

Post-treatment Life Planning and Relapse Prevention: An Effectiveness Study of an Integrative Model of Vocational Life Design for Young Rehabilitated Drug Abusers

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Executive Summary

A longitudinal mixed method of quantitative and qualitative research was used to evaluate the effectiveness of an integrative model of vocational life design in preventing relapse of youth rehabilitated from drug abuse. This integrative model involved four one-hour individual vocational counselling sessions based on Savickas' narrative life design and twelve 2-hour expressive arts groups. Motivational Interviewing techniques were used to aid the will to change.

Seventy youths rehabilitated from drug abuse have participated this study. In the quantitative part, both the 35 participants in the intervention group and another 35 participants in the control group were invited to complete four questionnaires. 62 participants completed the four time-point measures. In the dimension of drug use behaviours, frequency and number of participants of drug use were calculated. In the psychosocial dimension, self-efficacy to refuse drug use and psychometric scales were used to track the changes of the participants. In the qualitative research, 28 participants joined semi-structured focus-groups. Two case studies are presented to show the intervention process.

The research findings suggest the presence of effectiveness of the integrated model of vocational life design. Participants in both groups showed improvements in different psychometric scales. However, the progress of participants in the intervention group was greater and more consistent. The intervention group showed continuous improvement in their self-efficacy to refuse drug use, whereas the control group's self-efficacy to refuse drugs dropped in level at Time 4 of the time-point measures. In the intervention group, the relapse rate was lower than that of the control group. In the focus group interviews, the intervention group shared more specific and meaningful understanding of their future career paths and how they found meaning in their jobs. In the in-depth interviews, the participants showed progress in achieving breakthrough in their personal growth and also an enhanced inner strength when facing difficulties in their daily lives.

The findings in this study echoed previous studies in that self-efficacy and drug abuse are negatively correlated, demonstrated that life satisfaction is a protective factor with regard to drug use relapse. We also found that finding meaning in life is a stronger predictor of drug refusal efficacy than life satisfaction. Participants' ability to focus on the future and to recognise their potential in future opportunities play an important role in helping them find meaning in life.

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Introduction

Background

Under the auspices of the Beat Drugs Fund, this study aims to evaluate the effectiveness of a life-planning intervention model in preventing the relapse of rehabilitated addicts.

This study is inspired by the findings of two previous local longitudinal drug-related projects conducted by the Co-PI, Prof. Cheung Yuet-Wah. The first one is the “Longitudinal Study of Chronic Drug Abusers in Hong Kong” conducted from 2000 to 2003 (Cheung, 2009), with a sample size of 547 subjects at its baseline, and three waves of interviews spaced out at 12-month intervals. The mean age of the baseline sample was 36.3, and two-thirds of the subjects were primarily heroin users. The other study is the “Longitudinal Survey of Psychoactive Drug Abusers in Hong Kong” conducted from 2009 to 2012 (Cheung & Cheung, 2018), with a baseline sample of 754 psychoactive drug abusers recruited from 36 outreach agencies and drug treatment programmes. The subjects were interviewed six times, at 6-month intervals. The mean age of the baseline sample was 20.6, and the subjects were mostly young abusers of psychoactive drugs, especially ketamine.

Both longitudinal studies have demonstrated the significant and strong effects of life satisfaction in the continuation or discontinuation of drug use by treated addicts. These findings are consistent with local and overseas research which finds that a low level of life satisfaction is associated with a higher tendency to be involved in substance abuse (Bogart et al., 2007; Shek, 2003; Zullig et al., 2001). In a similar vein, Mohamad and colleagues (2018) further find that the relationship between life satisfaction and drug abuse among young people is mediated by their delinquency behaviour.

In recent years, there has been a growing recognition in treatment research that quality of life should be included in the evaluation of treatment effectiveness. While drug treatment is supposed to enhance quality of life, which is a protective factor against relapse, it can also bring about iatrogenic effects that reduce quality of life. Several studies suggest that quality of life should be included in treatment and rehabilitation programmes as one of the treatment outcomes (Smith & Larson, 2003; Torrens, 2008). The question therefore is: How can the level of life satisfaction of drug rehabilitees be raised?

Although both aforementioned longitudinal studies (Cheung, 2009; Cheung & Cheung, 2018) find a negative relationship between life satisfaction and continuation of drug use, the understanding of life satisfaction is not the same for both samples. Subjects of the longitudinal study of chronic drug abusers belong to an older generation of heroin abusers. They have wasted a good part of their lives on drug addiction, missing the opportunities to achieve a good career. For subjects such as these, they need to revise their aspirations downwards and be satisfied with the kind of life maintained by low pay and insecure jobs.

Life satisfaction involves quite a different mind-set and expectation in the sample of young psychoactive drug abusers in the second longitudinal study. Since these treated addicts are still young, their perception of whether or not they could have a good or normal future affects their present levels of life satisfaction. At this juncture, we are suggesting that life planning may be an effective means to help rehabilitated addicts to progressively reach a realistic life goal in which their personal growth is developed, a vocational path is planned, and their social life is enhanced.

Future planning, self-efficacy and life satisfaction are interrelated (Azizli et al., 2015). In other words, life planning facilitates life satisfaction, which creates longer-term protection for the rehabilitated drug abuser against relapse. Life planning is essential for young people in general. Intimacy, isolation, and identity and role confusion are constant challenges and psychosocial tasks among youth (Erikson, 1980). Life planning should facilitate rehabilitated young drug abusers to explore themselves in facing these psychosocial tasks and reduce the tendency of relapse.

Drug Use Behaviour and Self-Efficacy to Refuse Drug Use

Existing research has already demonstrated the importance of self-efficacy in drug abstinence (Cheung, 2009; Norozi et al., 2017; Taylor & Williams-Salisbury, 2015; Uzun & Kelleci, 2018). In Chong and Lopez's study (2008), self-efficacy was one of the main predictors of intrapersonal factors for decreasing risk in substance abuse. Giordano and colleagues (2016) also discern an association between self-efficacy and substance abuse. According to an earlier study, Bandura (1977) found that perceived self-efficacy and a belief in carrying out a task play an important role in successful behaviour change and task performance. Based on these findings, it is important to measure the self-efficacy to refuse drug use among participants in order to reflect the effectiveness of the intervention.

Drugs, Vocation and Life Satisfaction

People who have rehabilitated from drug abuse typically face challenges in returning to the work, seeking a job, and deriving work satisfaction (Siu et al., 2019). Siu and colleagues (2019) summarised the influences of long-term drug abuse on vocation which include: (1) negative impacts on neurocognitive abilities and everyday functional abilities; (2) co-occurring psychological disorders that bring negative effects on work performance and work readiness, and sustainability of employment; (3) lack of self-understanding and thus feeling lost and unsure when thinking of career paths; (4) lack of stable work experience; and (5) lack of skills and discipline for sustained employment. Meanwhile, Sari (2019) found that life satisfaction and meaning in life have a positive relationship with career decision-making self-efficacy. In addition, vocation or career satisfaction and life satisfaction are positively correlated (Judge & Watanabe, 1994). All these studies suggest that individuals with a history of drug use need to improve their self-understanding of their own strengths and gain clarity about their career paths to achieve life satisfaction and reduce relapse rates. To measure the effectiveness of the life planning programme, we proposed to measure our participants' self-efficacy to refuse drug use, their sense of meaning in life, life satisfaction, self-esteem, hope, understanding of their own identity, career decision self-efficacy, and career adaptability.

A Review of Interventions

There is no shortage of insightful vocational counselling models, such as the vocational choice theory (Holland, 1997), the career developmental theory (Super, 1990) and the cognitive information processing theory (Sampson, Reardon, Peterson & Lenz, 2004). In designing an optimal intervention for youth who have rehabilitated from drugs, an integration of three intervention approaches is used in this project: (1) narrative vocational counselling (Savickas, 2015; Savickas, et al., 2009), (2) expressive art techniques (Lusebrink, 2010), and (3) motivational interviewing (Miller & Rollnick, 2013).

Savickas's life-design vocational counselling approach (Savickas, 2015; Savickas, et al., 2009) is used as the basis of our integrative vocational counselling model. According to

Savickas (see Savickas et al., 2009; Savickas, 2015), narrative life planning is a technique that helps the client to achieve self-understanding and plan a vocational path and a desired social life for the future. It is a well-established vocational counselling approach (Brott, 2005; Savickas, 2015) for youth life planning, supported by findings of international studies showing statistically significant increases in career decision making self-efficacy (Di Fabio & Maree, 2012), higher levels of career adaptability, and greater life satisfaction than traditional intervention groups (Nota et al., 2016). In the past few decades, narrative life planning has become a professional practice, theoretically and methodologically, that is applied to a wide spectrum of people ranging from students, middle-aged people, employees of commercial organisations, etc. (e.g. Cardoso et al., 2016; Maree & Twigge, 2015; Wong, 2021). In Hong Kong, narrative life planning has been adopted to provide career and life counselling to secondary students and college students in higher-educational institutes (Education Bureau, 2018; Leung, 2005). It has been also applied to special populations such as students with disabilities (Burgstahler, 2001), inmates of correctional settings (Vernick & Reardon, 2001), and drug abusers (Platt, 1995).

A change of lifestyle is important for young drug abusers. This change can only happen when they design and own their life plan and are willing to realise personal goals. In overcoming the obstacles caused by drug abuse and its associated social stigma (Lloyd & Waghorn, 2007), it is important for young people to realise their own inner strengths. The narrative approach emphasises exploring, acknowledging and enriching one's own inner strengths, values and beliefs. With the technique of constructing, de-constructing, re-constructing, and co-constructing (Savickas, 2015), practitioners can assist young rehabilitators to reflect on their own lives, explore their preferred life identity and plan their own meaningful life. Previous studies using the narrative approach show that clients can deal with drug abuse through the process of emphasising their internal voices (von Braun et al., 2013). Therapeutic documents provide a media through which young people may reach a certain self-understanding and write their own stories for healing from addiction (Bosch, 2020). Furthermore, narrative intervention can provide a platform for people to rewrite and live out their preferred life stories (Clark, 2014).

As a complement to narrative vocational counselling, expressive arts therapy can facilitate deep self-exploration and understanding. Early studies (e.g., Carlson, 2007) have shown that art is not only compatible with a narrative approach, but it also enhances more therapeutic possibilities. A longitudinal study demonstrates that expressive arts can enhance the life satisfaction of the subjects (Meyer DeMott et al., 2017). Michalos and Kahlke (2010) also discovered a significant relationship among arts-related activities, satisfaction with quality of life, and happiness. Malchiodi (2005) pointed out that creativity can foster self-discovery, healing, and change. Expressive arts can be used by those searching for new resources (Levine & Levine, 2011) and as a self-exploration process (Liebmann, 2005).

One of the key functions of expressive arts therapy is to engage the five senses and facilitate expression of emotions through different art forms including, visual art, music, movement, dance, drama and poetry (creative writing). In the rehabilitation journey, young drug addicts experience emotional ups and downs. It is important for them to have a way to express and deal with the complicated emotions related to abstinence from drugs, to their future dreams, and to their efforts to realise their life plans. According to the Expressive Therapies Continuum (ETC) (Lusebrink, 2010), expressive arts encourage in-depth expression of the youth's inner journeys at kinesthetic, sensory, perceptual, affective, cognitive and symbolic levels. Peer support is crucial in the rehabilitation process. By holding regular group meetings,

social bonds among the young rehabilitees can be developed and strengthened to form a supportive and creative atmosphere.

The third and final approach, motivational interviewing (MI), is used to motivate youths rehabilitated from drug abuse to implement their individual life design and action plans. Motivational interviewing is commonly used in Hong Kong for treatment of substance abuse. It is a “person-centred, directive, method of communication for enhancing intrinsic motivation to change by exploring and resolving ambivalence” (Miller & Rollnick, 2002, p. 25). Motivational interviewing is an effective intervention in treatment for drug abusers (Lundahl & Burke, 2009; see also Bertrand et al., 2015; Satre et al., 2016). By exploring and resolving ambivalence, participants can enhance their intrinsic motivation for change (Miller and Rollnick, 2002). It is an effective intervention in treatment for drug abusers (Lundahl & Burke, 2009). In this study, motivational interviewing is used to motivate youth rehabilitated from drug abuse to design, implement and maintain their life plan and withdraw from drug use.

In the Treatment and Rehabilitation (T&R) setting, rehabilitees receive training in the vocational skills, self-efficacy, and social skills that prepare them to re-integrate into the community after programme completion. Such training covers many aspects of life planning. However, many discharged rehabilitees still find it difficult to maintain their drug-free status for very long after leaving their agencies. There is a need to offer discharged rehabilitees a well-structured and professional programme that engages them for a period of about one year after leaving their T&R agency, during which they can be systematically guided to develop their life goals and shown paths by which to reach them. The purpose of this study is to design, implement and test the effectiveness of an integrative life planning programme for relapse prevention.

Rationale and Objectives

Concerning the optimal treatment time for conducting this life-planning programme, young people who have already undergone drug detoxification and major rehabilitation are the most suitable. While in Treatment and Rehabilitation (T&R) programmes, rehabilitees receive social and vocational skills training and counselling that aim to prepare them for reintegration into the community. Some T&R agencies even provide additional informal care to their discharged clients by welcoming them to come back to join activities or see social workers. However, after leaving the T&R agencies, rehabilitated addicts very often face the world on their own, and without enough support, many of them return to drug abuse. There is a great need for a well-designed post-treatment relapse prevention programme for rehabilitated addicts, especially for the first year following detoxification and major T&R programmes, which is the critical period during which they are most vulnerable to relapse. An integrative model for life planning has been developed and implemented in this study. The objective of this study was to evaluate the effectiveness of a life-planning intervention model for youth rehabilitated from drug abuse, with a view to preventing relapse.

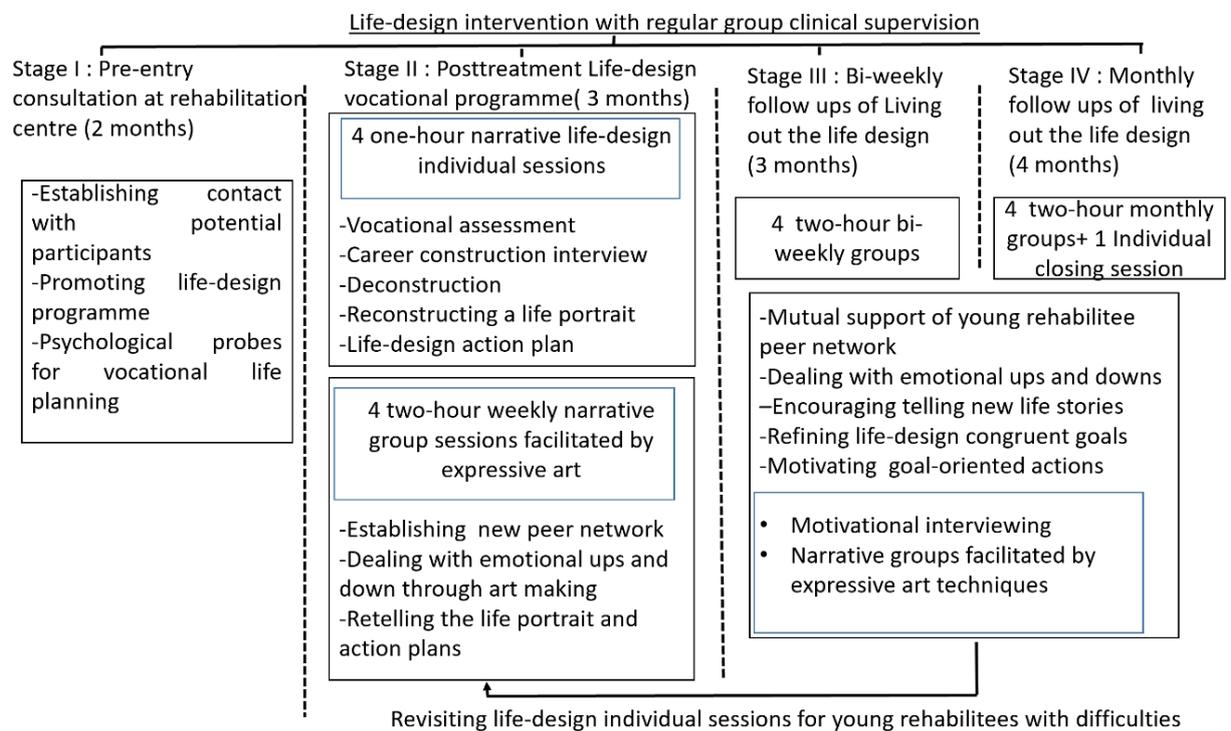
To measure the effectiveness of our intervention model, this study relies on the following outcome measurements: (1) self-efficacy to refuse drug use; (2) abstinence from using drugs; (3) life satisfaction; (4) meaning in life; (5) self-esteem; (4) hope; (5) functions of identity; (6) career decision self-efficacy; and (7) career adaptability.

An Integrative Life Planning Programme

On the basis of the three above-mentioned approaches, a four-stage integrative life-design vocational model for young post-treatment rehabilitees was implemented as outlined in the published brochure “Post-treatment Life Planning and Relapse Prevention: Life GPS”, seen here in Figure 1.

Figure 1

A Four-stage Integrative Life-design Vocational Programme



At **Stage I**, pre-entry consultation and promotion of the life planning (LP) programme were provided at the rehabilitation centres for young rehabilitees who were about to complete the T&R programme. They were informed about the LP programme and encouraged to join it after they were discharged from the agency. The duration of this stage took around two months.

At **Stage II**, the young rehabilitees were discharged from the T&R programme and joined the integrative LP programme as participants. In this programme, they were engaged in designing and living out a new meaningful life. In the programme, it was important for them to stay together and strengthen their mutual social support in this battle of staying drug-free. Therefore, both individual sessions for life planning and group sessions for establishing recovery-oriented social networks were important. In the four individual sessions, life-design vocational counsellors did not only conduct vocational assessments and career construction interviews to enable the participants to explore their life stories, strengths, values, role models, and deep interests, but also collaborated with them to reconstruct their individualised life portraits based on their self-concepts and self-awareness. In the light of their unique life portraits, life-design counsellors co-constructed with them tailor-made strength-based individualised action plans and addressed their concerns about their vocation or career choices.

In parallel, the participants were invited to participate in four two-hour group sessions, in which they could establish new social networks with their peers in the programme who shared

the common goal of staying drug-free and looking for a vocational recovery. Expressive arts techniques were used to help them express their emotional ups and downs during the process and deal with any guilt, shame and anxiety that might become obstacles in their way. The young clients were also encouraged towards the end of this stage to tell and re-tell their life portraits and action plans, so that they could own and embrace these plans and move towards a new future.

Motivational interviewing (MI) was applied throughout the whole intervention process. The facilitators needed to notice the participants' stages of change in order to adjust their intervention strategies. The stages of changes included pre-contemplation, contemplation, preparation and action (Prochaska & DiClemente, 1983). In this programme, the main techniques used were "RULE" and "OARS". "RULES" referred to "resisting the righting reflex", "understanding the patient's own motivations", "listening with empathy", and "empowering the patient" (Hall et al., 2012); and "OARS" referred to "open-ended questions", "affirmations", "reflections" and "summaries" (Clifford & Curtis, 2015). RULE and OARS can help facilitators build up relationships with participants and create an atmosphere for positive change. Thus, participants are guided in meaningful reflection. In this programme, the main purpose of using MI was to increase the motivation of participants for working out their action plans so as to change their lives. This stage took about three months.

At **Stage III**, the participants were encouraged to live out their life portraits and take action to realise their life designs. They were invited to meet once every two weeks in expressive arts groups. Mutual support of clients played an important role at this stage. They were encouraged to share their new life stories, their actions, efforts and achievements in accordance with their life designs. A single personal successful change story could ignite new hopes and possibilities in their peers. Along the way, counsellors used motivational interviewing techniques to help the young people to refine their life-design goals and motivate goal-oriented actions, as well as journey. This stage took three months.

At **Stage IV**, four monthly follow-ups were held to provide the young people with more space and trust so that they could restore their autonomy to live out their life designs. At this stage, it was what was happening outside the session that really mattered, giving room for new life stories to emerge and prosper. At the end of this stage, an individual closing session was held so that each participant could reflect on the changes that he/she had experienced since entering the LP programme, confirm their preferred identities and life portraits, and express what they wanted for the future. During Stage III and Stage IV, special individual sessions were arranged for those participants who had difficulties in implementing their life portraits, so that they could be coached by life design counsellors to refine their life portraits and action plans. The length of time taken to complete this stage was four months.

Throughout the whole programme, regular clinical group supervision was available for life-design counsellors to help refine their intervention plans, guide their practice and provide opportunities for them to exchange their experiences and share special cases.

Four Individual Life Design Sessions

In this programme, the facilitators used Savickas' *Life-Design Counseling Manual* to work with the participants in formulating action plans that reflected their unique values and abilities. Participants could reflect on their life stories, raise their self-awareness, understand their strengths via Career Construction Interviews (CCI), create life portraits, take the 24

Character Strengths Test and the Holland Code (RIASEC) assessments in these four individual sessions. Table 1 sums up the goals and activities in each session.

Table 1
Summary of the Individual Life Design Sessions

| Session | Goal | Activity |
|----------------|---|--|
| S1 | <ul style="list-style-type: none"> • To enhance the participants' understanding of the project • To build rapport with the participants and establish a working alliance • To explore the participants' unique micro-narratives using Career Construction Interviews (CCI) and the LifeLine Technique | <ul style="list-style-type: none"> • Welcoming and Introduction of the project • Introduction of rules and ethical principles • Career Construction Interview and LifeLine Technique • Conclusion and consolidation |
| S2 | <ul style="list-style-type: none"> • To build rapport with the participants and establish a working alliance • To thicken the narratives and to clarify any confusion or ambivalence in the narratives • To create a life portrait | <ul style="list-style-type: none"> • Welcoming and discussion about the meaning of the name • Deep reflection on Career Construction interview (CCI) • Career-related assessment |
| S3 | <ul style="list-style-type: none"> • To develop the participants' understanding about his/her career direction and introduce SMART goals • To build resources through discovery according to the LifeLine Technique • To enhance confidence with regard to setting goals and achieving a career plan | <ul style="list-style-type: none"> • Co-construction of a life portrait • Discussion of a new career direction • LifeLine Technique • Conclusion and consolidation |
| S4 | <ul style="list-style-type: none"> • To continue and consolidate the previous session's discussion • To motivate the participants to achieve their goals by facilitating dialogue with a significant other • To consolidate the experience by creating an art piece that expresses participants' anticipation of their future • To conclude the experience of the individual sessions | <ul style="list-style-type: none"> • Establishment of SMART goals • Discussion of the barriers to and supporting factors in achieving the goals • Art making for future • Harvesting • Conclusion and consolidation |

Session 1: Career Construction Interview

The purpose of this session is to focus on engaging participants, establishing a working alliance and undertaking life-design related assessment. In this session, the life-design counsellor briefs young participants on the narrative life-design programme, goes through and obtains informed consent, explains the research programme and obtains their consent to proceed, asks about their working experience, and establishes goals.

