻密程度，請選擇一個合適數字回答所有題目。

		完全沒有	很少	間中	很多	經常
1.	感到自己處於非常好的身體狀態？	1	2	3	4	5
2.	對你的身體健康沒有任何憂慮？	1	2	3	4	5
3.	身體感覺良好？	1	2	3	4	5
4.	感到活力充沛？	1	2	3	4	5
5.	對生活感到滿足？	1	2	3	4	5
6.	感到開心快樂？	1	2	3	4	5
7.	能夠跟別人溝通？	1	2	3	4	5
8.	如有需要的話，可以自由地往別處去 (例如步行或使用交通工具)？	1	2	3	4	5
9.	能夠照顧自己？	1	2	3	4	5
10.	你有多常享受閒餘時間的活動？	1	2	3	4	5
11.	你有多常花精力和專注於那些閒餘活動？	1	2	3	4	5
12.	如果你的閒餘活動出現問題，你有多常在沒有過多壓力下解決和處理它們？	1	2	3	4	5
13.	期待跟朋友和親屬相聚？	1	2	3	4	5
14.	享受跟同事或鄰居傾談？	1	2	3	4	5
15.	感到喜歡某人（或某些人）？	1	2	3	4	5
16.	跟別人說笑或一同歡笑？	1	2	3	4	5
17.	感到自己滿足到朋友或親屬的需要？	1	2	3	4	5
18.	對於自己所服用的任何藥物治療，你有多滿意？	1	2	3	4	5

（如沒有接受任何藥物治療，請加上✓號：_____，然後留空此題。）

第二部份：過往三個月內的吸毒頻率量表

請細心閱讀各題，填上你認為最適合的答案。所有答案將完全保密。

1. 在過去 3 個月內，你有多少次：	**過去 3 個月內**		
	從來沒有	**間中有**	**經常有**
A. 吸食大麻	☐	試過___次	每日_____次 / 每星期_____次
B. 吸食白粉（海洛英）	☐	試過___次	每日_____次 / 每星期_____次
C. 服食 Fing 頭丸（亞甲二氧基甲基安非他明）	☐	試過___次	每日_____次 / 每星期_____次
D. 吸食 K 仔（氯胺酮）	☐	試過___次	每日_____次 / 每星期_____次
E. 吸食冰（甲基安非他明）	☐	試過___次	每日_____次 / 每星期_____次
F. 服食忽得	☐	試過___次	每日_____次 / 每星期_____次
G. 服食五仔	☐	試過___次	每日_____次 / 每星期_____次
H. 服食藍精靈	☐	試過___次	每日_____次 / 每星期_____次
I. 服食白瓜子	☐	試過___次	每日_____次 / 每星期_____次
J. 吸食可卡因	☐	試過___次	每日_____次 / 每星期_____次
K. 服食咳藥水	☐	試過___次	每日_____次 / 每星期_____次
L. 吸食有機溶劑（天拿水）	☐	試過___次	每日_____次 / 每星期_____次
M. 服食其他毒品〔不包括吸煙或飲酒〕請註明：_____	☐	試過___次	每日_____次 / 每星期_____次

第三部分：戒毒自我效能感量表

以下 16 種不同的情境可能會觸發某些人士的吸毒念頭。請細心閱讀各題，然後選出你認為最適合的答案。這份問卷只作活動評估用途，所有資料絕對保密。啪嘢泛指在沒有醫生指示下使用違禁或合法的危害精神毒品，例如 K 仔、大麻、『冰』、搖頭丸、咳藥水、天拿水等。