The Transition Narrative. By asking the entry question, “how can I be useful to you as you construct your career”, the life-design counsellor invites the young participants to tell stories about their current transition. It is interesting to hear how they story their problems and make sense of their life experiences. In this part, they might share their past or current working experiences, educational background, their episodic experiences, and concern about their future. It is important for the life-design counsellor to accept their concerns and goals and introduce them to the idea that the person is not the problem but that the problem is the problem (White, 2007). In addition, it is important to assure the young participants that they are the experts of their own life, and that they are directing the session.

Career Construction Interviews (CCI). The career construction interview tool is helpful for exploring the preferred identity and life theme of young people with psychosis. Typical topics involve their role models, favourite stories, websites, television programmes, favourite sayings and their early recollections (Savickas, 2015). The life design counsellor asks the following questions: 1) Whom did you admire when you were growing up and why? Who were your heroes or heroines and why? Could you please list three persons (can be cartoon figures) other than your parents? These questions are important because people use role models as a blueprint for self-construction. 2) Do you read any magazines or watch any television or browse any websites? What do you like about them? This question is to explore the interests of the youth and the environment that draws their interests. 3) What is your favourite book or movie? Can you tell me a story about it? From a favourite story, the life-design counsellor can identify script that the youth use as strategies for their transition. 4) What is your favourite saying or motto? From a favourite saying, people usually select the best advice for themselves. 5) What are your earliest recollections? Can you tell me three stories? What might be the headline of each early story? How does your early recollection provide important meaning to your current self? If the Career Construction Interview is not completed in Session I, this should be followed up in Session II.

Session 2: Deep Reflection on the Career Construction Interview

The purpose of this session is to complete the Career Construction Interview (CCI), and to help young participants reflect and reason their life themes and career stories based on their childhood recollections, favourite stories, mottos and role models (Savickas et al., 2009; Savickas, 2012). Through mapping, young participants learn to make sense of the narration of their own life stories and understand how the Career Construction Interview informs their own life theme and their life script for their own career. In this session, participants are also invited to do two career-related assessments, namely the VIA Character Strength Test (Peterson, & Seligman, 2004) and Holland Code Career Test (Holland, 1997) to help them understand their key character strength and their talents.

Session 3: Reconstructing a Life Portrait

The purpose of this session is to combine the micro-narration (small stories) of the young participant into a macro-narration (a large story or life portrait). This life portrait will unfold deeper meaning of the youth, with which they would understand themselves better. This session aims at facilitating the youth to become aware of their underlying concern of life, their strength, their personalities and their interests. With this enriched self-awareness, the young participants rehabilitated from drug use are facilitated to make important life decisions. In reconstructing a life portrait, the following seven tasks are essential (Savickas, 2015):

The first task is to frame the perspective. From the three stories of the early recollections of the young participants, the life-design counsellor is able to gain a perspective from which to view the problem presented in the transition narrative of the young person. The early recollection may suggest a preoccupation or pains related to the preoccupation. Savickas (2015) points out that a preoccupation may become an occupation. In analysing the stories of early collections, the counsellor pays attention to the 'theme' and help clients to 'hear the message from-the-self-to-the-self' (Savickas, 2015:42). Young participants are invited to complete the sentence, 'In planning my career, my underlying concern has reminded me _____'.

The second task is to describe the self. It is important for the life-design counsellor to help the young participants to understand their own self-conceptualisation. The role models, no matter if they be true persons or cartoon figures, are important to the young participants in the shaping of their identity. The attributes that they use to describe their role models suggest core traits of their own preferred identities.

The third task is to make meaning or connection between their early recollections and their role model attributes. Through this task, the counsellor helps 'arc the character' and 'trace the inner journey of transformation' (Savickas, 2015:49) For example, one can say, 'to solve problems in growing up, I turned my fear of being neglected by others into concentrating on the one thing that I am good at'.

The fourth task is to name interests. The life-design counsellor tries to support the young participant to explore types of occupations that may fit their interests. By exploring their interests as suggested by their favourite magazines, websites, and TV programmes, the life-design counsellor helps young participants to explore their preferred occupation in four dimensions: (1) the places that they want to work in, (2) the people whom they want to work with, (3) the problems that they want to address, and (4) the ways or the procedures that they want to use. The counsellor is also encouraged to apply Holland's six vocational personality and work environments (Holland, 1997) to explore the participants' vocational interests.

The fifth task is to script a role. The life-design counsellor facilitates the young participants to understand their transitional problem with their favourite stories. When the young participants learn from their favourite stories to face their current problems, they are likely to see new possibilities in their occupation and revise their identity.

The sixth task is to apply advice. Young participants rehabilitated from drug use learn from their own favourite sayings or mottoes the best advice to face their current problems. They are the expert of their own lives. When they drew wisdom from their own selected sayings, they reinforce 'their own authority in authoring their own lives' (Savickas, 2015:63).

The seventh task is to unify the life portrait of the participants. The life counsellor helps make a first draft of the life portrait of a young participant by combining the findings of the six tasks above. In this process, it is important to make it internally consistent and use the same language as uttered by him or her. The counsellor will retell the life portrait for the young participant to hear and reflect upon. The retelling follows the sequential plot of the life portrait, including the young person's perspective, self-concept, vocational interests, revised identity script and advice. This life portrait speaks for itself and is intended to reveal a consistent meaning in life to the young participants.

In this session, the life-design counsellor discusses with the participants whether the career code type that Holland Code Career Test (Holland, 1997) suggests fits their life portraits and preferred identity.

Session 4: Life-design Action Plans

The last individual session aims at assisting individual young participants to make life-design action plans, encouraging them to initiate first steps and connecting them to occupational therapy service and other related services for further follow-up. When young participants learn to own their life portraits, most of them gain clearer self-concepts, self-awareness and show less confusion about their future direction. It is normal if they still show realistic hesitation or concern over other barriers in their career path. In this session, the life-design counsellor works together with them to foster the intentionality of each young participant, acknowledging and addressing their unique needs and concerns, and providing follow-up clinical services to them. Motivational interviewing techniques are used in this session to foster the intentionality of the young participants, so that they can stick to their commitments even if they encounter new challenges or difficulties. The counsellor collaborates with the young participants to set realistic goals, explore choices, and chart a direction through possibilities and constrains. The counsellor also encourages the young participants to discuss these topics with the significant others in their social network to engage more support for the process of information seeking, initiating important first steps, and promoting self-exploration and self-growth, all the while guided by the vocational life design that is consistent with their preferred identities.

Twelve Expressive Arts Group Sessions

In the twelve expressive arts group sessions, the expressive arts facilitator engaged different art modalities, including visual arts, music, movement, creative writing, and drama to facilitate youth rehabilitated from drug use in expressing their deep emotions, exploring their self-concepts, and discovering new resources and new possibilities.

The twelve expressive arts group sessions were organised in three different clusters (see Table 2). The purpose of the first cluster of interventions was to build up mutually supportive relationships among group members. Group members learnt to use imagination and creativity to explore new possibilities and were encouraged to share their personal experience in a safe space. The purpose of this cluster was to explore the lifestyle of the participants. Four sessions in this cluster involved the topics, “My Journey”, “My Story”, “My Space” and “My Voice”.

Table 2
Summary of the Expressive Arts Group Sessions

| Session | Clusters | Topic | Objective |
|---------|-------------------------|---------------------------|--|
| 1 | Lifestyle | My Journey 我的旅行 | <ul style="list-style-type: none"> • Build up therapeutic relationships • Facilitate participants’ imagination |
| 2 | | My Story 我的故事 | <ul style="list-style-type: none"> • Tell and retell a favourite story mentioned in the individual sessions |
| 3 | | My Space 我的空間 | <ul style="list-style-type: none"> • Build up a sense of security |
| 4 | | My Voice 我的聲音 | <ul style="list-style-type: none"> • Understand more about one’s inner voices • Learn to communicate with others |
| 5 | Identity and Boundaries | Names and Emblems 名不虛立 | <ul style="list-style-type: none"> • Explore the meaning of names: Self-identity I |
| 6 | | Light and Shadow 光影繽紛 | <ul style="list-style-type: none"> • Accept one’s past self: Self-identity II |
| 7 | | House of Light 光之居所 | <ul style="list-style-type: none"> • Build up boundaries and a secure base |
| 8 | | Frame and Freedom 自由邊框 | <ul style="list-style-type: none"> • Reflect on limitations and freedom |
| 9 | Strength and Future | Lamp in the Dark 暗夜燭燈 | <ul style="list-style-type: none"> • Explore inner strengths and inner resources |
| 10 | | Mask of Life 面具人生 | <ul style="list-style-type: none"> • Review life |
| 11 | | Dream Island 夢想之島 | <ul style="list-style-type: none"> • Welcome dreams and future |
| 12 | | One Piece 一中之一 | <ul style="list-style-type: none"> • Link up “me” and “we” |

Cluster 1: Lifestyle

The first cluster of expressive arts groups focused on the lifestyles of the youths. It valued their unique life journeys, their life themes as revealed in their favourite stories, their safe spaces and their inner voices.

Session 1: My Journey

Session 1 “My Journey” used the conceptual metaphor “life is a journey”. Participants were invited to perform a drama in which they went to an airport to set off on their journey on an airplane to their favourite places. In this session, the young participants were given the opportunity to choose photos of different landscapes and design a postcard to themselves using Pastel Nagomi Art. A gallery of artwork was arranged to enable each artwork to be seen and given aesthetic responses by other group members. Then the young participants were invited to write a poem to crystallise their understanding of “life is a journey”. Figure 2 shows an example of materials used and a postcard designed in Session 1.

Figure 2

Sample of Art Piece: My Journey



Example of Postcard



Example of Postcard designed by Participant

Session 2: My Story

In Session 2, an individualised handbook based on the sharing of the young participants in their four life-design individual counselling sessions was given to them. Many of the young people felt touched when reading their own personal stories in their individualised life design handbook. They were encouraged to share their life stories and preferred identities in front of the group members. The other group members gave them feedback and echoed their feelings with their similar experiences as outsider witness. Through telling and retelling, the preferred identities of the youths rehabilitated from drug use were enriched and their preferred life stories were acknowledged and encouraged by the group. Following this, they listened to the piano music *River Flows in You* by Yiruma and used crayons to draw to the music with their eyes closed. After a minute's free drawing with closed eyes, they were asked to open their eyes and draw a 2nd layer using watercolour in a conscious way. This process was symbolic and empowering. Life can be chaotic and painted with no control, yet can eventually be turned into a beautiful painting with conscious painting. Many participants were astonished by this process, not only at their being able to paint what they had painted, but also that their paintings reflected their lives. Figure 3 shows an example of an art piece made by a participant in this session.

Figure 3

Sample of Art Piece: My Story



Session 3: My Space

Everyone needs a safe space, a shelter where they can go when they feel wounded and exhausted. The purpose of this session was to enhance self-care and self-protection. Participants were first invited to use movement to explore their sense of safety and space. They were shown how to focus on themselves using stones and their five senses. The stones represented power. The participants were encouraged to write or draw things on the stones that gave them strength and that symbolised power. Participants painted their own wooden houses and use their stones of strength, colour papers, and other art materials to make their own unique spaces of safety. Through this activity, they searched for and created their own secure space, one which contained their power. Participants were invited to put their houses together so that they could create a safe village of unique houses and thus build up connections with each other. Figure 4 shows an example of a small house created by a participant and a village.

Figure 4

Sample of Art Piece: My Space



Note. Using different materials, participants designed their small houses to represent their secure spaces.



Note. Participants could add new elements when creating a village.

Session 4: My Voice

Many young people are not aware that they have a voice in their lives. Many participants shared that they found it hard to voice out what they truly wanted. There were sentences that they wanted to say to their life significant others, but they did not know how to free their true voice from their hearts. In this session, the participants were facilitated to hear their inner voices, the voices of others, and the voices in a group using paper rolls. Participants could think about what they wanted to voice and what they wanted to hear. Paper rolls were used to create “megaphones” by which to express their inner voices by (see Figure 5). Using art materials, participants were able to show others the status of their voices. Some wished to shine in front of others and be heard by others. One participant described how his voice was shut off, and how he did not know how to turn on the button to release his inner voice. When participants used their megaphone to express their inner voice, other group members played music instruments to give aesthetic responses.

Figure 5

Sample of Art Piece: My Voice



Cluster 2: Identity and Boundary

The second cluster of expressive arts groups aimed to explore participants' identities, understand their limitations in life, learn to accept themselves and others, and know how to build up safe boundaries in their communication with other people. The topics included "Emblem of the Name", "Light and Shadow", "House of Light", and "Frame and Freedom".

Session 5: Names and Emblems

Names are the unique signs of individuals. Exploring the names of people using art can bring another perspective to their understanding of themselves. Participants were invited to feel and follow the circular lines on a piece of wood mindfully and say their names softly. In the process, they shared stories about their names and the images that popped into their minds. They designed a badge to represent their names by painting on wooden pieces (see Figure 6). Through creating emblems for their names, participants explored the deeper meanings of their names and revealed what were wished by their family members and demonstrated what was important in their lives. This session helped participants learn more about who they are and whom they want to become.

Figure 6

Sample of Art Piece: Names and Emblems



Session 6: Light and Shadow

In this session, participants were given the opportunity to explore light and shadows, images and reflections. Participants were first invited to observe the dazzling light reflection of a glass of water. Then they were invited to paint white calligraphy cloth with pure water. The magical process is that when pure water drops fall on this white calligraphy cloth, inky marks appear; yet when the cloth dries up, all black marks fade away. Participants felt free to draw and paint whatever they wanted to let go of in their lives. Then they were invited to see the fading and recovery process of the calligraphy paper. They were given a bamboo stick to scratch out a vision of what their hearts were longing for on black scraping paper. Figure 7 shows two art pieces from this session. The letting go and the imprinting of one's vision on scratch paper creates a symbolic process of self-healing and recovery.

Figure 7

Sample of Art Piece: Light and Shade



Session 7: House of Light

Light needs a holder or a container. Many people have warmth in their hearts, but they need to hold, contain and protect that light. Different sorts of art materials were provided, from which participants created their own house of light in a creative way. No light can be lit without protection. By creating a house of light, the youths could visualise the base (the protection) they need to protect their inner warmth, passion and positive resources (see Figure 8). Participants showed individual metaphors for their houses of lights, such as a bird nest, a fireplace with a bible verse or a rice dumpling in memory of a loving grandma who had passed away. When they shared with each other their creative work, they shared their stories of light, stories of warmth and stories of hope at the same time.

Figure 8

Sample of Art Piece: House of Light



Cluster 3: Strength and Future

In the four expressive group sessions in the Cluster 3, participants focused on their strengths and their visions for their future through the following four session themes, “Lamp in the Dark”, “Mask of Life”, “Dream Island”, and “One Piece”. These themes supported participants to unmask themselves, face their futures, and prepare themselves to integrate into the community

Session 9: Lamp in the Dark

Expressive arts therapists facilitated participants with guided imagery to paint their inner power and strength on watercolour paper with watercolours. After sharing their reflections on the paintings, they were invited to roll the images and put candles inside them. When the lights were turned off, these became lanterns (see Figure 10). This transformation created a new perspective from which participants could visualise their inner strength. Participants were given the opportunity to reflect further on their inner strengths and resources and in which way they can bring light to others; in other words, how they might serve others or the community.

Figure 10

Sample of Art Piece: Lamp in the Dark

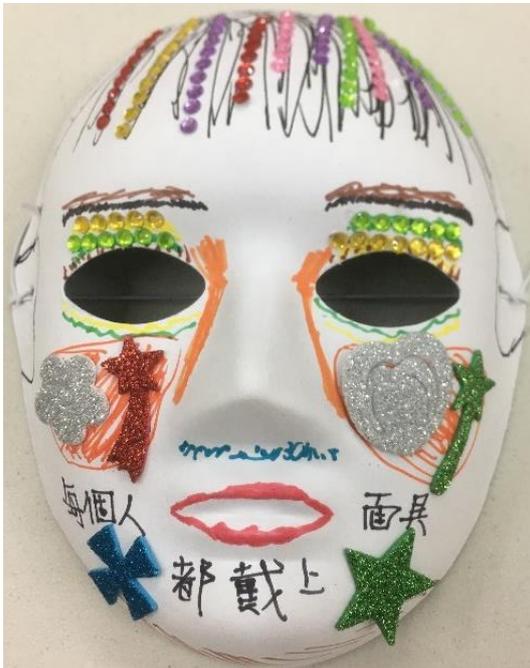


Session 10: Mask of Life

After several sessions of working with light, inner freedom and inner resources, it was time for our participants to face their past experiences and the incongruences in their lives. Participants were each given a blank mask to touch and feel with their eyes closed. They were then invited to paint their masks, inside and outside. The outer side of the mask represented how other people viewed them, whereas the inner side of the mask represented how they viewed themselves. In this session, participants could reflect how they were seen in other people's eyes and who they really were. Many participants revealed that they were not used to showing their true selves or their true emotions in front of others. The two sides of the participants' masks could vary greatly: The outside of a mask could be full of shining smiles, but inside could be very sad; the outside could be scary, but inside could be gentle; the outside might be colourful and exaggerated, but the inside might be simple. Figure 11 shows an example of a mask made by a participant.

Figure 11

Sample of Art Piece: Mask of Life



The outer side of the mask



The inner side of the mask

Session 11: Dream Island

The island of dreams activity was future orientated. Participants were encouraged to dream about their future and imagine their dream island. They were provided with a white plate and clay of different colours to create their dream island. On this island of dreams, they were free to create their preferred creatures and characters, from which they could create their own stories and dramas. New stories were created through interaction with different dream islands. Participants could put their islands together to form a dreamland (see Figure 12). In this session, participants were facilitated to embrace their hopes and their preferred life stories. The exchange and interaction among islands show their mutual support.

Figure 12

Sample of Art Piece: Dream Island



Session 12: One Piece

The purpose of the final session was to reach a good closure for the group and create an occasion for participants to express their appreciation for the mutual support they had received. In groups with more than six people, participants were invited to paint on a 10-metre-long paper with acrylics (see Figure 13). The collective painting allowed the participants to experience creating a huge piece of art collectively. Through painting this 10-metre-long picture together, they were able to review their relationships with group members, and their experiences in the sessions. After drawing the big painting, participants could use an empty photo frame to select their favourite parts from the big picture. By creating a single project together, both the uniqueness of the individual and the effort of the group collective are acknowledged. This process symbolises that each participant is a unique part in a group and that they are fully valued and appreciated by the whole group.

Figure 13

Sample of Art Piece: One Piece



A 10m long picture drawn by participants

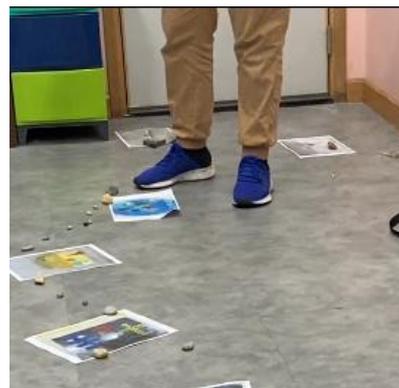


Participant used a photo frame to choose their favourite part from the big picture

For group sizes smaller than six people, participants were invited to use stones to make their own labyrinth (see Figure 14). They decorated the labyrinth with photoprints of the creative artwork that they had made in different sessions. They walked through their own stone labyrinth with the witness and encouragement of all group members. Then they were invited to make and write a handmade card for one group member to show their appreciation.

Figure 14

Sample of Art Piece: Stone Labyrinth



Method

A longitudinal mixed design of quantitative and qualitative research was used to test the effectiveness of the integrative model of vocational life design for youth rehabilitated from drug abuse. For quantitative research, participants were asked to complete the pre-test questionnaire before the intervention (T1); the post-test (T2) after the Stage II life-design consultation; the 3rd time point questionnaire (T3) after the Stage III bi-weekly follow-up groups; and the 4th time point questionnaire (T4) after the Stage IV monthly follow up groups. Qualitative research includes both semi-structured focus-group interviews and case studies. Semi-structured focus-group interviews were conducted in parallel with the four-wave quantitative research. Two case studies based on records from the intervention sessions and the in-depth interviews were used to illustrate how participants' self-exploration and career perception may change their relationship to drugs.

Quantitative Research

Sampling

The inclusion criteria of the participants were (1) aged between 15 and 35, and (2) receiving typical rehabilitation treatment for drug abuse. Those suffering from severe mental disorders was an exclusion criterion. The inclusive and exclusive criteria helped control possible confounding factors and ensure the physical and psychological condition of the participants. In total, 70 participants (41 males and 29 females) were recruited in this programme. The average age of the participants was 27.84 ($SD = 5.41$). All participants in this study were recruited on a voluntary basis from collaborating agencies, including the Society for the Aid and Rehabilitation of Drug Abusers, Hong Kong Lutheran Social Service, the Evangelical Lutheran Church of Hong Kong, Caritas Hong Kong, Hong Kong Children and Youth Services, Hong Kong Christian Service, the Society of Rehabilitation and Crime Prevention, Hong Kong, Tung Wah Group of Hospitals, Barnabas Charitable Service Association Limited, and the Hong Kong Federation of Youth Groups. Altogether 24 participants of the intervention group and 14 of the control group were recruited from residential homes, whereas 11 participants in the intervention group and 21 participants in the control group were referred by social workers in the community.

Owing to the social movement in 2019 and the COVID-19 outbreak in 2020, the recruitment of participants was very challenging. During those times, services at most agencies were suspended and group activities were discouraged. Many newly rehabilitated young drug users, who were our potential participants, were reluctant to participate in longitudinal intervention and research studies out of health concerns and because of social distancing policies. Therefore, recruitment of 70 participants for randomisation into the intervention group and the control group in one attempt became an impossible task. In spite of these difficulties, the research team made great efforts to approach as many rehabilitation centres and agencies as possible and actively discussed feasible recruitment strategies with social workers to work out solutions for individual agencies. Several agencies provided the participants with the choice of either joining the intervention group or the control group.

With the full support of participating agencies, the study recruited 70 participants by referral in small batches from various agencies over an extended period of 15 months (See the RAG approval dated June 16th, 2020 to extend the recruitment from 6 months to 15 months). Owing to health concerns, however, the assignment of intervention group and control group was largely restricted by the policies of individual agencies and the self-selection of the participants. This recruitment strategy thus restricted the possibility of conducting randomised

sampling for this study. Although randomisation and matching were not performed in the formation of the intervention group and the control group, it turns out that no statistically significant differences were found between the control group and the intervention group in terms of age, education, or religious affiliation, suggesting that basic matching has been achieved in the two groups of the participants. However, participants in the control group showed more full-time employment and marital or couple relationship than those in the intervention group (see Table 4). All participants completed the questionnaires in T1 and 2. In T3, there were 33 participants (with two withdrawals) in the control group and 34 participants (with 1 withdrawal) in the intervention group. In the final time-point, 62 participants were identified as having completed the questionnaires from T1 to T4 (control group, $N = 31$; intervention group, $N = 31$). The completion rate is 88.6% and the dropout rate is 11.4%. In total, eight cases dropped out by the end of the reported period. The reasonable number of dropouts will not affect the statistical reliability of our study. G*power (Faul, Erdfelder, Buchner, & Lang, 2009) is used to determine the sample size. Regarding the MANOVA between-factors repeated measure with two groups, a sample size of 38 participants is required for a four time-point measure, respectively with the medium effect size ($f = 0.25$), alpha at 0.05, and power at 0.85. Regarding the MANOVA within-factors repeated measure with two groups, a sample size of 54 participants is required for four time-point measure respectively with the medium effect size ($f = 0.25$), alpha at 0.05, and power at 0.85. Therefore, our minimum sample size would be 54 participants. Since our proposed intervention covers 8 months and includes four individual life-design consultation sessions and 12 expressive arts groups, we proposed 70 participants in the proposal to accommodate a reasonable number of dropouts throughout this eight-month intervention, as many young people who are rehabilitated from drug use are unlikely to commit to a long intervention and follow up.

Measures

The questionnaire kit consists of standardised psychometric scales (see below), and socio-demographic variables that included gender, age, education, work experience, previous drug use information and treatment history. Referring to Table 3, the standardised psychometric scales show statistically satisfying reliabilities in this project:

Self-Efficacy to Refuse Drug Use (SE): Self-efficacy has been found to be an important protective factor against drug-reuse (e.g., Marlatt, 1985; Cheung, 2009). In this study, we made use of the Questionnaire Set 4 of the 2018 Beat Drugs Fund to measure Self-Efficacy to Refuse Drug Use. It is a 5-point scale (1 = very difficult to refuse to 5 = very easy to refuse) with 7 items in Question 1. The higher the score, the higher the level of self-efficacy to refuse drug use. The Cronbach's alpha coefficient from T1 to T4 measured as .867 to .889.

The Meaning in Life Questionnaire (MLQ) (Steger et al., 2006) was adopted to measure the presence of and the search for meaning in life. The higher the score in the presence of meaning in life, the more participants feel that they find meaning in life. The higher the score in the search for meaning in life, the more participants put effort into looking for meaning or deepening their understanding of meaning in their lives. It is a 7-point scale (1 = totally not accurate to 7 = totally accurate) with 10 items. The two subscales were found to be reliable from T1 to T4 in this study (presence, $\alpha = .816$ to $.790$; search, $\alpha = .879$ to $.846$).

The Satisfaction with Life Scale (SWLS) (Diener et al., 1985) was used to measure the participants' global evaluation upon their personal life on a 7-point scale (1 = strongly disagree

to 7 = strongly agree) with five items. The higher the score, the higher the level of life satisfaction. The Cronbach's alpha coefficient from T1 to T4 measured as .889 to .887.

Rosenberg's Self-Esteem Scale (RSE) (Rosenberg, 1965) was adopted to measure the subjects' overall subjective evaluation of themselves on a 4-point scale (1 = strongly disagree to 4 = strongly agree) with ten items. The higher the score, the higher the self-esteem. The Cronbach's alpha coefficient from T1 to T4 measured as .787 to .847.

The Herth Hope Index (HHI) (Herth, 1992) was adopted to measure the level of hope felt by participants on a 4-point scale (1 = strongly disagree to 4 = strongly agree) of twelve items to identify their inner sense of temporality and future (ITF), inner positive readiness and expectancy (IPRE), and interconnectedness with self and others (ISO). The total possible points on the total scale are 48 points. The Cronbach's alpha of hope scale ranges from .565 to .866. The Cronbach's alpha of inner sense of temporality and future from T1 to T4 is .632 to .727, the inner positive readiness and expectancy ranges from .712 to .866, and interconnectedness with self and others ranges from .604 to .676.

The Functions of Identity Scale (FIS) (Serafini & Adams, 2002) was adopted to measure subjects' perceived functions of identity along with five dimensions, which are structure, future goals, harmony, and personal control. FIS is a 5-point scale (1 = never to 5 = always) with fifteen items. A high score suggests a stronger sense of self with respect to the five subscales. The Cronbach's alpha of all FIS items is .625 to .874. All subscales found to be reliable from T1 to T4 in this study (structure, $\alpha = .633$ to .787; harmony, $\alpha = .733$ to .785; goals, $\alpha = .800$ to .874; future, $\alpha = .686$ to .835; personal control, $\alpha = .718$ to .814).

The Career Decision-making Self-Efficacy Scale - Short Form (CDSE-SF) (Betz, Klein, & Taylor, 1996) was adopted to measure the subjects' confidence and happiness in their career development process. It is a 5-point scale (1 = no confidence to 5 = complete confidence) with 25 items. The higher scores represent greater belief in accomplishing the selected career. The Cronbach's alpha measures from T1 to T4 ranged from .926 to .958.

The Career Adapt-Abilities Scale (CAAS) (Maggiori, Rossier & Savickas, 2017) was adopted to measure the career adaptability of the participants along with four subscales, namely, concern (awareness and preparation of vocational future), control (responsibility for preparing career and personal control), curiosity (explore professional environment) and confidence (perceived self-efficacy to solve the problems). It is a 5-point scale (1 = not strong to 5 = strongest) with 12 items. The higher scores represent higher levels of career adaptability. All subscales were found to be reliable from T1 to T4 in this study (concern, $\alpha = .839$ to .914; control, $\alpha = .755$ to .835; curiosity, $\alpha = .794$ to .859; confidence, $\alpha = .856$ to .881).

A summary of the reliabilities of the above-mentioned scales at the four time-points is given in Table 3.

Table 3
Reliabilities of the Psychometric Scales at Four Time-points

| | T1 N = 70 | T2 N = 70 | T3 N = 67 | T4 N = 62 |
|---|--------------|--------------|--------------|--------------|
| | α | α | α | α |
| Self-efficacy to Refuse Drug Use (SE) | | | | |
| SE | .867 | .864 | .876 | .889 |
| The Meaning in Life Questionnaire (MLQ) | | | | |
| Presence | .816 | .790 | .817 | .790 |
| Search | .879 | .854 | .907 | .846 |
| The Satisfaction with Life Scale (SWLS) | | | | |
| SWLS | .889 | .881 | .933 | .887 |
| Rosenberg's Self-Esteem Scale (RSE) | | | | |
| RSE | .787 | .836 | .842 | .847 |
| The Herth Hope Index (HHI) | | | | |
| Inner Sense of Temporality and Future (ITF) | .632 | .678 | .759 | .727 |
| Inner Positive Readiness and Expectancy (IPRE) | .712 | .781 | .828 | .866 |
| Interconnectedness with Self and Others (ISO) | .604 | .565 | .620 | .676 |
| Functions of Identity Scale (FIS) | | | | |
| Structure | .633 | .663 | .749 | .787 |
| Harmony | .733 | .636 | .785 | .785 |
| Goals | .800 | .858 | .870 | .874 |
| Future | .686 | .762 | .855 | .835 |
| Personal Control | .718 | .625 | .858 | .814 |
| Career Decision-making Self-Efficacy Scale - Short Form (CDSE-SF) | | | | |
| CDSE-SF | .926 | .950 | .964 | .958 |
| Career Adapt-Abilities Scale (CAAS) | | | | |
| Concern | .839 | .883 | .906 | .914 |
| Control | .755 | .857 | .868 | .835 |
| Curiosity | .794 | .824 | .904 | .859 |
| Confidence | .856 | .874 | .885 | .881 |

In order to track the drug use and relapse status of our participants, Drug Use Frequency in the Past One month, Three months and Six months (Questionnaire sets 5, 6 and 7, Beat Drugs Fund, 2018) were administrated in this study.

Procedures

The participants in the intervention group were invited to participate in four waves of intervention measures, including Time 1 (before the pre-entry consultation of Stage I), Time 2 (after the Stage II life-plan personal consultation and four weekly groups), Time 3 (after the Stage III four bi-weekly follow-up groups) and Time 4 (after the four monthly groups and the individual closing session at Stage IV). The participants in the control group were also invited to complete the same four waves of interventions measures parallel to the intervention group.

Statistical Analyses

The Chi-square was used to compare the similarity and difference in demographic data. The Cronbach's alpha of each psychometrical scales and subscales was calculated to test the reliabilities of the psychometrical scales and their subscales. An independent-samples t-test and one-way repeated measures ANOVA were conducted to compare the scores of the psychometrical scales at different points to examine the changes of the participants in the intervention group and the control group. Correlation and regression tests were used to explore the relationship between different variables and search for the predictors of self-efficacy to reject drug use.

Qualitative Research

Semi-structured focus-group interviews were conducted along with the four-wave study. Altogether 28 participants joined the focus group interviews. The focus-group interviews were (1) to explore the needs and the difficulties in searching for jobs and being employed, as well as the meaning of work from the perspectives of the rehabilitated young drug users; (2) to probe into the vocational recovery experiences of the participants; (3) to help establish a new network of non-drug-using friends through the relationships developed in the life design programme; and (4) to triangulate and understand the findings of the quantitative design. In addition to the focus group sessions, in-depth interviews were also conducted with selected participants.

Sixteen participants from the intervention group and twelve participants from the control group were invited to form four semi-structured focus-group interviews at four time points of data collection in parallel to the quantitative research. The interview took around one hour. These participants were selected according to their gender, age, employment history, educational level, and other relevant criteria. Thematic analyses were used to analyse the transcription of the interviews. Two case studies are provided in this report to show the process of the integrative life design programme.

Ethical Approval

Ethical approval was obtained from the Human Research Ethics Committee of Hong Kong Shue Yan University. Participation in the life planning programme was voluntary. Participants were briefed about the research procedures before joining the programme and their consents to be participants in our study were sought. To protect the personal data of the participants, case numbers instead of full names were used to track the identification of participants. All data of the participants were kept strictly confidential in the computers.

Quantitative Results

Demographic Data of Participants

Among the 70 participants, the majority of participants were male (58.6%) (see Table 4). In both the control and the intervention groups, the numbers of male participants surpassed those of the female. The gender ratios of the two groups does not show a statistically significant difference in the Chi-square test ($\chi^2 = .059$, $df = 1$, $p > .05$). The average age of all participants was 27.84, ranging from 15 to 35 ($SD = 5.41$). An independent-samples t-test indicated no statistically significant difference between the two groups, with an average age in the control group of 28.77 ($SD = 4.72$), and an average age in the intervention group of 26.91 ($SD = 5.94$), $t(68) = 1.447$, $p > .05$. Levene's test indicated equal variances ($F = 2.919$, $p = 0.92$). The assumption of homogeneity of variance has not been violated. Indicated by the Chi-square test, the two groups did not show any significant difference in what types of housing they lived in ($\chi^2 = 3.464$, $df = 4$, $p > .05$), their educational level ($\chi^2 = 5.437$, $df = 4$, $p > .05$), or their religion ($\chi^2 = 7.051$, $df = 3$, $p > .05$). The two groups showed similarities in family monthly income, ($\chi^2 = 7.633$, $df = 9$, $p > .05$). In sum, the gender composition of the two groups were similar; participants from both groups were also similar in terms of housing status, education level, religious affiliation, and family monthly income.

After screening out missing answers of salary input, the individual averaged monthly income in the intervention group was 19038.46 HKD ($SD = 13957.47$) and that of the control group was 15818.18 HKD ($SD = 8238.33$). The Levene's Test for Equality of Variances indicates unequal variances ($F = 5.952$, $p = 0.020$) between the intervention group and the control group. Therefore, the two-sample t-test with unequal variances was calculated, $t(17) = -.758$, $p > .05$, which indicates no statistically significant salary differences between the two groups. Statistically significant differences in marital status were found ($\chi^2 = 11.246$, $df = 3$, $p < .05$). Most of the participants in the control group (65.7%) and the intervention group (85.7%) were single, but a larger portion of the participants in the control group were married. There was also a significant difference between the two groups in their employment status ($\chi^2 = 4.884$, $df = 1$, $p < .05$). In the intervention group, 48.6% of them were employed and 51.4% of them were unemployed, whereas 74.3% of participants in the control group were employed and 25.7% were unemployed. One possible explanation for the above differences in employment status between the two groups is that employed participants were more inclined to join the control groups which required much less commitment and time.

Descriptive and Explorative Analytical Results

Descriptive Data

Table 5 shows the descriptive statistics of all scales at the four time-points for the participants from both the intervention group and the control group. It gives an overview of the changes of the participants at different stages of the project.

Table 4
A Comparison of the Demographic Data of the Two Groups

| | Intervention <i>N</i> (%) | Control <i>N</i> (%) | Total <i>N</i> (%) | χ^2 | <i>p</i> |
|-------------------------|------------------------------|---------------------------|-----------------------|----------|----------|
| Gender | | | | | |
| Male | 21 (60.0) | 20 (57.1) | 41 (58.6) | | |
| Female | 14 (40.0) | 15 (42.9) | 29 (41.4) | | |
| | | | | .059 | .808 |
| Housing Type | | | | | |
| Public | 20 (57.1) | 17 (48.6) | 37 (52.9) | | |
| House Ownership | 4 (11.4) | 1 (2.9) | 5 (7.1) | | |
| Private | 9 (25.7) | 14 (40.0) | 23 (32.9) | | |
| Sub-divided Flat | 1 (2.9) | 2 (5.7) | 3 (4.3) | | |
| Others | 1 (2.9) | 1 (2.9) | 2 (2.9) | | |
| | | | | 3.464 | .483 |
| Education | | | | | |
| Primary or less | 0 (0.0) | 1 (2.9) | 1 (1.4) | | |
| Junior Secondary | 20 (57.1) | 13 (37.1) | 33 (47.1) | | |
| Senior Secondary | 10 (28.6) | 18 (51.1) | 28 (40) | | |
| Post-secondary | 4 (11.4) | 2 (5.7) | 6 (8.6) | | |
| Undergraduate | 1 (2.9) | 1 (2.9) | 2 (2.9) | | |
| | | | | 5.437 | .245 |
| Employment Status | | | | | |
| Employed | 17 (48.6) | 26 (74.3) | 43 (61.4) | | |
| Unemployed | 18 (51.4) | 9 (25.7) | 27 (38.6) | | |
| | | | | 4.884 | .027 |
| Marital Status | | | | | |
| Single | 30 (85.7) | 23 (65.7) | 53 (75.7) | | |
| Cohabitation | 1 (2.9) | 1 (2.9) | 2 (2.9) | | |
| Married | 1 (2.9) | 11 (31.4) | 12 (17.1) | | |
| Divorced | 2 (5.7) | 0 (0.0) | 2 (2.9) | | |
| No answer | 1 (2.9) | 0 (0.0) | 1 (1.4) | | |
| | | | | 11.246 | .010 |
| Family Monthly Income | | | | | |
| 0 – 15,000 | 13 (37.1) | 7 (20) | 20 (28.6) | | |
| 15,001 – 30,000 | 7 (20) | 10 (28.6) | 17 (24.3) | | |
| 30,001 – 45,000 | 9 (25.7) | 9 (25.7) | 18 (25.7) | | |
| 45,001 or more | 4 (11.4) | 8 (22.9) | 12 (17.1) | | |
| No answer | 2 (5.7) | 1 (2.9) | 3 (4.3) | | |
| | | | | 7.633 | .571 |
| Religion | | | | | |
| No religion | 16 (45.7) | 11 (31.4) | 27 (38.6) | | |
| Christianity | 11 (31.4) | 21 (60.0) | 32 (45.7) | | |
| Buddhism | 6 (17.1) | 3 (8.6) | 9 (12.9) | | |
| Others | 2 (5.7) | 0 (0.0) | 2 (2.9) | | |
| | | | | 7.051 | .070 |
| | <i>M</i> (<i>SD</i>) | <i>M</i> (<i>SD</i>) | <i>t</i> | | <i>p</i> |
| Age | 26.91 (5.94) | 28.77 (4.72) | 1.447 | | .152 |
| Personal Monthly Income | 19038.46 (13957.47) | 15818.18 (8238.33) | -.758 | | .459 |

**p* < .05

Table 5
Descriptive Statistics of Psychometric Scales at Four Time-points in the Two Groups

| | Intervention Group | | | | Control Group | | | |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | <i>Mean (SD)</i> | | | | <i>Mean (SD)</i> | | | |
| | T1 <i>N</i> = 35 | T2 <i>N</i> = 35 | T3 <i>N</i> = 34 | T4 <i>N</i> = 31 | T1 <i>N</i> = 35 | T2 <i>N</i> = 35 | T3 <i>N</i> = 33 | T4 <i>N</i> = 31 |
| Self-Efficacy to Refuse Drug Use (SE) | | | | | | | | |
| SE | 31.46 (5.32) | 32.31 (5.11) | 32.44 (5.26) | 33.94 (2.00) | 33.26 (3.14) | 33.71 (2.28) | 34.00 (1.82) | 33.23 (5.14) |
| The Meaning in Life Questionnaire (MLQ) | | | | | | | | |
| Presence | 24.03 (6.30) | 25.77 (5.28) | 26.21 (5.54) | 27.45 (4.34) | 25.80 (5.13) | 25.89 (5.81) | 26.73 (5.57) | 27.45 (5.81) |
| Search | 26.46 (6.27) | 25.94 (6.00) | 26.85 (5.78) | 28.39 (4.33) | 25.31 (6.17) | 24.77 (6.12) | 27.12 (5.48) | 27.48 (5.42) |
| The Satisfaction with Life Scale (SWLS) | | | | | | | | |
| SWLS | 19.77 (7.26) | 21.11 (6.46) | 22.74 (7.03) | 24.52 (6.22) | 22.29 (6.51) | 22.43 (6.49) | 23.70 (7.38) | 25.23 (5.87) |
| Satisfaction of Life (SL) | | | | | | | | |
| SL | 2.96 (.76) | 3.19 (.80) | 3.34 (.89) | 3.62 (.85) | 3.36 (.88) | 3.40 (.78) | 3.45 (.82) | 3.71 (.66) |
| Rosenberg's Self-Esteem Scale (RSE) | | | | | | | | |
| RSE | 27.71 (4.29) | 28.94 (4.51) | 29.15 (3.85) | 30.81 (4.33) | 28.71 (3.89) | 29.06 (4.02) | 29.76 (4.61) | 30.61 (4.35) |
| The Herth Hope Index (HHI) | | | | | | | | |
| Inner sense of temporality and expectancy (ITF) | 11.57 (1.67) | 12.00 (2.26) | 11.82 (1.87) | 12.74 (1.65) | 12.03 (2.11) | 11.66 (1.63) | 12.03 (2.23) | 12.71 (2.16) |
| Inner positive readiness and expectancy (IPRE) | 12.23 (1.80) | 12.69 (1.92) | 12.44 (1.85) | 13.35 (1.74) | 12.80 (1.86) | 12.63 (1.88) | 13.00 (2.06) | 13.29 (2.08) |
| Interconnectedness with self and others (ISO) | 11.51 (1.95) | 11.77 (2.25) | 11.85 (1.86) | 12.55 (1.95) | 12.57 (1.52) | 12.17 (1.56) | 12.70 (1.65) | 13.06 (1.65) |
| The Functions of Identity Scale (FIS) | | | | | | | | |
| Structure | 9.66 (1.85) | 10.43 (1.80) | 10.47 (2.03) | 11.35 (2.17) | 10.09 (2.16) | 10.66 (1.88) | 11.00 (2.02) | 11.32 (2.01) |
| Harmony | 10.11 (2.01) | 10.74 (1.75) | 10.94 (1.79) | 11.81 (1.78) | 10.51 (2.03) | 10.83 (1.74) | 11.03 (1.86) | 11.55 (1.98) |
| Goals | 9.91 (2.20) | 10.20 (2.35) | 10.53 (2.44) | 11.48 (2.20) | 10.20 (2.13) | 10.77 (2.29) | 10.73 (2.24) | 11.48 (2.42) |
| Future | 9.89 (2.34) | 10.60 (2.20) | 10.79 (2.32) | 11.58 (1.96) | 10.40 (2.06) | 10.57 (2.10) | 10.94 (2.29) | 11.52 (2.45) |
| Personal Control | 10.23 (2.30) | 10.80 (1.78) | 10.82 (2.18) | 11.77 (2.16) | 10.49 (1.90) | 10.77 (2.02) | 11.00 (2.49) | 11.26 (2.24) |
| Career Decision Self-Efficacy Scale – Short Form (CDSE-SF) | | | | | | | | |
| CDSE-SF | 86.23 (15.99) | 90.63 (16.69) | 93.29 (15.88) | 95.87 (14.62) | 89.03 (12.54) | 89.31 (15.96) | 92.88 (16.25) | 96.77 (14.94) |
| Career Adapt-Abilities Scale (CAAS) | | | | | | | | |
| Concern | 8.00 (2.95) | 9.26 (2.95) | 9.50 (3.16) | 10.84 (2.66) | 8.49 (2.36) | 9.11 (2.64) | 9.18 (2.76) | 9.87 (2.62) |
| Control | 9.60 (2.93) | 10.43 (2.80) | 11.18 (2.76) | 11.39 (2.43) | 10.40 (2.56) | 10.89 (2.49) | 11.00 (2.78) | 12.00 (2.53) |
| Curiosity | 9.86 (2.64) | 10.20 (2.53) | 10.88 (2.67) | 11.19 (2.50) | 10.49 (2.84) | 10.54 (2.36) | 10.85 (2.98) | 11.48 (2.36) |
| Confidence | 10.20 (2.76) | 10.17 (2.55) | 10.97 (2.62) | 11.74 (2.67) | 10.57 (2.87) | 10.74 (2.45) | 11.24 (2.81) | 12.06 (2.21) |

Note. SL = Satisfaction of Life (1 = least satisfaction to 5 = most satisfaction)

Table 6
Correlations of All Scales at T1

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | |
|----------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----|--|
| 1. SE | | | | | | | | | | | | | | | | | | | | |
| 2. MLQ (Presence) | .381** | | | | | | | | | | | | | | | | | | | |
| 3. MLQ (Search) | -0.035 | 0.129 | | | | | | | | | | | | | | | | | | |
| 4. SWLS | .265* | .625*** | 0.008 | | | | | | | | | | | | | | | | | |
| 5. SL | 0.164 | .546*** | 0.087 | .711*** | | | | | | | | | | | | | | | | |
| 6. RSE | 0.175 | .654*** | 0.110 | .573*** | .609*** | | | | | | | | | | | | | | | |
| 7. HHI (ITF) | 0.096 | .733*** | 0.195 | .554*** | .478*** | .768*** | | | | | | | | | | | | | | |
| 8. HHI (IPRE) | 0.180 | .693*** | 0.230 | .573*** | .476*** | .670*** | .818*** | | | | | | | | | | | | | |
| 9. HHI (ISO) | -0.022 | .453*** | 0.025 | .385** | .409*** | .553*** | .579*** | .558*** | | | | | | | | | | | | |
| 10. FIS (Structure) | 0.180 | .557*** | 0.148 | .423*** | .356** | .639*** | .620*** | .623*** | .503*** | | | | | | | | | | | |
| 11. FIS (Harmony) | 0.049 | .580*** | .396*** | .399*** | .427*** | .665*** | .693*** | .651*** | .424*** | .690*** | | | | | | | | | | |
| 12. FIS (Goals) | 0.077 | .505*** | 0.174 | .331** | .323** | .518*** | .591*** | .505*** | .241* | .481*** | .576*** | | | | | | | | | |
| 13. FIS (Future) | 0.191 | .684*** | 0.074 | .502*** | .528*** | .604*** | .658*** | .547*** | .369** | .486*** | .551*** | .796*** | | | | | | | | |
| 14. FIS (Personal Control) | 0.053 | .419*** | .391*** | .252* | .276* | .578*** | .563*** | .541*** | .384** | .606*** | .671*** | .691*** | .547*** | | | | | | | |
| 15. CDSE-SF | 0.062 | .607*** | .336** | .457*** | .394*** | .549*** | .654*** | .618*** | .395*** | .487*** | .566*** | .557*** | .512*** | .557*** | | | | | | |
| 16. CAAS (Concern) | -0.101 | .507*** | 0.064 | .357** | .397*** | .570*** | .534*** | .463*** | .313** | .326** | .468*** | .685*** | .644*** | .506*** | .632*** | | | | | |
| 17. CAAS (Control) | -0.013 | .317** | .246* | 0.016 | 0.075 | .359** | .370** | .331** | .266* | .319** | .403*** | .454*** | .334** | .548*** | .577*** | .558*** | | | | |
| 18. CAAS (Curiosity) | -0.116 | 0.233 | 0.029 | 0.010 | 0.076 | .348** | .330** | 0.227 | .296* | .278* | .370** | .544*** | .460*** | .539*** | .573*** | .674*** | .697*** | | | |
| 19. CAAS (Confidence) | 0.068 | .375** | 0.190 | .271* | .247* | .390*** | .431*** | .478*** | .370** | .398*** | .424*** | .534*** | .397*** | .501*** | .632*** | .581*** | .588*** | .659*** | | |

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Self-Efficacy to Refuse Drug Use = SE; The Meaning in Life Questionnaire = MLQ; The Satisfaction with Life Scale = SWLS; Satisfaction of Life = SL; Rosenberg's Self-Esteem Scale = RSE; Herth Hope Scale = HHI; Inner sense of temporality and expectancy = ITF; Inner positive readiness and expectancy = IPRE; Interconnectedness with self and others = ISO; The Functions of Identity Scale = FIS; Career Decision Self-Efficacy – Short Form= CDSE - SF; Career Adapt-Abilities Scale = CAAS

Correlations

Table 6 shows the correlations among all scales in T1. Self-efficacy to refuse drug use were positively correlated with the subscale presence of meaning in life (MLQ) ($r(68) = .381$, $p < .01$) and Satisfaction with Life (SWLS) ($r(68) = .265$, $p < .05$).