		肯定會(能夠)	好可能會(能夠)	很難說	可能會(能夠)	可能不會(不能夠)	好可能不會(不能夠)	肯定不會(不能夠)
1.	試想像你將會參加一個 Party，Party 上你會認識到一啲新朋友。你覺得啪嘢可以令你放鬆，令你更加有自信，你能唔能夠逃避啪嘢嘅引誘？	7	6	5	4	3	2	1
2.	試想像你啱啱搞壞咗一件好事，你自己一個人喺屋企覺得情緒低落，你能唔能夠逃避喺屋企啪嘢嘅引誘？	7	6	5	4	3	2	1
3.	試想像你喺屋企同男/女朋友鬧翻，此刻你覺得好嬲。你想同佢和好，但同時你亦想啪嘢，你能唔能夠抗拒啪嘢嘅引誘？	7	6	5	4	3	2	1
4.	試想像依幾日你冇乜嘢要做，而家你覺得好自在。阻止你啪嘢嘅唯一原因係你對自己承諾過你要戒毒 2 個月。而家仲差 3 個星期至到期解禁。你會唔會喺依個時候啪嘢？	7	6	5	4	3	2	1
5.	試想像而家係夜深，你屋企有毒品，啱啱你又瞓唔著。之前你曾經決定唔再啪嘢。你能唔能夠抗拒用毒品嚟幫你瞓覺嘅引誘？	7	6	5	4	3	2	1

6.	試想像聽日你開始返新工，今晚你同朋友出街玩，想開心下。你能唔能夠抗拒以啪嘢嚟助慶嘅引誘？	7	6	5	4	3	2	1
7.	試想像你喺屋企啱啱同男/女朋友鬧翻，此刻你覺得非常嬲。你好想用啪嘢嚟向佢報復。你能唔能夠抗拒啪嘢嘅引誘？	7	6	5	4	3	2	1
8.	試想像你同男/女朋友啱啱掟煲，而家情緒十分低落，你會唔會向啪嘢嘅引誘讓步？	7	6	5	4	3	2	1
9.	試想像你啱啱遇見兩位朋友，佢哋以啪嘢嚟慶祝贏馬。你能唔能夠拒絕佢哋嘅慫恿，唔同佢哋一齊啪嘢？	7	6	5	4	3	2	1
10.	試想像你正在參加 Party，你覺得好緊張。其他人都好自在，好投入。你會唔會想用啪嘢嚟幫自己放鬆一吓？	7	6	5	4	3	2	1
11.	試想像你已經立志 2 個月內唔再啪嘢，但喺第 5 個星期你就失敗咗啦。你會唔會因為今次失敗而將錯就錯，啪得更多呢？	7	6	5	4	3	2	1
12.	試想像你已經差唔多可以戒毒戒到一個破記錄的時間，但尋晚你終於失守。你會唔會因為尋晚失敗咗，今晚再啪呢？	7	6	5	4	3	2	1
13.	試想像你而家自己一個人喺屋企覺得情緒低落，你能唔能夠抗拒出街啪嘢嘅引誘？	7	6	5	4	3	2	1
14.	試想像你嘅好朋友指責你反應遲鈍。你覺得好受傷，好想啪嘢，你能唔能夠抗拒啪嘢嘅引誘？	7	6	5	4	3	2	1
15.	試想像你嘅好朋友而家覺得好傷心。佢好想同你傾一啲沉重嘅心事。此刻佢好想以啪嘢嚟提升心情。你可唔可以唔同佢一齊啪嘢？	7	6	5	4	3	2	1