For the Meaning in Life Questionnaire (MLQ), presence of meaning in life had strong positive correlations with the scores of several scales including Rosenberg's Self-Esteem Scale (RSE), $r(68) = .654$, $p < .001$, Inner sense of temporality and expectancy (ITF) in the Herth Hope Index (HHI), $r(68) = .733$, $p < .001$, inner positive readiness and expectancy (IPRE) in HHI, $r(68) = .693$, $p < .001$, future in FIS, $r(68) = .684$, $p < .001$, and Career Decision Self-Efficacy (CDSE), $r(68) = .607$, $p < .001$. The presence of meaning in life also had moderately positive correlations with interconnectedness with self and others (ISO) in HHI, $r(68) = .453$, $p < .001$, structure in the Functions of Identity Scale (FIS), $r(68) = .557$, $p < .001$, harmony in FIS, $r(68) = .580$, $p < .001$, goals in FIS, $r(68) = .505$, $p < .001$, personal control in FIS, $r(68) = .419$, $p < .001$, and concern in the Career Adapt-Abilities Scale (CAAS), $r(68) = .507$, $p < .001$. Presence of meaning in life had only weak positive correlations with control in CAAS, $r(68) = .317$, $p < .01$, and confidence in CAAS, $r(68) = .375$, $p < .01$.

For another subscale under the Meaning in Life Questionnaire (MLQ), searching for meaning had weak positive correlations with harmony in FIS, $r(68) = .396$, $p < .001$, personal control in FIS, $r(68) = .391$, $p < .01$, CDSE, $r(68) = .336$, $p < .01$, and control in CAAS, $r(68) = .246$, $p < .05$.

Two scales measuring life satisfaction were used in this study, namely Satisfaction of Life (SL) and the Satisfaction with Life Scale (SWLS). The SL score was found to have strong positive correlation with the score of Self-Esteem Scale (RSE), $r(68) = .609$, $p < .001$, and moderate positive correlations with Inner sense of temporality and expectancy (ITF) in HHI, $r(68) = .478$, $p < .001$, inner positive readiness and expectancy (IPRE) in HHI, $r(68) = .476$, $p < .001$, interconnectedness with self and others (ISO) in HHI, $r(68) = .409$, $p < .001$, harmony in FIS, $r(68) = .427$, $p < .001$, future in FIS, $r(68) = .528$, $p < .001$, and presence in MLQ, $r(68) = .546$, $p < .001$. SL also had weak positive correlations with structure in FIS, $r(68) = .356$, $p < .01$, goals in FIS, $r(68) = .323$, $p < .01$, CDSE, $r(68) = .394$, $p < .001$, concern in CAAS, $r(68) = .397$, $p < .001$, personal control in FIS, $r(68) = .276$, $p < .05$, and confidence in CAAS, $r(68) = .247$, $p < .05$.

Satisfaction with Life Scale (SWLS) had strong positive correlations with presence in MLQ, $r(68) = .625$, $p < .001$, and SL, $r(68) = .711$, $p < .001$. SWLS had moderate positive correlations with RSE, $r(68) = .573$, $p < .001$, ITF in HHI, $r(68) = .554$, $p < .001$, IPRE in HHI, $r(68) = .573$, $p < .001$, structure in FIS, $r(68) = .423$, $p < .001$, future in FIS, $r(68) = .502$, $p < .001$, and CDSE, $r(68) = .457$, $p < .001$. SWLS also had weak positive correlations with ISO in HHI, $r(68) = .385$, $p < .01$, harmony in FIS, $r(68) = .399$, $p < .001$, goals in FIS, $r(68) = .331$, $p < .01$, and concern in CAAS, $r(68) = .357$, $p < .01$.

In sum, the above correlation test results indicate that self-efficacy to refuse drug use positively correlate with the presence of meaning in life and life satisfaction. Meaning in life (MLQ) and life satisfaction (SWLS) were positively correlated with several other psychometric scales used in this study.

Regression

The correlation tests showed statistically positive correlations among self-efficacy to refuse drug use, presence of meaning in life, and life satisfaction (SWLS). In order to further explore their relationships, a two-step linear regression model was established with life satisfaction entered at the first step and presence of meaning in life entered at the second step. The results are displayed in the Table 7.

Table 7

Linear Regression Analyses of Self-Efficacy to Refuse Drug Use using Life Satisfaction (SWLS) and Presence of Meaning in Life

| | Predictors | <i>R</i> | <i>R</i> ² | <i>F</i> | <i>R</i> ² change (ΔR^2) and <i>F</i> change (ΔF) | <i>Std</i> <i>Error</i> | <i>Beta</i> | <i>t</i> | <i>p</i> |
|-------------------------|-----------------------------------|----------|-----------------------|----------|--|----------------------------|-------------|----------|----------|
| 1 st step | Life Satisfaction (SWLS) | .265 | .070 | 5.144 | $\Delta R^2 = .070$ $\Delta F = 5.144$ | .074 | .169 | 2.268* | .027 |
| 2 nd step | Life Satisfaction (SWLS) | .383 | .147 | 5.753 | $\Delta R^2 = .076$ $\Delta F = 5.986$ | .092 | .028 | 0.303 | .763 |
| | Presence of Meaning in Life | | | | | .111 | .271 | 2.447* | .017 |

Note. * $p < .05$.

The results showed both the 1st step regression model ($F(1, 68) = 5.144, p = .027$, with an R^2 of .070) and the 2nd step regression model ($F(2, 67) = 5.753, p = .005$, with R^2 of .147) were statistically significant regression models. Both life Satisfaction and Presence of Meaning in Life are statistically positive predictors of self-efficacy to refuse drug use. Presence of Meaning in Life ($\beta = .271, p = .017$) is a stronger positive predictor than Life Satisfaction ($\beta = .169, p = .027$) in predicting self-efficacy to refuse drug use.

Linear regression tests were computed to explore predictors of life satisfaction and presence of meaning in life based on the existing correlations. For predicting life satisfaction, self-esteem ($\beta = .356, p = .046$) and Future in FIS ($\beta = .359, p = .052$) was found to be positive predictors for life satisfaction. Future in FIS ($\beta = .476, p = .001$) was found to be a positive predictor for presence of meaning in life.

Pre-test Group Comparison

The pre-test was used to compare the baseline similarities and differences between the intervention group and the control group before any intervention started (see Table 8). Independent-samples t-tests indicated that most of the variables did not show statistical differences except for “interconnectedness with self and others” in the Herth Hope Index, and “satisfaction of life”. For these two variables, the mean scores in the control group were significantly higher than those of the intervention group (Hope of Interconnectedness with Self and Others, $t(68) = 2.533, p < .05$; Satisfaction of Life, $t(68) = 2.035, p < .05$).

Table 8*The Comparison between the Intervention Group and the Control Group at T1*

| | Intervention | | Control | | <i>t</i> | <i>p</i> |
|--|---------------|-----------|---------------|-----------|----------|----------|
| | <i>N</i> = 35 | | <i>N</i> = 35 | | | |
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | |
| Self-Efficacy to Refuse Drug Use (SE) | 31.46 | 5.32 | 33.26 | 3.14 | -1.724 | .089 |
| The Meaning in Life Questionnaire (MLQ) | | | | | | |
| Presence | 24.03 | 6.30 | 25.80 | 5.13 | -1.289 | .202 |
| Search | 26.46 | 6.27 | 25.31 | 6.17 | .769 | .445 |
| The Satisfaction with Life Scale (SWLS) | | | | | | |
| SWLS | 19.77 | 7.26 | 22.29 | 6.51 | -1.525 | .132 |
| Satisfaction of Life (SL) | | | | | | |
| SL | 2.96 | .76 | 3.36 | .88 | -2.035* | .046 |
| Rosenberg's Self-Esteem Scale (RSE) | | | | | | |
| RSE | 27.71 | 4.29 | 28.71 | 3.89 | -1.022 | .310 |
| The Herth Hope Index (HHI) | | | | | | |
| Inner sense of temporality and expectancy (ITF) | 11.57 | 1.67 | 12.03 | 2.11 | -1.006 | .318 |
| Inner positive readiness and expectancy (IPRE) | 12.23 | 1.80 | 12.80 | 1.86 | -1.306 | .196 |
| Interconnectedness with self and others (ISO) | 11.51 | 1.95 | 12.57 | 1.52 | -2.533* | .014 |
| The Functions of Identity Scale (FIS) | | | | | | |
| Structure | 9.66 | 1.85 | 10.09 | 2.16 | -.892 | .375 |
| Harmony | 10.11 | 2.01 | 10.51 | 2.03 | -.827 | .411 |
| Goals | 9.91 | 2.20 | 10.20 | 2.13 | -.552 | .582 |
| Future | 9.89 | 2.34 | 10.40 | 2.06 | -.977 | .332 |
| Personal Control | 10.23 | 2.30 | 10.49 | 1.90 | -.510 | .612 |
| Career Decision Self-Efficacy Scale - Short Form (CDSE-SF) | | | | | | |
| CDSE-SF | 86.23 | 15.99 | 89.03 | 12.54 | -.815 | .418 |
| Career Adapt-Abilities Scale (CAAS) | | | | | | |
| Concern | 8.00 | 2.95 | 8.49 | 2.36 | -.761 | .449 |
| Control | 9.60 | 2.93 | 10.40 | 2.56 | -1.216 | .228 |
| Curiosity | 9.86 | 2.64 | 10.49 | 2.84 | -.959 | .341 |
| Confidence | 10.20 | 2.76 | 10.57 | 2.87 | -.551 | .583 |

Note. SL = Satisfaction of Life (1 = least satisfaction to 5 = most satisfaction)

**p* < .05

It is observed that all mean scores in the control group were higher than the intervention group except the mean score in “searching for meaning” in the Meaning in Life Questionnaire (MLQ). This result shows that more participants in the intervention group were still at the stage of searching for life meaning and more participants in the control group claimed to have found their life meaning before the intervention started.

Changes in Self-Efficacy to Refuse Drug Use

Table 9 shows how the two groups changed their self-efficacy to refuse drug (SE) at the four time-points. No statistically significant time or group differences were found in the ANOVA test. The results of pair sample t-test (not shown in the table) indicate that the intervention group had statistically improved, $t(30) = -3.463, p < .01$, whereas no statistical improvement was found in the control group, $t(30) = -0.093, p > .05$. For the intervention group, the SE mean score improves continuously from T1 32.10 ($SD = 3.35$) to 33.94 ($SD = 2.00$) in T4. For the control group, the SE mean score at T1 was 33.13 ($SD = 3.28$) and that of T4 was 33.23 ($SD = 5.14$)

Table 9
Self-Efficacy to Refuse Drug Use in Both Groups at Four Time-points

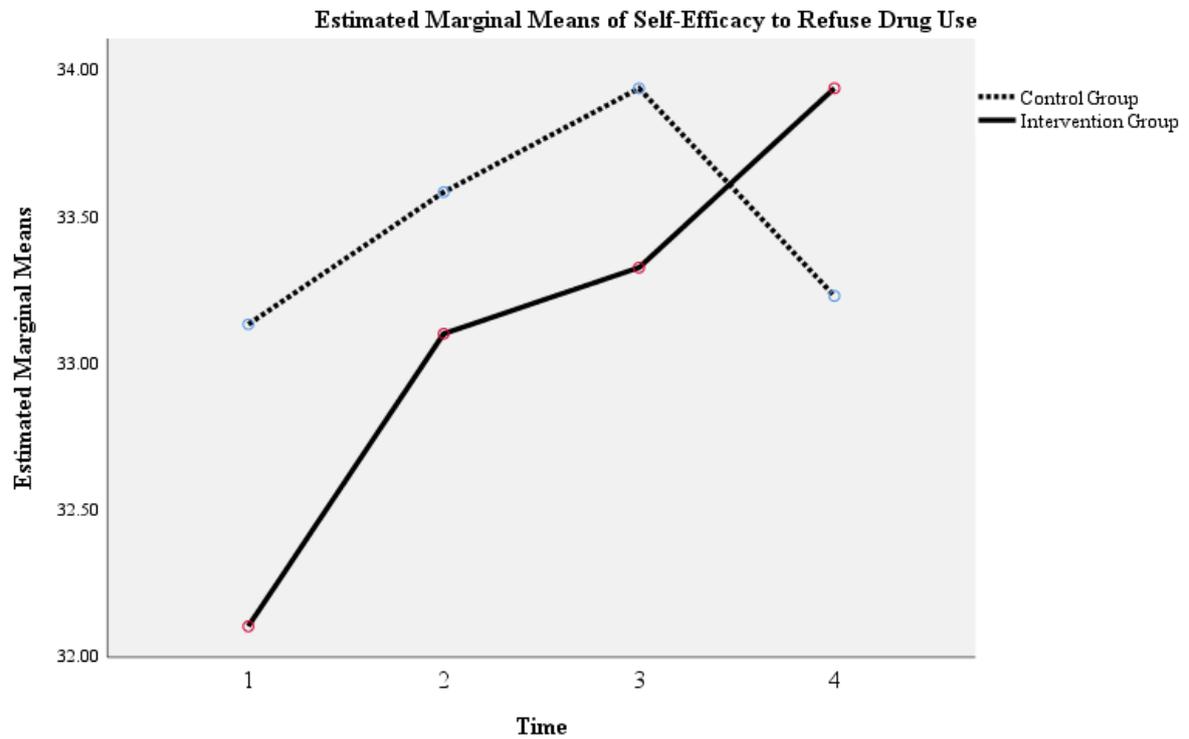
| | Intervention (<i>N</i> = 31) | | | | Control (<i>N</i> = 31) | | | | Time | Group | Time X Group |
|---------------------------------------|----------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------|------------------------------|
| | T1 <i>M</i> (<i>SD</i>) | T2 <i>M</i> (<i>SD</i>) | T3 <i>M</i> (<i>SD</i>) | T4 <i>M</i> (<i>SD</i>) | T1 <i>M</i> (<i>SD</i>) | T2 <i>M</i> (<i>SD</i>) | T3 <i>M</i> (<i>SD</i>) | T4 <i>M</i> (<i>SD</i>) | <i>F</i> (<i>Sig.</i>) | <i>F</i> (<i>Sig.</i>) | <i>F</i> (<i>Sig.</i>) |
| Self-Efficacy to Refuse Drug Use (SE) | 32.10 (3.35) | 33.10 (2.56) | 33.32 (2.68) | 33.94 (2.00) | 33.13 (3.28) | 33.58 (2.39) | 33.94 (1.86) | 33.23 (5.14) | 2.377 (.105) ^a | .382 (.539) ^a | 1.508 (.227) ^a |

Note. ^aApplied Greenhouse-Geisser correction.

Figure 15 shows that the mean score of self-efficacy to refuse drug use of the intervention group kept increasing from 32.10 ($SD = 3.35$) to 33.94 ($SD = 2.00$). The mean score of the control group also increased slightly between T1 and T4 (from 33.13 to 33.23), but it is worth noting that there was a decline from the peak of 33.94 ($SD = 1.86$) at T3 to 33.23 ($SD = 5.14$) at T4.

Figure 15

Changes in Self-Efficacy to Refuse Drug Use of the Intervention and the Control Group at Four Time-points



Changes in psychosocial aspects

ANOVA tests were conducted to explore time and group differences respectively in various psychometric scales. Table 10 shows statistically significant time differences but no group difference. No interaction effects were found between groups and different time-points.

Table 11 shows that the intervention group significantly improved from T1 to T4 for all items except the Searching for Meaning in Life (MLQ). Substantial improvements were found in the scoring of their self-esteem (RSE) ($F(3, 90) = 7.906, p < .001$), identity structure ($F(3, 90) = 6.989, p < .001$), identity harmony ($F(2.298, 68.928) = 8.217, p < .001$), and future possibilities ($F(2.449, 73.483) = 9.436, p < .001$) in the Functions of Identity Scale, the Career Decision Self-Efficacy Scale ($F(3, 90) = 7.395, p < .001$), Concern ($F(3, 90) = 12.553, p < .001$), Control ($F(3, 90) = 6.617, p < .001$), and Confidence ($F(3, 90) = 7.439, p < .001$) in the Career Adapt-Abilities Scale, and the Satisfaction with Life Scale ($F(1.999, 59.982) = 9.710, p < .001$). Moreover, the Inner sense of temporality and future ($F(3, 90) = 5.429, p < .01$), Inner positive readiness and expectancy ($F(2.279, 77.925) = 4.996, p < .01$), and Interconnectedness with Self and Others ($F(3, 90) = 4.173, p < .01$) in the Herth Hope Index, Goals ($F(3, 90) = 5.976, p < .01$) and Personal Control ($F(2.366, 70.986) = 7.005, p < .01$) in the Functions of Identity Scale, Curiosity ($F(3, 90) = 5.488, p < .01$) in the Career Adapt-Abilities Scale, the Presence of Meaning ($F(3, 90) = 4.940, p < .01$) in Life Questionnaire, the Satisfaction with Life Scale ($F(1.999, 59.982) = 9.710, p < .001$), and the Satisfaction of Life ($F(1.869, 56.070) = 3.689, p < .05$) also show improvements after the intervention.

The only item that did not show significant improvement is the Searching for Meaning in the Meaning in Life Questionnaire ($F(3, 90) = 2.452, p > .05$). This is understandable because many participants migrated from the state of “searching for meaning in life” to the stage of “presence of meaning in life” after participating in the integrative life-design programme.

Table 12 shows the changes in the psychometric scales from T1 to T4 for the control group. It reveals that the improvement in the control group is less apparent than the intervention group. The statistically improved variables include Self-esteem (RSE) ($F(2.320, 69.590) = 4.929, p < .01$), Inner sense of temporality and future ($F(3, 90) = 3.831, p < .05$) and Interconnectedness with self and others ($F(3, 90) = 3.932, p < .05$) in the Herth Hope Index, Structure ($F(2.213, 66.392) = 4.017, p < .05$), Harmony ($F(2.174, 65.220) = 3.849, p < .05$), Goals ($F(3, 90) = 5.272, p < .01$), and Future ($F(3, 90) = 4.969, p < .01$) in the Functions of Identity Scale, the Career Decision Self-Efficacy Scale ($F(2.386, 71.578) = 4.197, p < .05$), Concern ($F(3, 90) = 3.748, p < .05$), Control ($F(3, 90) = 5.233, p < .01$), and Confidence ($F(3, 90) = 5.270, p < .01$) in the Career Adapt-Abilities Scale, Searching for Meaning in Life Questionnaire ($F(3, 90) = 3.686, p < .05$), the Satisfaction with Life Scale ($F(2.511, 75.344) = 4.825, p < .01$), and the Satisfaction of Life ($F(3, 90) = 1.034, p < .01$). The other four items, Inner positive readiness and expectancy ($F(2.220, 66.589) = 2.021, p > .05$) in the Herth Hope Index, Personal control ($F(3, 90) = 1.939, p > .05$) in the Functions of Identity Scale, Curiosity ($F(3, 90) = 1.673, p > .05$) in Career Adapt-Abilities Scale, and Presence ($F(3, 90) = 1.817, p > .05$) in the Meaning in Life Questionnaire, did not show significant improvement.

Table 10*Progress and Interaction of Psychometric Scales in Both Groups at Four Time-points*

| | Intervention (N = 31) | | | | Control (N = 31) | | | | Time <i>F</i> (<i>Sig.</i>) | Group <i>F</i> (<i>Sig.</i>) | Time X Group <i>F</i> (<i>Sig.</i>) |
|---|--------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------------|--------------------------------------|---|
| | T1 <i>M (SD)</i> | T2 <i>M (SD)</i> | T3 <i>M (SD)</i> | T4 <i>M (SD)</i> | T1 <i>M (SD)</i> | T2 <i>M (SD)</i> | T3 <i>M (SD)</i> | T4 <i>M (SD)</i> | | | |
| The Meaning in Life Questionnaire (MLQ) | | | | | | | | | | | |
| Presence | 24.00 (6.35) | 25.90 (4.88) | 26.03 (5.55) | 27.45 (4.34) | 25.58 (5.41) | 25.90 (5.92) | 26.71 (5.73) | 27.45 (5.81) | 6.122*** (.001) | .231 (.632) | .705 (.550) |
| Search | 25.90 (6.32) | 25.68 (6.12) | 26.68 (5.75) | 28.39 (4.33) | 25.32 (6.36) | 24.71 (6.35) | 27.06 (5.60) | 27.48 (5.42) | 5.639*** (.001) | .196 (.659) | .355 (.785) |
| The Satisfaction with Life Scale (SWLS) | | | | | | | | | | | |
| SWLS | 19.42 (7.04) | 21.35 (6.62) | 22.42 (7.17) | 24.52 (6.22) | 21.81 (6.32) | 21.84 (6.58) | 23.29 (7.43) | 25.23 (5.87) | 13.435*** (.000) ^a | .584 (.448) ^a | .743 (.498) ^a |
| Satisfaction of Life (SL) | | | | | | | | | | | |
| SL | 2.95 (.72) | 3.15 (.82) | 3.27 (.86) | 3.50 (1.06) | 3.32 (.88) | 3.32 (.76) | 3.44 (.82) | 3.71 (.66) | 7.517*** (.000) | 1.874 (.176) | .426 (.735) |
| Rosenberg's Self-Esteem Scale (RSE) | | | | | | | | | | | |
| RSE | 27.68 (4.21) | 28.94 (4.27) | 29.16 (3.80) | 30.81 (4.33) | 28.68 (4.11) | 29.00 (4.23) | 29.81 (4.75) | 30.61 (4.35) | 12.485*** (.000) ^a | .159 (.691) ^a | .814 (.473) ^a |
| The Herth Hope Index (HHI) | | | | | | | | | | | |
| Inner sense of temporality and expectancy (ITF) | 11.52 (1.71) | 11.97 (2.32) | 11.84 (1.88) | 12.74 (1.65) | 12.00 (2.24) | 11.58 (1.71) | 12.00 (2.29) | 12.71 (2.16) | 7.907*** (.000) ^a | .018 (.895) ^a | 1.240 (.296) ^a |
| Inner positive readiness and expectancy (IPRE) | 12.13 (1.80) | 12.65 (1.96) | 12.55 (1.73) | 13.35 (1.74) | 12.77 (1.93) | 12.52 (1.90) | 12.94 (2.05) | 13.29 (2.08) | 5.693** (.002) ^a | .282 (.597) ^a | 1.320 (.271) ^a |
| Interconnect- edness with self and others (ISO) | 11.42 (1.86) | 11.74 (2.21) | 11.84 (1.71) | 12.55 (1.95) | 12.61 (1.58) | 12.13 (1.65) | 12.68 (1.68) | 13.06 (1.65) | 6.732*** (.001) ^a | 3.861 (.054) ^a | 1.417 (.243) ^a |
| The Functions of Identity Scale (FIS) | | | | | | | | | | | |
| Structure | 9.58 (1.84) | 10.48 (1.67) | 10.48 (1.93) | 11.35 (2.17) | 10.13 (2.28) | 10.55 (1.96) | 10.90 (2.04) | 11.32 (2.01) | 10.682*** (.000) ^a | .411 (.524) ^a | .554 (.608) ^a |
| Harmony | 10.03 (2.09) | 10.68 (1.62) | 10.90 (1.78) | 11.81 (1.78) | 10.68 (2.09) | 10.74 (1.83) | 10.97 (1.89) | 11.55 (1.98) | 11.752*** (.000) ^a | .111 (.740) ^a | 1.330 (.268) ^a |
| Goals | 9.90 (2.27) | 10.29 (2.25) | 10.61 (2.26) | 11.48 (2.20) | 10.23 (2.23) | 10.65 (2.36) | 10.68 (2.27) | 11.48 (2.42) | 11.126*** (.000) ^a | .143 (.707) ^a | .251 (.838) ^a |
| Future | 9.81 (2.36) | 10.58 (2.14) | 10.87 (2.29) | 11.58 (1.96) | 10.35 (2.17) | 10.48 (2.20) | 10.84 (2.33) | 11.52 (2.45) | 13.662*** (.000) ^a | .033 (.857) ^a | .848 (.456) ^a |
| Personal Control | 10.19 (2.32) | 10.77 (1.75) | 10.74 (2.21) | 11.77 (2.16) | 10.55 (1.98) | 10.91 (2.12) | 10.87 (2.50) | 11.26 (2.24) | 8.350*** (.000) | .003 (.959) | 1.249 (.293) |
| Career Decision Self-Efficacy Scale - Short Form (CDSE-SF) | | | | | | | | | | | |
| CDSE-SF | 85.13 (14.49) | 90.13 (16.37) | 92.71 (15.47) | 95.87 (14.62) | 89.74 (12.01) | 89.65 (16.57) | 93.61 (15.24) | 96.77 (14.94) | 10.731*** (.000) ^a | .212 (.647) ^a | .855 (.454) ^a |
| Career Adapt-Abilities Scale (CAAS) | | | | | | | | | | | |
| Concern | 7.84 (2.81) | 9.16 (2.97) | 9.52 (3.10) | 10.84 (2.66) | 8.52 (2.50) | 8.87 (2.68) | 9.19 (2.65) | 9.87 (2.62) | 15.476*** (.000) | .154 (.696) | 2.193 (.090) |
| Control | 9.61 (2.99) | 10.35 (2.83) | 11.23 (2.72) | 11.39 (2.43) | 10.55 (2.61) | 10.84 (2.49) | 11.03 (2.80) | 12.00 (2.53) | 10.794*** (.000) | .641 (.427) | 1.266 (.287) |
| Curiosity | 9.74 (2.59) | 10.06 (2.50) | 10.90 (2.62) | 11.19 (2.50) | 10.68 (2.89) | 10.71 (2.37) | 11.00 (2.88) | 11.48 (2.36) | 6.383*** (.000) | .784 (.379) | .824 (.482) |
| Confidence | 10.16 (2.84) | 10.16 (2.48) | 10.97 (2.70) | 11.74 (2.67) | 10.81 (2.87) | 10.81 (2.40) | 11.35 (2.71) | 12.06 (2.21) | 12.656*** (.000) | .749 (.390) | .199 (.897) |

Note. ^aApplied Greenhouse-Geisser correction.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 11
Score Changes in the Different Scales of the Intervention Group at Different Time-points

| | Intervention (<i>N</i> = 31) | | | | Time | |
|--|-------------------------------|------------------------------|------------------------------|------------------------------|---------------------------------|------------------|
| | T1 <i>M</i> (<i>SD</i>) | T2 <i>M</i> (<i>SD</i>) | T3 <i>M</i> (<i>SD</i>) | T4 <i>M</i> (<i>SD</i>) | <i>F</i> (<i>Sig.</i>) | Partial η^2 |
| Self-Efficacy to Refuse Drug Use (SE) | | | | | | |
| SE | 32.10 (3.35) | 33.10 (2.56) | 33.32 (2.68) | 33.94 (2.00) | 5.959*** (.003) ^a | .166 |
| The Meaning in Life Questionnaire (MLQ) | | | | | | |
| Presence | 24.00 (6.35) | 25.90 (4.88) | 26.03 (5.55) | 27.45 (4.34) | 4.940** (.003) | .141 |
| Search | 25.90 (6.32) | 25.68 (6.12) | 26.68 (5.75) | 28.39 (4.33) | 2.452 (.068) | .076 |
| The Satisfaction with Life Scale (SWLS) | | | | | | |
| SWLS | 19.42 (7.04) | 21.35 (6.62) | 22.42 (7.17) | 24.52 (6.22) | 9.710*** (.000) ^a | .245 |
| Satisfaction of Life (SL) | | | | | | |
| SL | 2.95 (.72) | 3.15 (.82) | 3.27 (.86) | 3.50 (1.06) | 3.689* (.034) ^a | .109 |
| Rosenberg's Self-Esteem Scale (RSE) | | | | | | |
| RSE | 27.68 (4.21) | 28.94 (4.27) | 29.16 (3.80) | 30.81 (4.33) | 7.906*** (.000) | .209 |
| The Herth Hope Index (HHI) | | | | | | |
| Inner sense of temporality and expectancy (ITF) | 11.52 (1.71) | 11.97 (2.32) | 11.84 (1.88) | 12.74 (1.65) | 5.429** (.002) | .153 |
| Inner positive readiness and expectancy (IPRE) | 12.13 (1.80) | 12.65 (1.96) | 12.55 (1.73) | 13.35 (1.74) | 4.996** (.007) ^a | .143 |
| Interconnectedness with self and others (ISO) | 11.42 (1.86) | 11.74 (2.21) | 11.84 (1.71) | 12.55 (1.95) | 4.173** (.008) | .122 |
| The Functions of Identity Scale (FIS) | | | | | | |
| Structure | 9.58 (1.84) | 10.48 (1.67) | 10.48 (1.93) | 11.35 (2.17) | 6.989*** (.000) | .189 |
| Harmony | 10.03 (2.09) | 10.68 (1.62) | 10.90 (1.78) | 11.81 (1.78) | 8.217*** (.000) ^a | .215 |
| Goals | 9.90 (2.27) | 10.29 (2.25) | 10.61 (2.26) | 11.48 (2.20) | 5.976** (.001) | .166 |
| Future | 9.81 (2.36) | 10.58 (2.14) | 10.87 (2.29) | 11.58 (1.96) | 9.436*** (.000) ^a | .239 |
| Personal Control | 10.19 (2.32) | 10.77 (1.75) | 10.74 (2.21) | 11.77 (2.16) | 7.005** (.001) ^a | .189 |
| Career Decision Self-Efficacy Scale - Short Form (CDSE-SF) | | | | | | |
| CDSE-SF | 85.13 (14.49) | 90.13 (16.37) | 92.71 (15.47) | 95.87 (14.62) | 7.395*** (.000) | .198 |
| Career Adapt-Abilities Scale (CAAS) | | | | | | |
| Concern | 7.84 (2.81) | 9.16 (2.97) | 9.52 (3.10) | 10.84 (2.66) | 12.553*** (.000) | .295 |
| Control | 9.61 (2.99) | 10.35 (2.83) | 11.23 (2.72) | 11.39 (2.43) | 6.617*** (.000) | .181 |
| Curiosity | 9.74 (2.59) | 10.06 (2.50) | 10.90 (2.62) | 11.19 (2.50) | 5.488** (.002) | .155 |
| Confidence | 10.16 (2.84) | 10.16 (2.48) | 10.97 (2.70) | 11.74 (2.67) | 7.439*** (.000) | .199 |

Note. ^aApplied Greenhouse-Geisser correction.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 12
Score Changes in the Different Scales of the Control Group at Different Time-points

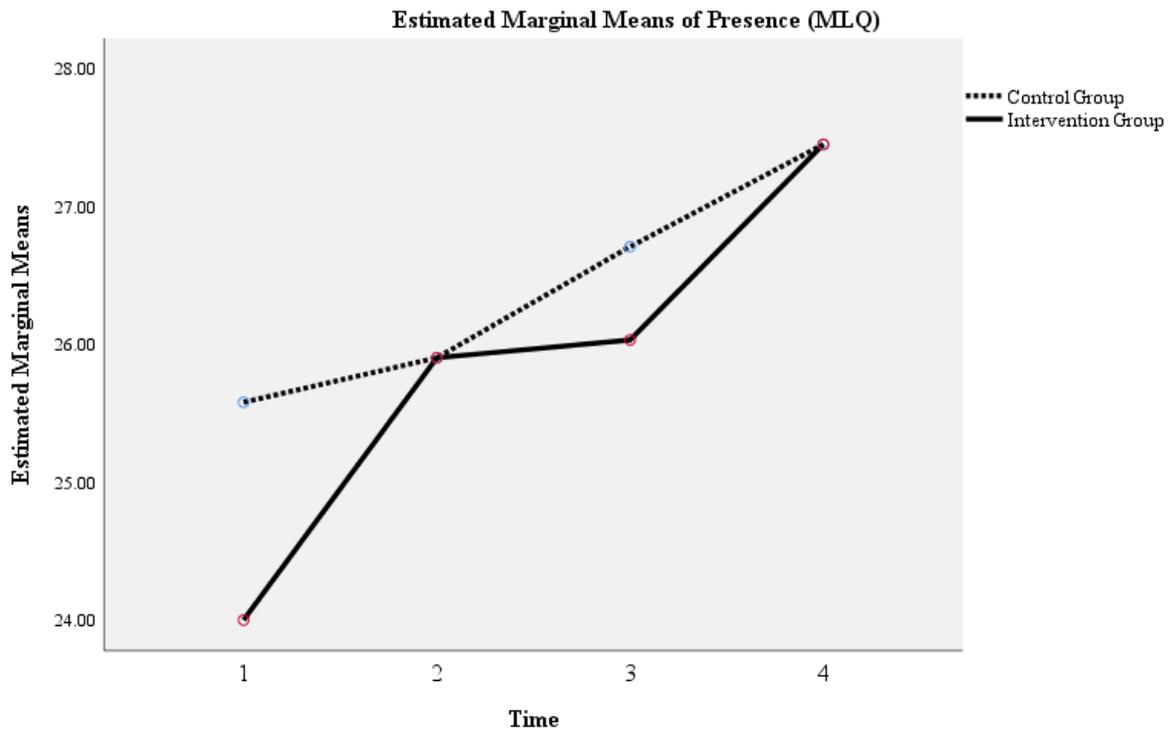
| | Control (N = 31) | | | | Time | |
|--|------------------|------------------|------------------|------------------|--------------------------------|---------------------|
| | T1 M (SD) | T2 M (SD) | T3 M (SD) | T4 M (SD) | F (Sig.) | Partial η^2 |
| Self-Efficacy to Refuse Drug Use (SE) | | | | | | |
| SE | 33.13 (3.28) | 33.58 (2.39) | 33.94 (1.86) | 33.23 (5.14) | .496 (.535) ^a | .016 |
| The Meaning in Life Questionnaire (MLQ) | | | | | | |
| Presence | 25.58 (5.41) | 25.90 (5.92) | 26.71 (5.73) | 27.45 (5.81) | 1.817 (.150) | - |
| Search | 25.32 (6.36) | 24.71 (6.35) | 27.06 (5.60) | 27.48 (5.42) | 3.686* (.015) | .109 |
| The Satisfaction with Life Scale (SWLS) | | | | | | |
| SWLS | 21.81 (6.32) | 21.84 (6.58) | 23.29 (7.43) | 25.23 (5.87) | 4.825** (.006) ^a | .139 |
| Satisfaction of Life (SL) | | | | | | |
| SL | 3.32 (.88) | 3.32 (.76) | 3.44 (.82) | 3.71 (.66) | 1.034** (.005) | .131 |
| Rosenberg's Self-Esteem Scale (RSE) | | | | | | |
| RSE | 28.68 (4.11) | 29.00 (4.23) | 29.81 (4.75) | 30.61 (4.35) | 4.929** (.007) ^a | .141 |
| The Herth Hope Index (HHI) | | | | | | |
| Inner sense of temporality and expectancy (ITF) | 12.00 (2.24) | 11.58 (1.71) | 12.00 (2.29) | 12.71 (2.16) | 3.831* (.012) | .113 |
| Inner positive readiness and expectancy (IPRE) | 12.77 (1.93) | 12.52 (1.90) | 12.94 (2.05) | 13.29 (2.08) | 2.021 (.136) ^a | - |
| Interconnectedness with self and others (ISO) | 12.61 (1.58) | 12.13 (1.65) | 12.68 (1.68) | 13.06 (1.65) | 3.932* (.011) | .116 |
| The Functions of Identity Scale (FIS) | | | | | | |
| Structure | 10.13 (2.28) | 10.55 (1.96) | 10.90 (2.04) | 11.32 (2.01) | 4.017* (.019) ^a | .118 |
| Harmony | 10.68 (2.09) | 10.74 (1.83) | 10.97 (1.89) | 11.55 (1.98) | 3.849* (.023) ^a | .114 |
| Goals | 10.23 (2.23) | 10.65 (2.36) | 10.68 (2.27) | 11.48 (2.42) | 5.272** (.002) | .149 |
| Future | 10.35 (2.17) | 10.48 (2.20) | 10.84 (2.33) | 11.52 (2.45) | 4.969* (.003) | .142 |
| Personal Control | 10.55 (1.98) | 10.91 (2.12) | 10.87 (2.50) | 11.26 (2.24) | 1.939 (.129) | - |
| Career Decision Self-Efficacy Scale - Short Form (CDSE-SF) | | | | | | |
| CDSE-SF | 89.74 (12.01) | 89.65 (16.57) | 93.61 (15.24) | 96.77 (14.94) | 4.197* (.014) ^a | .123 |
| Career Adapt-Abilities Scale (CAAS) | | | | | | |
| Concern | 8.52 (2.50) | 8.87 (2.68) | 9.19 (2.65) | 9.87 (2.62) | 3.748* (.014) | .111 |
| Control | 10.55 (2.61) | 10.84 (2.49) | 11.03 (2.80) | 12.00 (2.53) | 5.233** (.002) | .149 |
| Curiosity | 10.68 (2.89) | 10.71 (2.37) | 11.00 (2.88) | 11.48 (2.36) | 1.673 (.178) | - |
| Confidence | 10.81 (2.87) | 10.81 (2.40) | 11.35 (2.71) | 12.06 (2.21) | 5.270** (.002) | .149 |

Note. ^aApplied Greenhouse-Geisser correction.
 * $p < .05$, ** $p < .01$, *** $p < .001$.

Line charts were drawn to show the scoring changes in the different psychometrical scales over four time points. In Figure 16, the control group had a higher mean score for Presence of meaning ($M = 25.89$, $SD = 5.81$) than the intervention group ($M = 24.03$, $SD = 6.30$) at T1. Both groups showed improvement on this dimension. The mean score for the control group at T4 was 27.45 ($SD = 5.81$), and for the intervention group was also 27.45 ($SD = 4.34$). In other words, the participants in the intervention group made greater progress.

Figure 16

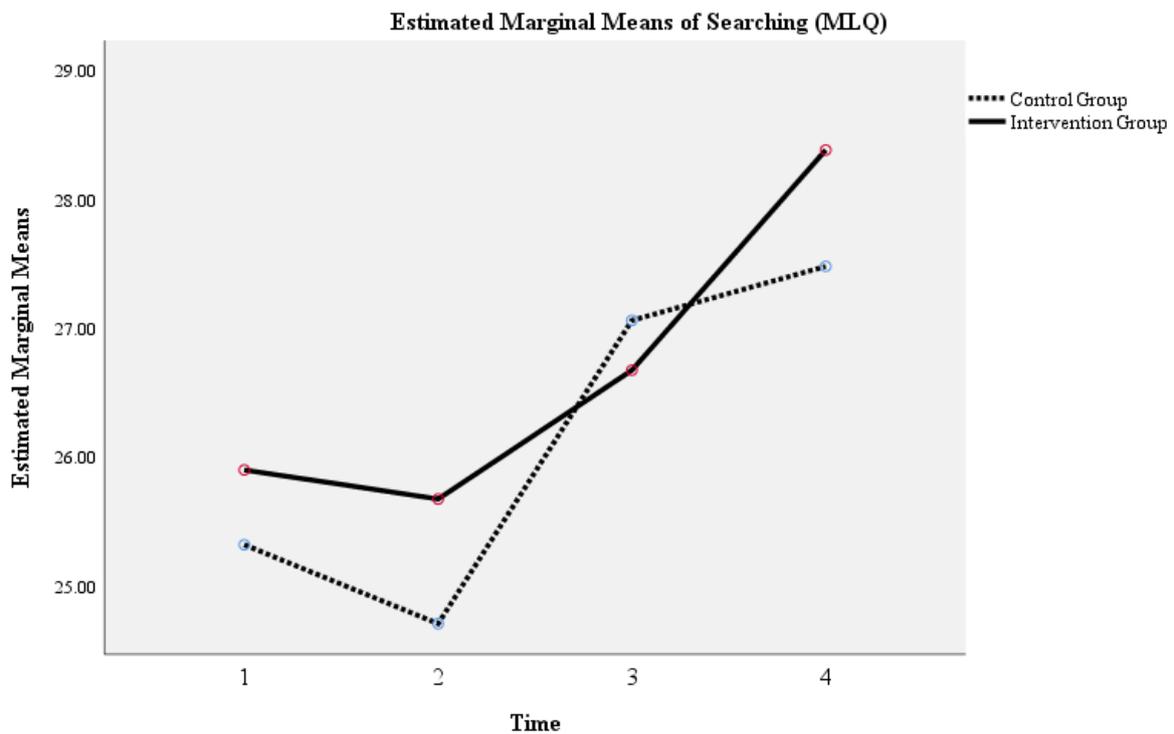
Changes in Presence of Meaning in Life (MLQ) of the Intervention and the Control Group at Four Time-points



In Figure 17, the mean score of the intervention group was higher than the control group at T1 (intervention, $M = 26.46$, $SD = 6.27$; control, $M = 25.31$, $SD = 6.17$). At T2, the mean scores of the two groups both dropped, while the mean score of the control group was higher than that of the intervention group at T3 (intervention, $M = 26.85$, $SD = 5.78$; control, $M = 27.12$, $SD = 5.48$). At T4, the mean score of the intervention group ($M = 28.39$, $SD = 4.33$) was higher than that of the control group ($M = 27.48$, $SD = 5.42$).

Figure 17

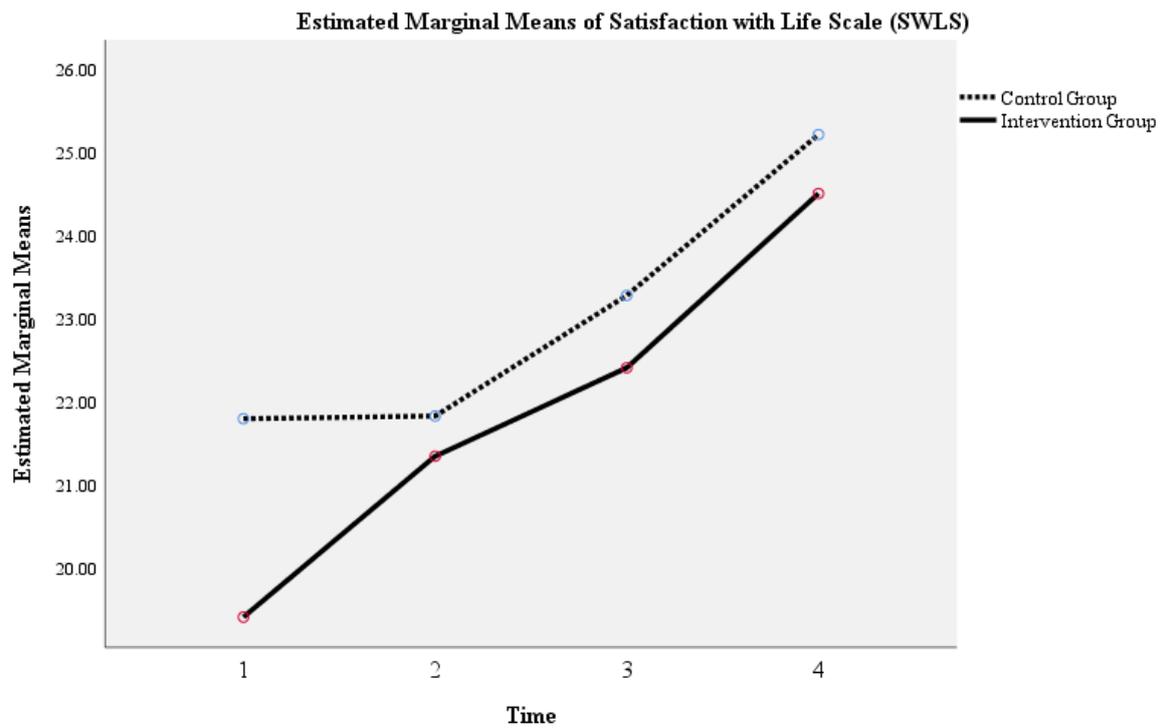
Changes in Search for Meaning in Life (MLQ) of the Intervention and the Control Groups at Four Time-points



In Figure 18, the mean score for Life Satisfaction (SWLS) of the control group ($M = 22.29$, $SD = 6.51$) was higher than that of the intervention group ($M = 19.77$, $SD = 7.26$) at T1. The mean scores of the control group were higher than those of the intervention group over the remaining time-points. However, the difference between the two groups grew smaller from T1 to T4, which shows that the changes in life satisfaction (SWLS) for the intervention group were larger.