16.	試想像今日係週末，你覺得好悶，冇嘢能夠叫你提起精神。你而家一個人喺屋企，依個時候你能唔能夠抗拒啲嘢嘅引惑？	7	6	5	4	3	2	1

第四部分：抗逆力量表

下表是用於評估心理彈性水平的自我評定量表。請根據過去一個月您的情況，對下面每個闡述，選出最符合您的一項。這些問題沒有對錯之分。

	題目	從來不會	很少	有時	經常	一直如此
1.	我能適應變化	0	1	2	3	4
2.	我有親密、安全的關係	0	1	2	3	4
3.	有時，命運或上帝能幫忙	0	1	2	3	4
4.	無論發生什麼我都能應付	0	1	2	3	4
5.	過去的成功讓我有信心面對挑戰	0	1	2	3	4
6.	我能看到事情幽默的一面	0	1	2	3	4
7.	應對壓力使我感到有力量	0	1	2	3	4
8.	經歷艱難或疾病後，我往往會很快恢復	0	1	2	3	4
9.	事情發生總是有原因的	0	1	2	3	4
10.	無論結果怎樣，我都會盡自己最大努力	0	1	2	3	4
11.	我能實現自己的目標	0	1	2	3	4
12.	當事情看起來沒什麼希望時，我不會輕易放棄	0	1	2	3	4
13.	我知道去哪裏尋求幫助	0	1	2	3	4
14.	在壓力下，我能夠集中注意力並清晰思考	0	1	2	3	4
15.	我喜歡在解決問題時帶起頭作用	0	1	2	3	4
16.	我不會因失敗而氣餒	0	1	2	3	4
17.	我認為自己是個強而有力的人	0	1	2	3	4
18.	我能做出不尋常的或艱難的決定	0	1	2	3	4
19.	我能處理不快樂的情緒	0	1	2	3	4
20.	我不得不按照預感行事	0	1	2	3	4
21.	我有強烈的目的感	0	1	2	3	4
22.	我感覺能掌控自己的生活	0	1	2	3	4
23.	我喜歡挑戰	0	1	2	3	4
24.	我努力工作以達到目標	0	1	2	3	4
25.	我對自己的成績感到驕傲	0	1	2	3	4

第五部份：參加者基本資料

1. 性別：1□男　　2□女
2. 年齡:_____
3. 出生地點：1□香港　　2□中國大陸　　3□其他：_____
4. 教育程度：
   1□小學或以下　　2□中一至中三　　3□中四至中六
   4□預科　　5□專上非學位課程　　6□專上學位課程或以上

5. 你有否經醫生診斷患有精神病?
   1□沒有　　2□有，請註明：_____

6. 你是否與家人同住?
   1□是：與誰同住?(可選多項)　1□父親　2□母親　3□兄弟姐妹
   4□祖父母/外祖父母　5□其他親人:_____
   2□否：1□與朋友同住　2□自己一個住　3□其他：_____

7. 你現在所居住的房屋類型是？
   1□公營租住房屋（公屋）　2□村屋
   3□私人永久性房屋（私樓）　4□資助出售單位／夾屋
   5□臨時房屋／木屋／板間房／劏房／籠屋　6□其他：_____

8. 你家庭每月的入息多少（包括工作薪資、綜合社會保障援助金（綜援金）、長俸、其他親戚給予生活費或其他收入）？
   1□$10,000 或以下　2□$10,001 - $20,000　3□$20,001 - $30,000
   4□$30,001 - $40,000　5□$40,001 - $50,000　6□$50,001 或以上
   7□不知道

9. 你家庭主要入息來源是？
   1□父親　2□母親　3□綜援　4□其他:

10. 你的居住地區是？
    1□香港島　2□九龍　3□新界　4□其他:

11. 你的主要照顧者是？
    1□母親　2□父親　3□祖父/母　4□家傭　5□自己　6□其他:

IX. Appendix B: The homework exercise of SBCBT

工具：人生正面大事回顧

輔導目標：
工作員陪同個案回顧個案由童年至現在的正面事件，並從中取出例子證明個人能力，更具體地反映個人優勢。

嘗試回想人生中有哪些正面的事件，最影響你的情緒，請把相關事件扼要地記錄下來。

階段	事件一及意義	事件二及意義	事件三及意義
童年			
青少年			
成年			

這些經歷中，你發現有甚麼共同之處？自己對人、對事有甚麼要求？面對這些事件，你對自己整體有甚麼評價？

工具：個人及外在資源表

輔導目標：
工作員和個案可透過表格，搜集個人及外在的優勢或者資源，讓個案能夠具體地明白，個人及環境中原在的可能性，增加持續善用優勢的意識。

我的強項 例：善良	**內在資源 / 優勢** 例：有兼職及收入	**外在資源** 例：家庭、朋友支持

X. Reference

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XI. Research and editorial board

Acknowledgement
Beat Drugs Fund