Figure 18

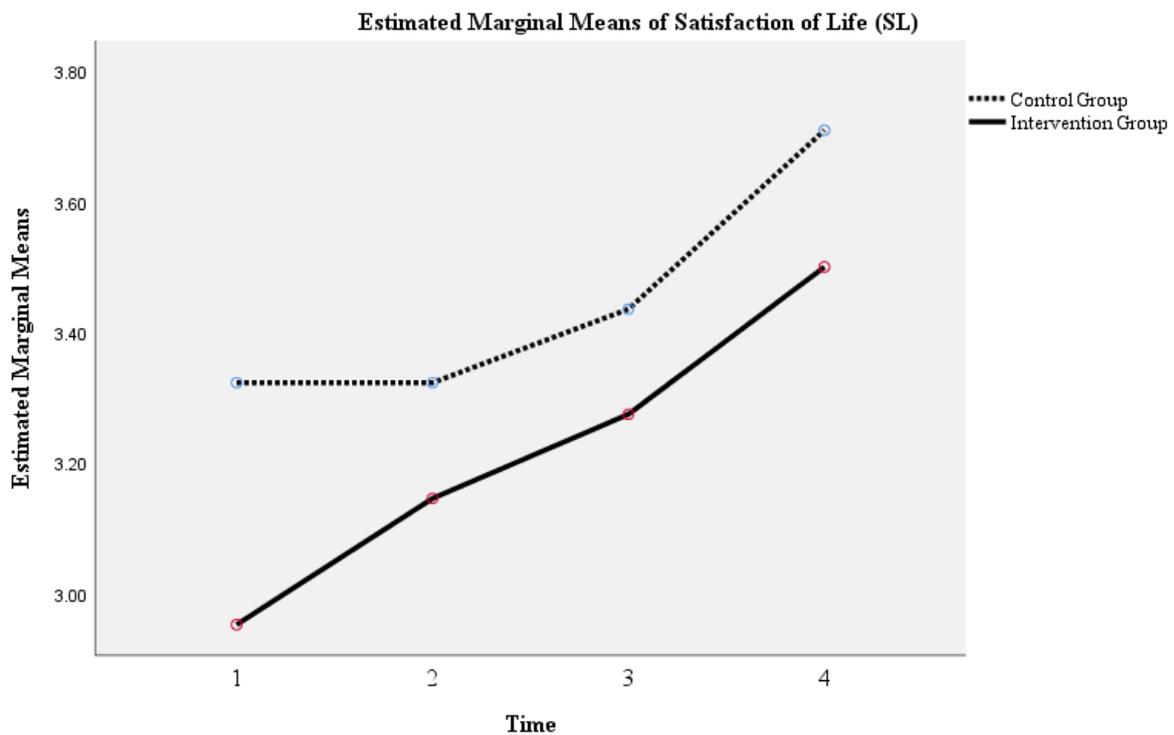
Changes in Satisfaction with Life Scale (SWLS) of the Intervention and the Control Group at Four Time-points



The scoring of a similar Life Satisfaction scale was also charted. The lines representing the control and the intervention groups in Figure 19 show a similar trend to Figure 18. Both the control group and the intervention group showed improvement in SL, but the changes in SL from T1 to T4 for the intervention group were bigger than those of the control group.

Figure 19

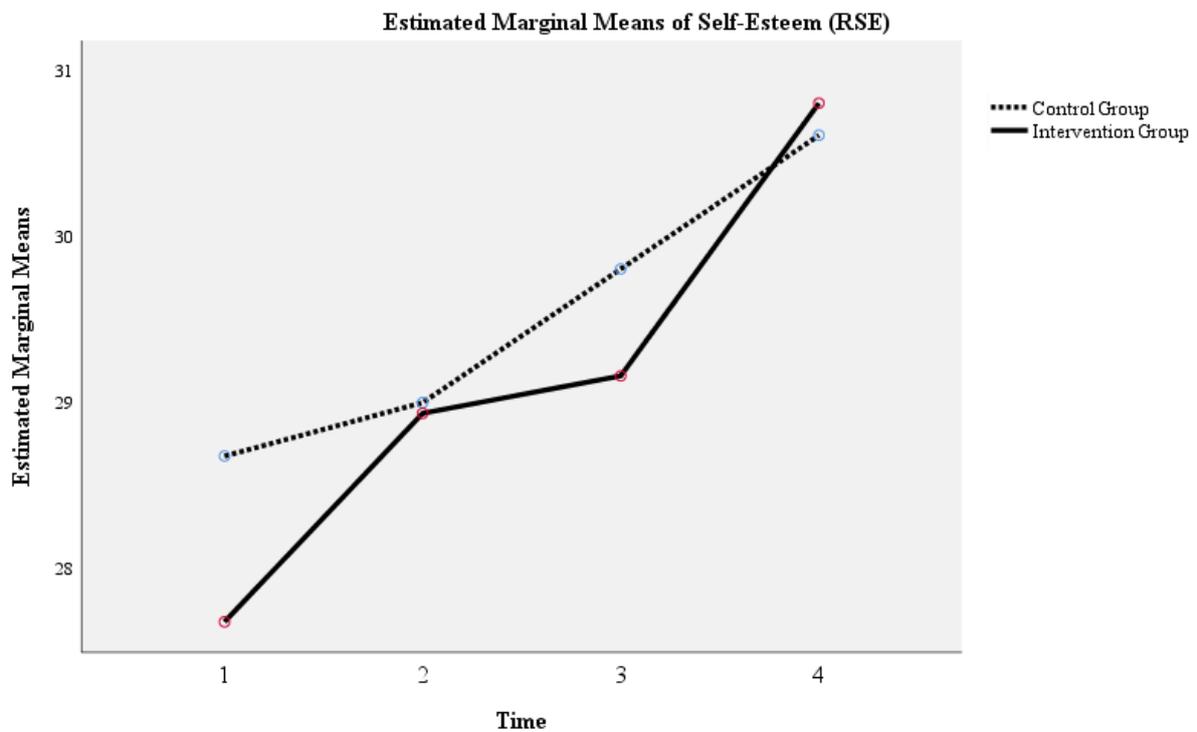
Changes in Satisfaction of Life (SL) of the Intervention and the Control Group at Four Time-points



As shown in Figure 20, self-esteem increased for both the control group and the intervention group. The baseline mean score at T1 for the intervention group ($M = 27.71$, $SD = 4.29$) is lower than for the control group ($M = 28.71$, $SD = 3.89$). At the final T4 stage, the intervention group achieved a higher mean score ($M = 30.81$, $SD = 4.33$) than that of the control group ($M = 30.61$, $SD = 4.35$).

Figure 20

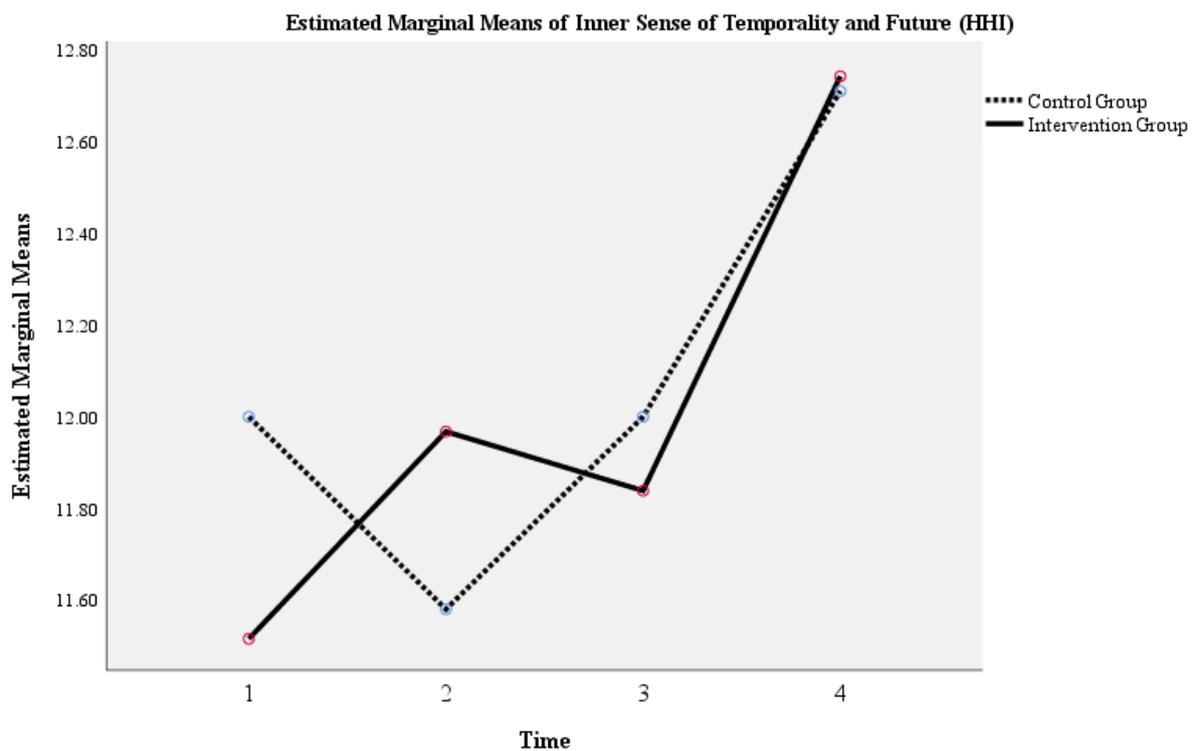
Changes in Self-Esteem (RSE) of the Intervention and the Control Group at Four Time-points



In Figure 21, the mean scores for Inner sense of temporality and future in both groups increased. At T1, the mean score of the control group ($M = 12.03$, $SD = 2.11$) was higher than that of the intervention group ($M = 11.57$, $SD = 1.67$). The mean score of the control group dropped at T2, while the intervention group increased. The score for the intervention group then dropped slightly at T3. Arriving at T4, however, the intervention group ($M = 12.74$, $SD = 1.65$) achieved a slightly higher mean score than that of the control group ($M = 12.71$, $SD = 2.16$).

Figure 21

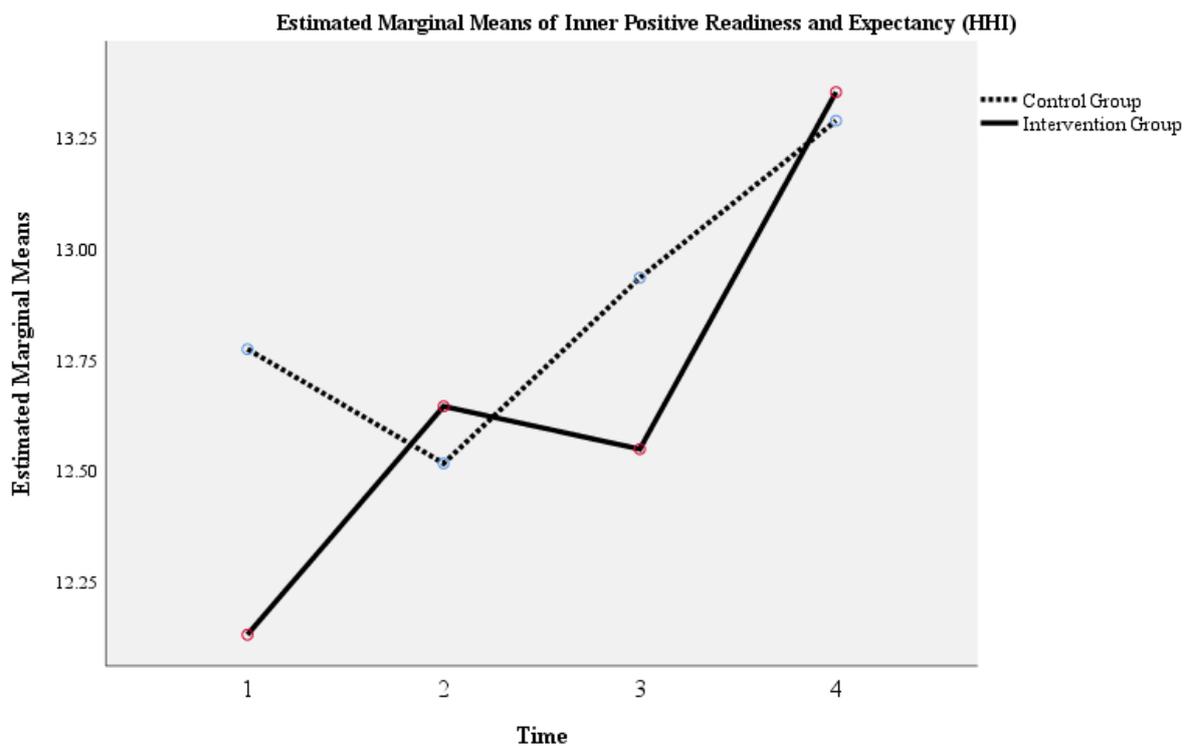
Changes in Inner Sense of Temporality and Future (HHI) of the Intervention and the Control Group at Four Time-points



In Figure 22, the mean score of Inner Positive Readiness and Expectancy (HHI) for the control group ($M = 12.80$, $SD = 1.86$) was higher than the intervention group ($M = 12.23$, $SD = 1.80$) at T1 pre-test. The mean score of the control group then dropped at T2, and the mean score of the intervention group also dropped in T3. Arriving at T4, the mean score of intervention group ($M = 13.35$, $SD = 1.74$) was higher than that of the control group ($M = 13.29$, $SD = 2.08$).

Figure 22

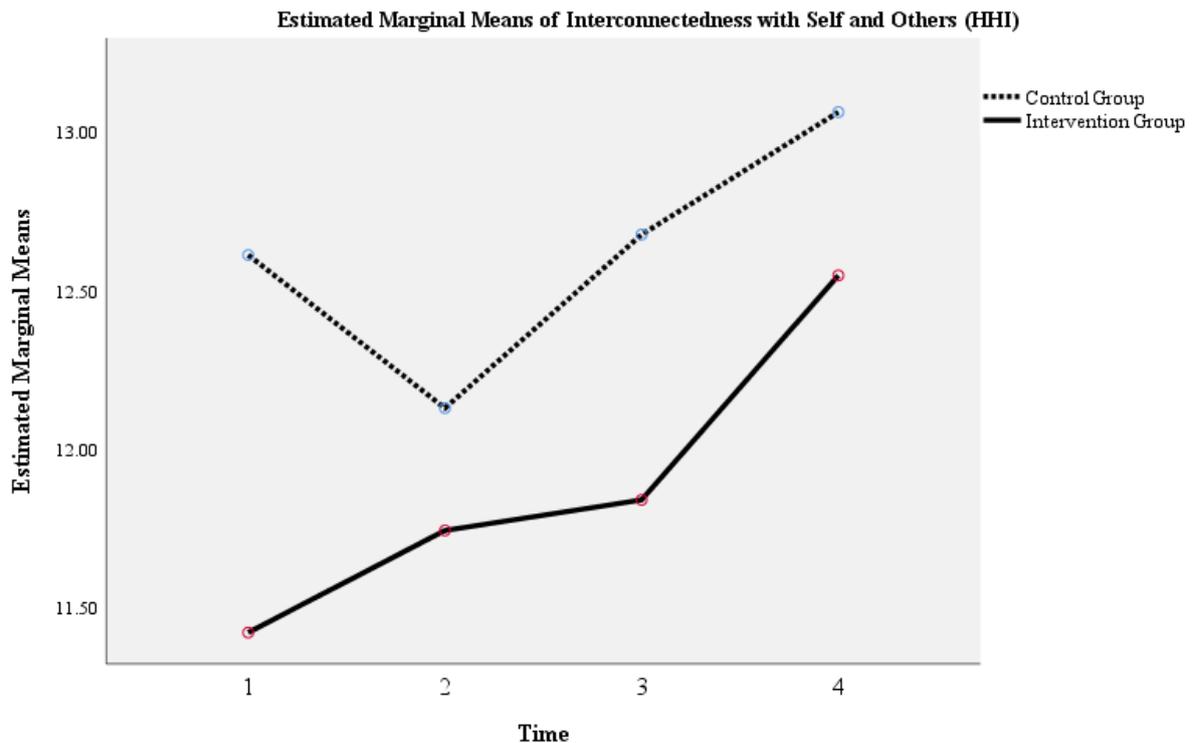
Changes in Inner Positive Readiness and Expectancy (HHI) of the Intervention and the Control Group at Four Time-points



In Figure 23, the mean score for Interconnectedness with Self and Others (HHI) at T1 for the control group ($M = 12.57$, $SD = 1.52$) was higher than that for the intervention group ($M = 11.51$, $SD = 1.95$). However, the mean score dropped at T2 for the control group, whereas the mean score for the intervention group continuously increased over the four time-points. By T4, the difference between the two groups had narrowed (intervention, $M = 12.55$, $SD = 1.95$; control, $M = 13.06$, $SD = 1.65$).

Figure 23

Changes in Interconnectedness with Self and Others (HHI) of the Intervention and the Control Group at Four Time-points



The results in Figure 24 show that both the control group and the intervention group improved on the dimension of identity structure (FIS). At T1, the mean score of the control group ($M = 10.09$, $SD = 2.16$) was higher than the intervention group ($M = 9.66$, $SD = 1.85$). Although there was a drop for the intervention group at T3, the mean score at T4 of the intervention group ($M = 11.35$, $SD = 2.17$) was slightly higher than the control group ($M = 11.32$, $SD = 2.01$).

Figure 24

Changes in Identity Structure (FIS) of the Intervention and the Control Group at Four Time-points

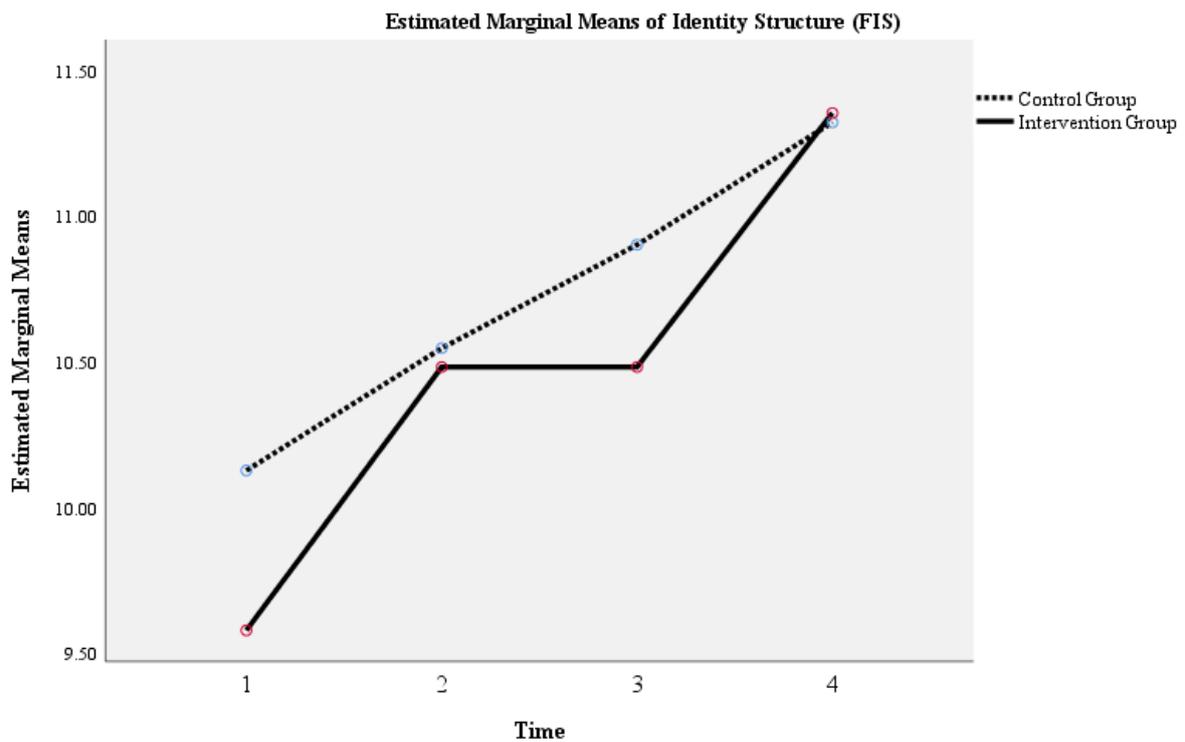
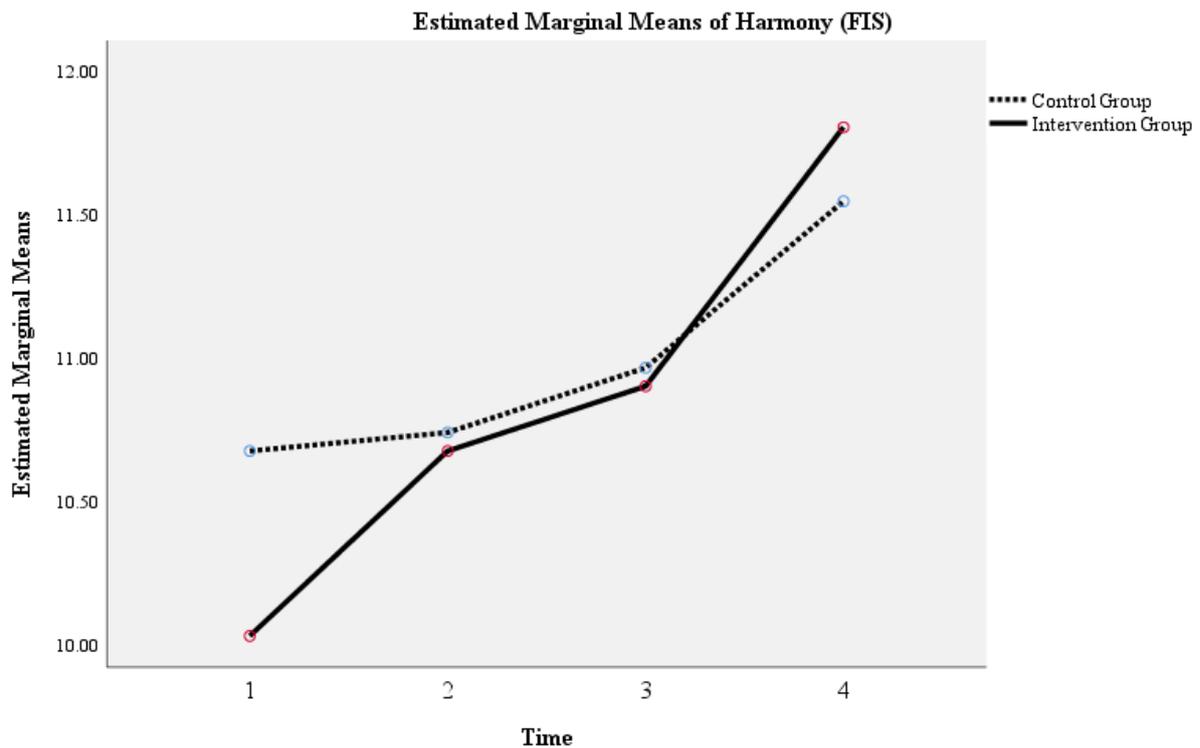


Figure 25 shows the improvements in Identity Harmony for both the control and the intervention group. Although the mean score of the control group at T1 ($M = 10.51, SD = 2.03$) was higher than that of the intervention group ($M = 10.11, SD = 2.01$), the intervention group achieved a higher mean score at T4 ($M = 11.81, SD = 1.78$) than the control group ($M = 11.55, SD = 1.98$).

Figure 25

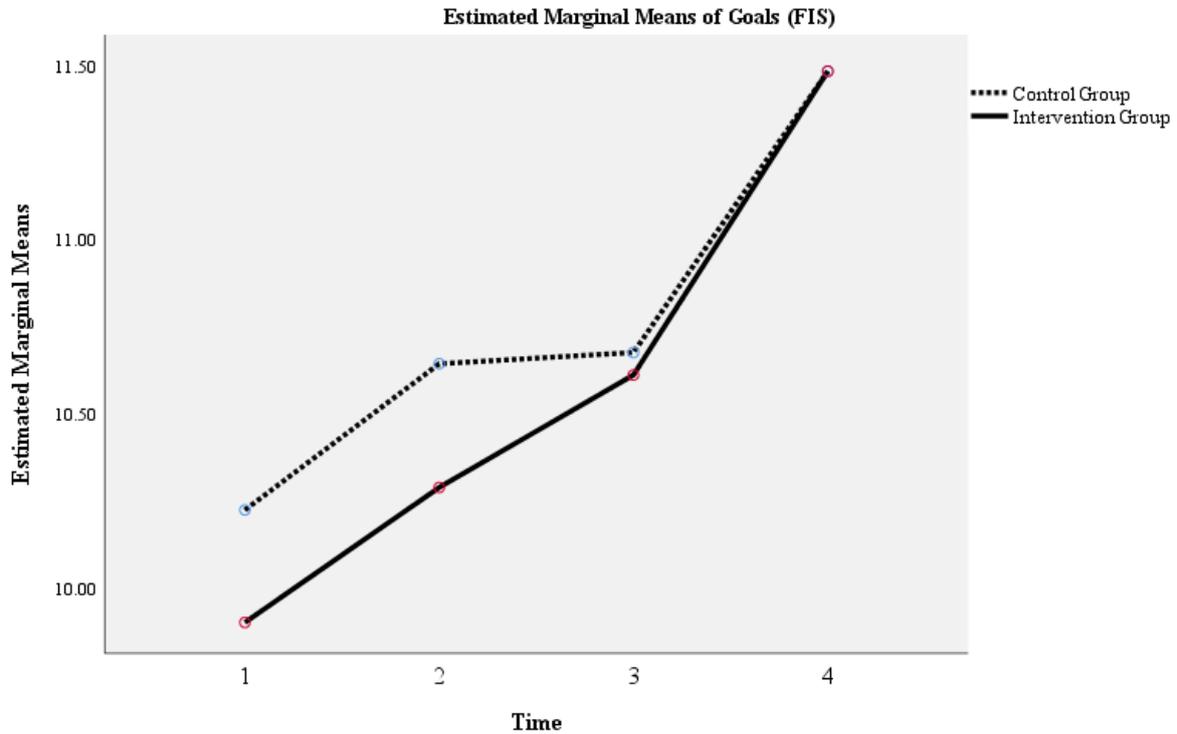
Changes in Identity Harmony (FIS) of the Intervention and the Control Group at Four Time-points



In Figure 26, the Identity Goals (FIS) mean score for the control group ($M = 10.20$, $SD = 2.13$) was higher than for the intervention group ($M = 9.91$, $SD = 2.20$) at T1. However, the mean score of the intervention group increased ($M = 11.48$, $SD = 2.20$) and reached the same level of the control group ($M = 11.48$, $SD = 2.42$) at T4.

Figure 26

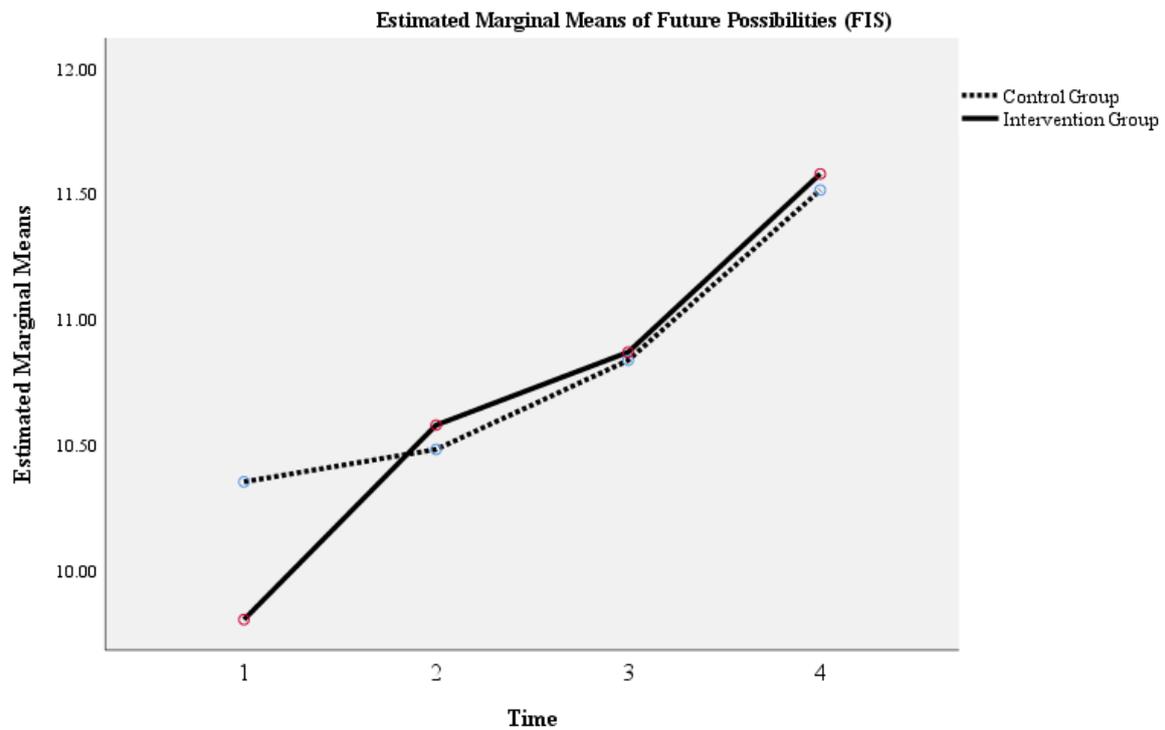
Changes in Identity Goals (FIS) of the Intervention and the Control Group at Four Time-points



In Figure 27, the Identity Future Possibilities (FIS) mean score for the control group ($M = 10.40$, $SD = 2.06$) was higher than for the intervention group ($M = 2.89$, $SD = 2.34$) at T1. However, the positive change in mean score for the intervention group was greater than the control group over time. At T4, the mean score of the intervention group ($M = 11.58$, $SD = 1.96$) was even slightly higher than that of the control group ($M = 11.52$, $SD = 2.45$).

Figure 27

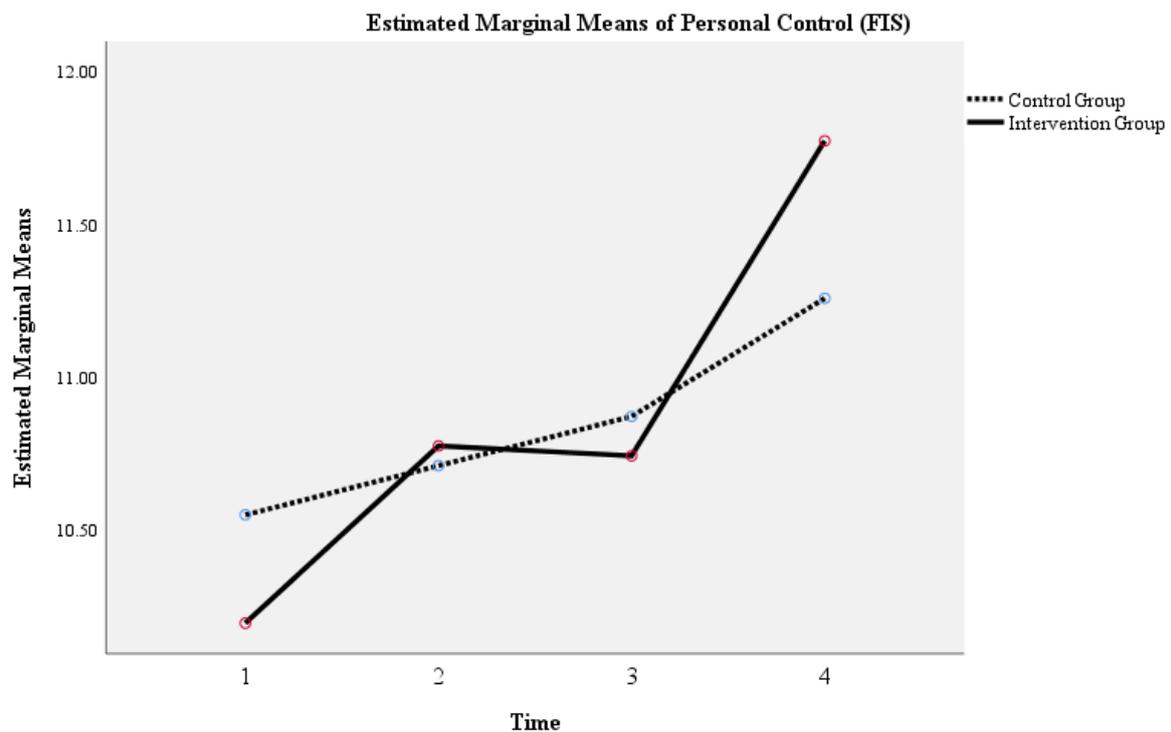
Changes in Identity Future Possibilities (FIS) of the Intervention and the Control Group at Four Time-points



In Figure 28, the Identity Personal Control (FIS) mean score for the control group ($M = 10.49$, $SD = 1.90$) was higher than for the intervention group ($M = 10.23$, $SD = 2.30$) at T1. The mean score of the control group increased slowly over time. Although there was a drop for the intervention group at T4, the intervention group ($M = 11.77$, $SD = 2.16$) showed larger improvement on personal control than the control group ($M = 11.26$, $SD = 2.24$) at T4.

Figure 28

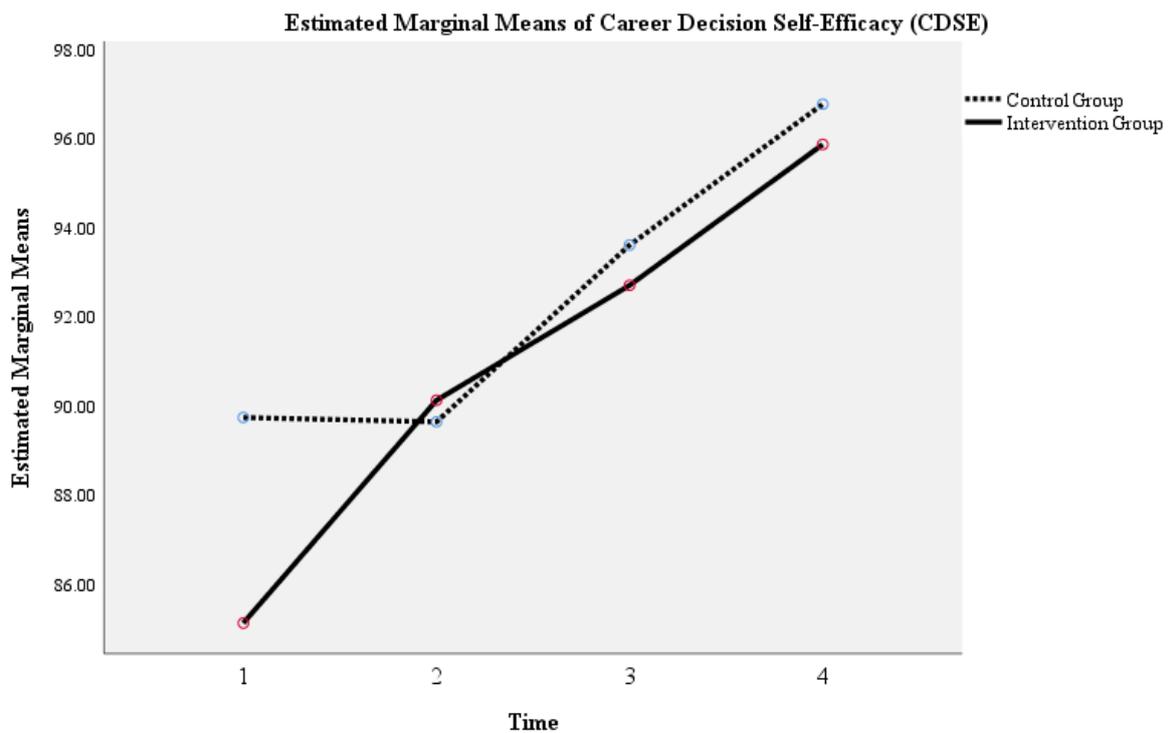
Changes in Identity Personal Control (FIS) of the Intervention and the Control Group at Four Time-points



In Figure 29, the control group had a higher mean score for Career Decision Self-Efficacy (CDSE) ($M = 89.03$, $SD = 12.54$) than the intervention group ($M = 86.23$, $SD = 15.99$) at T1. The mean score of both the intervention group and the control group increased over time, but the difference between the two groups became smaller at T4 (intervention, $M = 95.87$, $SD = 14.62$; control, $M = 96.77$, $SD = 14.94$).

Figure 29

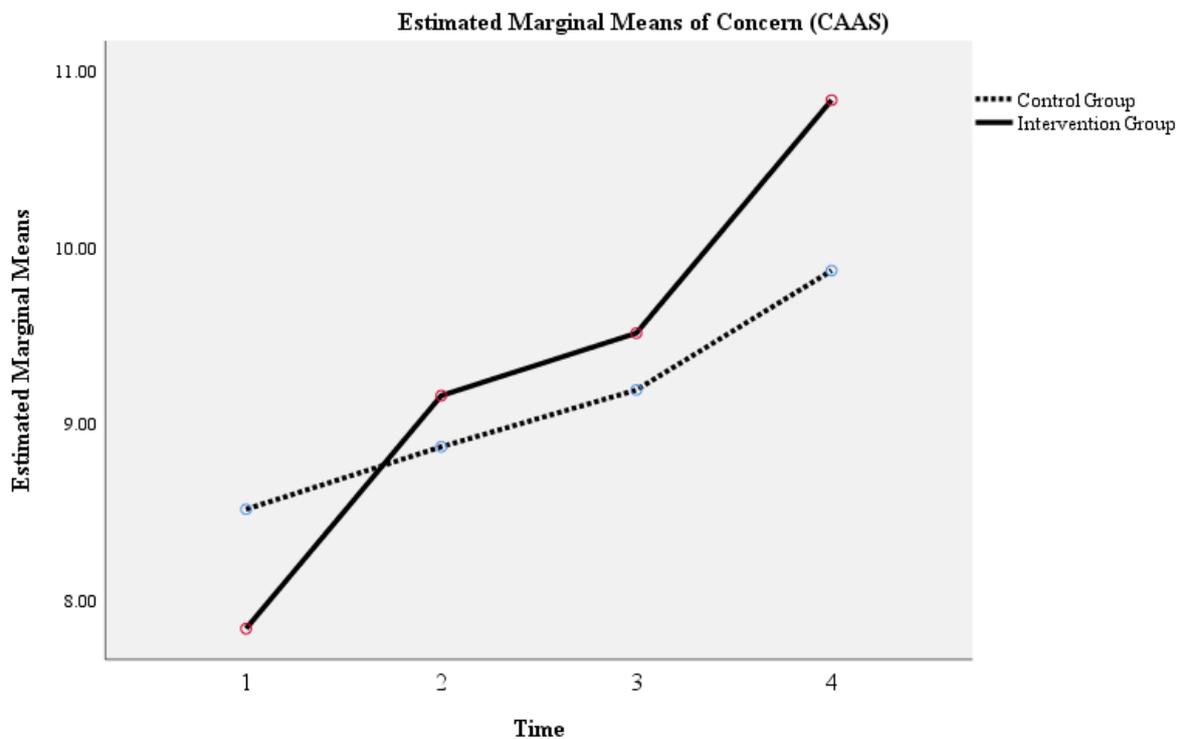
Changes in Career Decision Self-Efficacy (CDSE) of the Intervention and the Control Group at Four Time-points



In Figure 30, the control group had a higher mean score for Career Concern (CAAS) ($M = 8.49$, $SD = 2.36$) than the intervention group ($M = 8.00$, $SD = 2.95$) at T1. The figure shows that the mean scores of both groups increased over time. However, the mean score of the intervention group ($M = 9.26$, $SD = 2.95$) was higher than the control group ($M = 9.11$, $SD = 2.64$) from T2 onwards. At T4, the mean score of the intervention group was 10.84 ($SD = 2.66$), while the mean score of the control group was 9.87 ($SD = 2.62$).

Figure 30

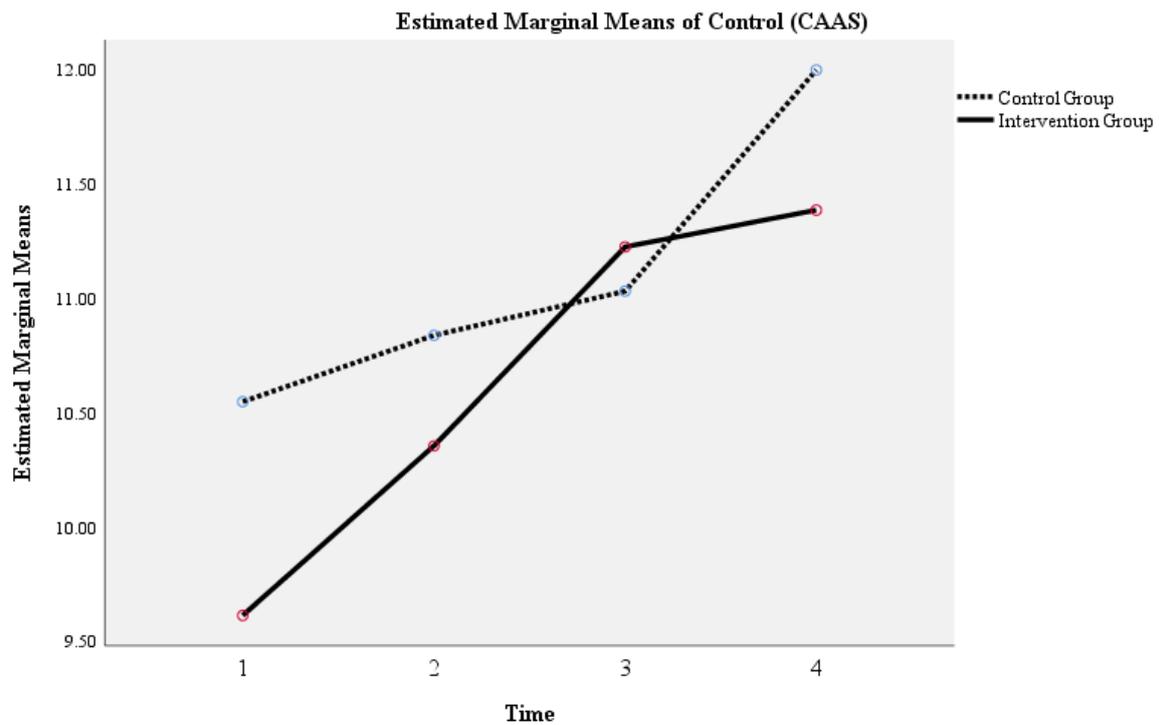
Changes in Career Concern (CAAS) of the Intervention and the Control Group at Four Time-points



In Figure 31, the Career Control (CAAS) mean score of the control group ($M = 10.40$, $SD = 2.56$) was higher than that of the intervention group ($M = 9.60$, $SD = 2.93$) at T1. The mean scores of both groups increased over time. The mean score of the intervention group ($M = 11.18$, $SD = 2.76$) was higher than that of the control group ($M = 11.00$, $SD = 2.78$) at T3. By T4, however, the mean score of the control group ($M = 12.00$, $SD = 2.53$) had increased more than that of the intervention group ($M = 11.39$, $SD = 2.43$).

Figure 31

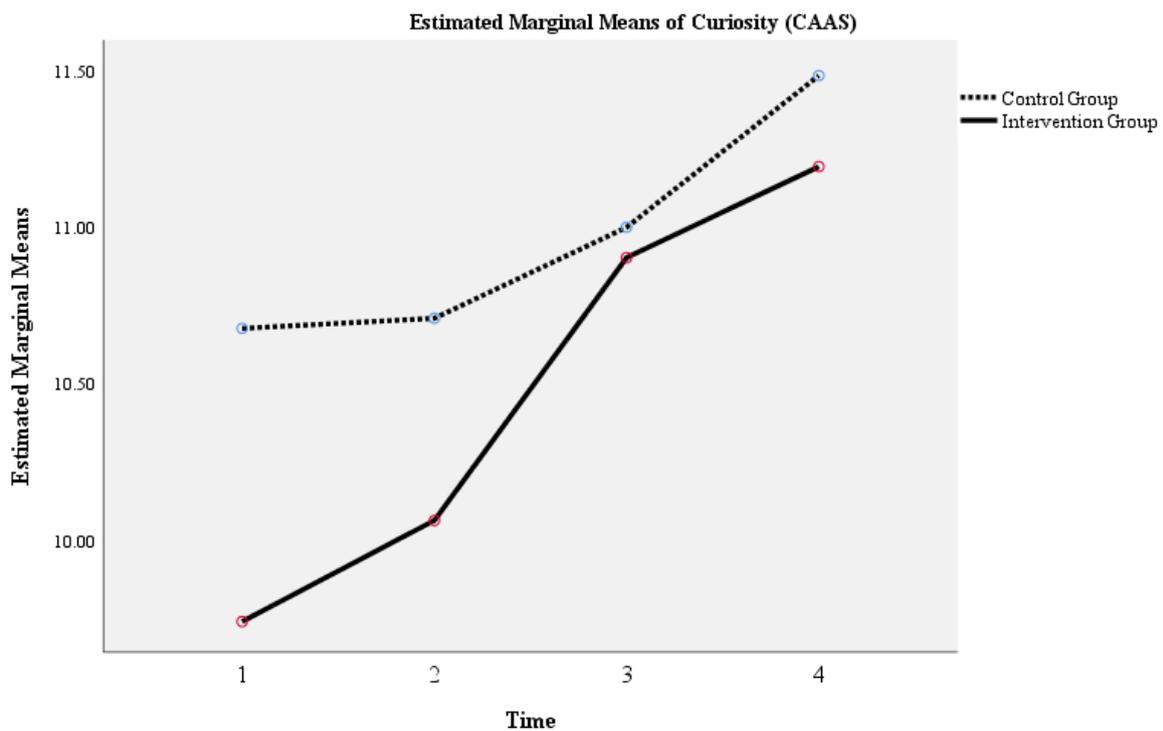
Changes in Career Control (CAAS) of the Intervention and the Control Group at Four Time-points



In Figure 32, the Career Curiosity (CAAS) mean score for the control group was higher than for the intervention group at all the four time-points. However, the intervention group showed greater improvement. There was a large difference between the intervention group and the control group at T1 (intervention, $M = 9.86$, $SD = 2.64$; control, $M = 10.49$, $SD = 2.84$), but the difference grew smaller by T4 (intervention, $M = 11.19$, $SD = 2.50$; control, $M = 11.48$, $SD = 2.36$).

Figure 32

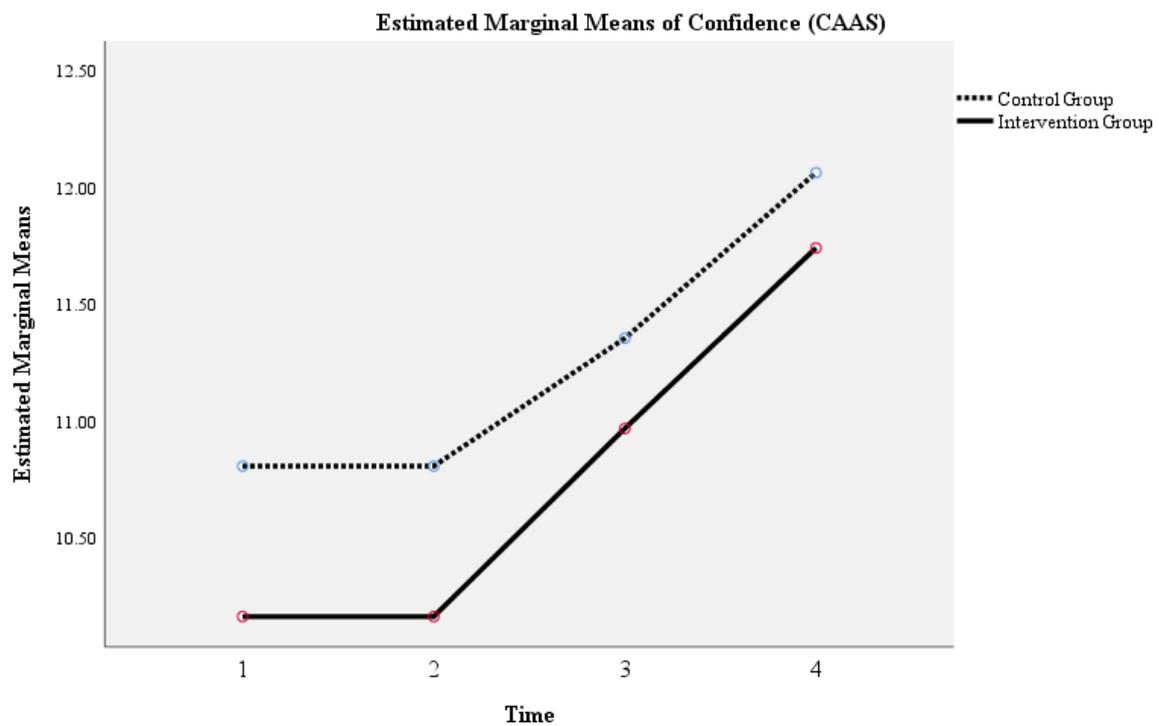
Changes in Career Curiosity (CAAS) of the Intervention and the Control Group at Four Time-points



As seen from Figure 33, the changes in Career Confidence (CAAS) for both groups were similar. However, the difference between the control group and the intervention group became smaller over time. At T1, the mean score of the control group ($M = 10.57$, $SD = 2.87$) was higher than that of the intervention group ($M = 10.20$, $SD = 2.76$). At T4, the mean score of the control group was 12.06 ($SD = 2.21$), whereas the mean score of the intervention group was 11.74 ($SD = 2.67$).

Figure 33

Changes in Career Confidence (CAAS) of the Intervention and the Control Group at Four Time-points



In sum, the analysis above shows that the changes in all the psychometric scales for the participants in the intervention group were more prominent than the control group. Although the changes in some variables were not statistically significant, substantial improvement for the intervention group's participants are indeed observable from all the figures above.

Drug Usage at Different Time**Table 13***Drug Usage in the Past Month, Past 3 Months, and Past 6 Months from Time 1 to Time 4*

| | Past 30 days | | | | Past 3 months | | | | Past 6 months | | | |
|--|--------------|------------|------------|------------|---------------|------------|------------|------------|---------------|------------|------------|------------|
| | T1 N=70 | T2 N=70 | T3 N=67 | T4 N=62 | T1 N=70 | T2 N=70 | T3 N=67 | T4 N=62 | T1 N=70 | T2 N=70 | T3 N=67 | T4 N=62 |
| Cannabis/ Marijuana/ Grass | | | | | | | | | | | | |
| Never used | 65 | 67 | 64 | 58 | 67 | 65 | 64 | 59 | 63 | 64 | 61 | 57 |
| Used occasionally | 5 | 1 | 1 | 2 | 3 | 3 | 1 | 2 | 5 | 3 | 4 | 3 |
| Used regularly | 0 | 2 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 3 | 2 | 2 |
| Heroin/ White Powder | | | | | | | | | | | | |
| Never used | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 |
| Used occasionally | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ecstasy/ E/ XTC | | | | | | | | | | | | |
| Never used | 68 | 70 | 67 | 62 | 68 | 68 | 67 | 62 | 67 | 68 | 67 | 61 |
| Used occasionally | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 3 | 2 | 0 | 1 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ketamine/ K/ K Zai | | | | | | | | | | | | |
| Never used | 67 | 70 | 67 | 62 | 68 | 68 | 67 | 62 | 65 | 65 | 63 | 60 |
| Used occasionally | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 |
| Used regularly | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 3 | 4 | 2 |
| Ice | | | | | | | | | | | | |
| Never used | 68 | 70 | 67 | 62 | 67 | 68 | 67 | 62 | 67 | 67 | 63 | 59 |
| Used occasionally | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| Used regularly | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 3 | 3 | 2 |
| MX/ Methaqualone | | | | | | | | | | | | |
| Never used | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 |
| Used occasionally | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ng Chai/ Give-me-five | | | | | | | | | | | | |
| Never used | 69 | 70 | 67 | 62 | 69 | 68 | 67 | 62 | 68 | 69 | 66 | 61 |
| Used occasionally | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 1 | 1 | 1 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blue Gremlin | | | | | | | | | | | | |
| Never used | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 | 69 | 70 | 67 | 62 |
| Used occasionally | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Zopiclone/ Triazolam | | | | | | | | | | | | |
| Never used | 69 | 70 | 67 | 62 | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 |
| Used occasionally | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cocaine/ Crack/ Coke | | | | | | | | | | | | |
| Never used | 66 | 70 | 66 | 61 | 65 | 66 | 66 | 61 | 61 | 62 | 63 | 59 |
| Used occasionally | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 3 | 2 | 0 | 2 |
| Used regularly | 3 | 0 | 0 | 0 | 4 | 3 | 1 | 0 | 6 | 6 | 4 | 1 |
| Cough Medicine/ Codeine | | | | | | | | | | | | |
| Never used | 70 | 68 | 67 | 61 | 69 | 68 | 67 | 61 | 69 | 68 | 67 | 61 |
| Used occasionally | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Used regularly | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | 0 |
| Organic Solvents (Thinner) | | | | | | | | | | | | |
| Never used | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 |
| Used occasionally | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Drugs (not inclusive of alcohol or cigarettes) | | | | | | | | | | | | |
| Never used | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 | 70 | 70 | 67 | 62 |
| Used occasionally | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Descriptive data of drug use. Table 13 shows the number of participants who never used, used occasionally, and used regularly in past month, past 3 months, and past 6 months. In general, the drug use of participants decreased from T1 to T4. In this study, there were no participants using heroin, MX, organic solvents or other drugs.

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Never used | 31 | 35 | 35 | 35 | 34 | 32 | 31 | 30 | 32 | 33 | 32 | 34 | 34 | 32 | 31 | 30 | 28 | 33 | 29 | 33 | 31 | 32 | 29 | 30 |
| Used occasionally | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| Used regularly | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 5 | 1 | 5 | 1 | 3 | 1 | 1 | 0 |
| Cough Medicine/ Codeine | | | | | | | | | | | | | | | | | | | | | | | | |
| Never used | 35 | 35 | 35 | 33 | 34 | 33 | 31 | 30 | 35 | 34 | 35 | 33 | 34 | 33 | 31 | 30 | 35 | 34 | 35 | 33 | 34 | 33 | 31 | 30 |
| Used occasionally | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Used regularly | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 |
| Organic Solvents (Thinner) | | | | | | | | | | | | | | | | | | | | | | | | |
| Never used | 35 | 35 | 35 | 35 | 34 | 33 | 31 | 31 | 35 | 35 | 35 | 35 | 34 | 33 | 31 | 31 | 35 | 35 | 35 | 35 | 34 | 33 | 31 | 31 |
| Used occasionally | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Drugs (not inclusive of alcohol or cigarettes) | | | | | | | | | | | | | | | | | | | | | | | | |
| Never used | 35 | 35 | 35 | 35 | 34 | 33 | 31 | 31 | 35 | 35 | 35 | 35 | 34 | 33 | 31 | 31 | 35 | 35 | 35 | 35 | 34 | 33 | 31 | 31 |
| Used occasionally | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Used regularly | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Comparison between the Two Groups. Table 14 shows the number of participants in each group who used drugs. In the measure of one month, only one participant reported having used drugs. He used a half dose of cannabis in T4 due to his overwhelming grief in a broken romantic relationship.

In the control group, the number of participants who relapsed into drug use was higher than in the intervention group. In T2 to T4, there were 3 participants in the control group who relapsed into using cannabis; 1 participant relapsed into using cocaine in T3; and 2 participants used cough medicine in T2.

Table 15
Frequency of Drug Use of Participants

| | Past Month | | | | Past 3 Months | | | | Past 6 Months | | | |
|----------------------------------|------------|------------|------------|------------|---------------|------------|------------|------------|---------------|------------|------------|------------|
| | T1 N=70 | T2 N=70 | T3 N=67 | T4 N=62 | T1 N=70 | T2 N=70 | T3 N=67 | T4 N=62 | T1 N=70 | T2 N=70 | T3 N=67 | T4 N=62 |
| Cannabis/ Marijuana/ Grass | 10 | 11.57 | 13.86 | 15.86 | 16 | 32 | 40 | 43 | 154 | 136 | 111 | 83 |
| Ecstasy/ E/ XTC | 11 | 0 | 0 | 0 | 7 | 3 | 0 | 0 | 12 | 9 | 0 | 2 |
| Ketamine/ K/ K Zai | 271.71 | 0 | 0 | 0 | 1079 | 975 | 0 | 0 | 2164 | 2860 | 2769 | 1456 |
| Ice | 287.14 | 0 | 0 | 0 | 612 | 598 | 0 | 0 | 1643 | 1638 | 1394 | 1120 |
| Ng Chai/ Give-me- five | 5 | 0 | 0 | 0 | 4 | 9 | 0 | 0 | 8 | 7 | 6 | 2 |
| Blue Gremlin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Zopiclone/ Triazolam | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cocaine/ Crack/ Coke | 266.71 | 0 | 3.14 | 2.07 | 2121 | 1002 | 6.5 | 4.25 | 4594 | 3074 | 1872 | 1827.5 |
| Cough Medicine/ Codeine | 0 | 34.29 | 0 | 5.29 | 39 | 104 | 0 | 14 | 78 | 390 | 0 | 27 |

Descriptive data of drug use. The above data in Table 15 was calculated by following the suggested formula from the Beat Drugs Fund. For instance, if the participant reported using drugs twice daily in the past month, the frequency would be 2 times multiplied by 30 days; if the participant used drugs twice weekly, the frequency would be $(2 \div 7 \times 30)$ 8.51 times in the past month. To review the results, the frequency of drug use decreased, with the exception of cannabis.

Table 16
Frequency of Drug Use of Participants in Both Groups

| | Past Month | | | | | | | | Past 3 Months | | | | | | | | Past 6 Months | | | | | | | |
|----------------------------------|------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|---------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|---------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
| | T1 | | T2 | | T3 | | T4 | | T1 | | T2 | | T3 | | T4 | | T1 | | T2 | | T3 | | T4 | |
| | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> | <i>In</i> | <i>Ctrl</i> |
| Cannabis/ Marijuana/ Grass | 6 | 4 | 0 | 11.57 | 0 | 13.86 | 1 | 14.86 | 3 | 13 | 3 | 29 | 0 | 40 | 0 | 43 | 79 | 75 | 80 | 56 | 5 | 106 | 2 | 81 |
| Ecstasy/ E/ XTC | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 10 | 2 | 8 | 1 | 0 | 0 | 2 | 0 |
| Ketamine/ K/ K Zai | 271.71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1079 | 0 | 975 | 0 | 0 | 0 | 0 | 0 | 2164 | 0 | 2860 | 0 | 2405 | 364 | 1274 | 182 |
| Ice | 287.14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 612 | 0 | 598 | 0 | 0 | 0 | 0 | 0 | 1643 | 0 | 1638 | 0 | 1394 | 0 | 1120 | 0 |
| Ng Chai/ Give-me- five | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 7 | 0 | 6 | 0 | 2 | 0 |
| Blue | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gremlin | | | | | | | | | | | | | | | | | | | | | | | | |
| Zopiclone/ Triazolam | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cocaine/ Crack/ Coke | 266.71 | 0 | 0 | 0 | 0 | 3.14 | 0 | 2.07 | 1183 | 938 | 1001 | 1 | 0 | 6.5 | 0 | 4.25 | 2718 | 1876 | 2631 | 443 | 1859 | 13 | 1820 | 7.5 |
| Cough Medicine/ Codeine | 0 | 0 | 0 | 34.29 | 0 | 0 | 0 | 5.29 | 0 | 39 | 0 | 104 | 0 | 0 | 0 | 14 | 0 | 78 | 0 | 390 | 0 | 0 | 0 | 27 |

Note. Other Drugs = not inclusive of alcohol or cigarettes

Table 16 shows the frequency of drug use by the intervention group and control group. In the Past Month data, cannabis use in the intervention group increased in T4, due to the relapse of one participant. In the control group, cannabis use also increased (T1, 4; T2, 11.57; T3, 13.86; T4, 14.86), and there was a relapse of cocaine (T3, 3.14) and cough medicine (T2, 34.29) use.

In the Past 3 Months data, there was a decrease in drug use of all types by the intervention group. However, cannabis use in the control group increased from 13 to 43 in T1 to T4. The frequency of cocaine use fluctuated between 938 in T1, 1 in T2, 6.5 in T3, and 1 in T4. The frequency of cough medicine use fluctuated between 39 in T1, 104 in T2, 0 in T3, and 14 in T4.

In the Past 6 Months data, both the intervention and the control group showed a decreasing tendency in drug use. However, in the control group, cannabis use fluctuated between 75 in T1, 56 in T2, 106 in T3, and 81 in T4, and cough medicine use between 78 in T1, 390 in T2, 0 in T3, and 27 in T4. In the intervention group, cannabis and ketamine use increased between T1 to T2. These frequencies decreased in T3 and T4.

Table 17 summarises the numbers of participants in the Past Month who were either drug-free or still using drugs during the project period. The participants in both groups were recruited by agencies, and had been referred on the understanding that they would be actively committed participants with high levels of self-control. Therefore, few of the participants reported drug use. However, it is notable that drug use in the intervention group dropped from 11.43% to 3.23%, whereas it increased from 5.71% to 9.68% in the control group.

Table 17

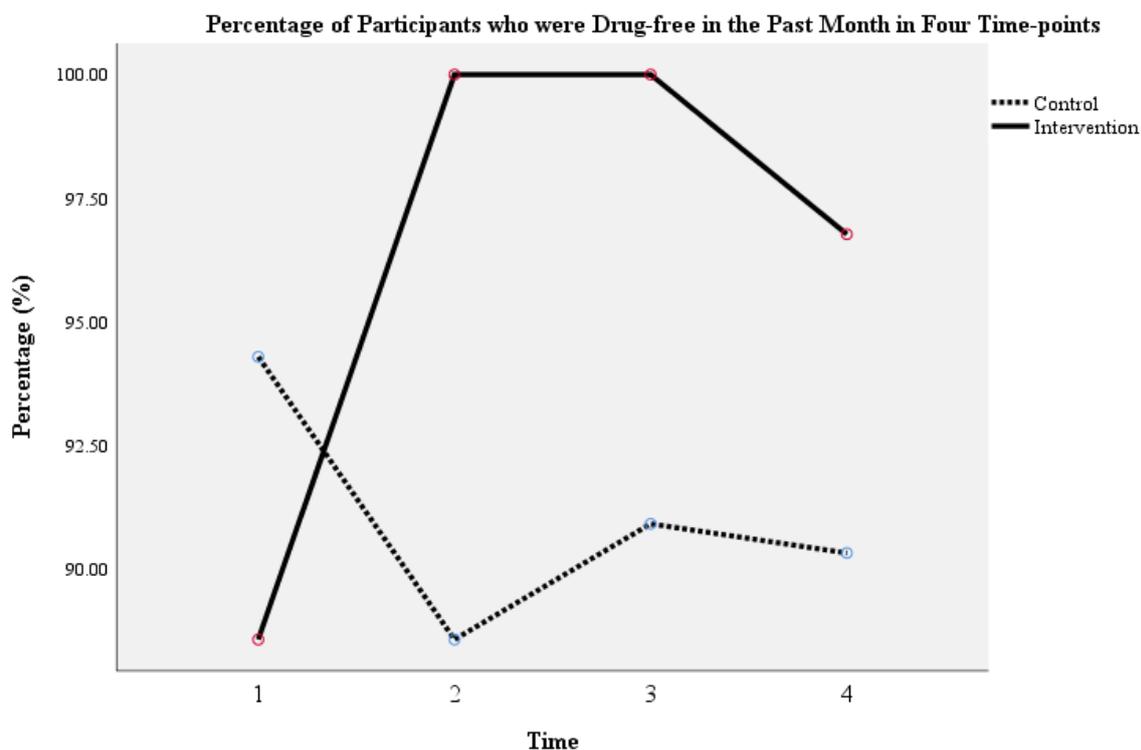
Participants who were Drug-free and Drug-using in the Past Month at Four Time-points

| | Drug-free N (%) | | Drug-using N (%) | |
|----|-----------------------|---------------|-----------------------|---------------|
| | Intervention Group | Control Group | Intervention Group | Control Group |
| T1 | 31 (88.57) | 33 (94.29) | 4 (11.43) | 2 (5.71) |
| T2 | 35 (100.00) | 31 (88.57) | 0 (0.00) | 4 (11.43) |
| T3 | 34 (100.00) | 30 (90.91) | 0 (0.00) | 3 (9.09) |
| T4 | 30 (96.77) | 28 (90.32) | 1 (3.23) | 3 (9.68) |

In Figure 34, the line graph shows the trends for participants who were drug-free in the Past Month at Four Time-points. Although the control group had a higher percentage than the intervention group at T1, the intervention group was higher for T2, T3 and T4.

Figure 34

The Percentage of Participants who were Drug-free in the Past Month at Four Time-points



Evaluation from Participants

Narrative vocational counselling approach, expressive arts techniques and motivational interviewing were integrated in an organic intervention package. It is a composite treatment. The three components are interrelated and not separated with each other. Thus, their effectiveness cannot be assessed dividedly. Although narrative approach was mainly used in the individual sessions and expressive arts techniques was mainly used in group sessions, techniques and concepts of the motivational interviewing were used throughout the project for fostering the positive changes of participants, such as the stages of changes included pre-contemplation, contemplation, preparation, action and maintenance (Prochaska & DiClemente, 1983). Some participations started to take actions after the individual life-design sessions. Others may still contemplate of making changes in the expressive arts groups. Some even relapsed and needed to start all over again from contemplation. Therefore, the Integrative programme of Vocational Life Design was evaluated by the participants as a whole (See Table 18).

Table 18

Participants' Ratings of the Integrative Programme of Vocational Life Design Programme

| Items | Mean | SD |
|--|------|------|
| 1. Do you agree that the content of the programme and the types of activities are suitable for you? (1: lowest to 5: highest) | 4.21 | .650 |
| 2. Do you agree that the programme helps you understand your characteristics better? (traits/strengths?) (1: lowest to 5: highest) | 4.27 | .574 |
| 3. Do you agree that the programme helps you better understand your abilities and strengths? (1: lowest to 5: highest) | 4.27 | .674 |
| 4. Do you agree that the programme helps you discover your inner/outer resources? (1: lowest to 5: highest) | 4.15 | .755 |
| 5. Do you agree that the programme provides you with a space for expression of your inner thoughts and feelings? (1: lowest to 5: highest) | 4.33 | .645 |
| 6. Do you agree that the programme helps you better understand your own choices and expected life (e.g. academic study/vocational path)? (1: lowest to 5: highest) | 4.24 | .830 |
| 7. Rate your relationships with your counsellor and group members (1: lowest to 10: highest) | 8.93 | 1.52 |
| 8. Rate the discussion on the expected themes (1: lowest to 10: highest) | 8.53 | 1.44 |
| 9. Rate the suitability of the counselling approach and style (1: lowest to 10: highest) | 8.50 | 1.46 |
| 10. Overall rating (1: lowest to 10: highest) | 8.58 | 1.33 |

Table 18 summarises the ratings by the participants towards this programme. All participants reported positive feedback. The participants were asked whether they agreed with six different statements (Question 1 to Question 6) on a 5-point scale. On the whole, our

participants agreed that the programme was suitable and helpful in self-understanding, self-expression and exploring their careers (means scores were all above 4). Our participants particularly agreed that the programme provided them with a space for expression of their inner thoughts and feelings ($M = 4.33$, $SD = .645$).

The participants were also asked to rate the following aspects of the programme on a 10-point scales: their relationships with their counsellor and group members, the discussion on the expected themes, the suitability of the counselling approach and style, and the overall rating of the programme. Our participants rated all the aspects favourably (means score were all above 8). The highest mean score was for their relationships with their counsellor and group members ($M = 8.93$, $SD = 1.52$). The participants were also highly satisfied with the overall programme ($M = 8.58$, $SD = 1.33$).

Qualitative Results

Focus Group Interviews

In total, 16 participants from the intervention group and 12 participants from the control group were invited to join focus group interviews. The age of the participants in the intervention group ranged from 15 to 35, with a mean of 28.1. Eight of them were male. In the control group, the age range of the participants was 15 to 35, with a mean of 28.3. Nine of them were female. The content of the interviews was analysed by thematic analysis.

In the focus group interviews, both groups shared their views on drug abuse, what having a job meant to them, the needs and difficulties met on career paths, and their ideas on future career directions. For the intervention group, they also talked about their new network of non-drug-using friends introduced by the LP programme, and provided feedback on the programme.

In the response examples below, the participant ID numbers starting with “P” were recruited from the intervention group, whereas those with “B” were recruited from the control group.

Reasons for Drug Use

In the sharing by participants, their reasons for drug use were varied. Reasons included a desire to release unpleasant emotions, not to be tortured by reality, enjoy the excitement brought by drugs, gain a quiet personal space, and to chat with friends.

It felt like I wasn't tortured by reality when I am accompanied by drugs. Drugs had their charm... Drug use was an addiction and a habit.
(P009/Female/Age 22)

Drugs were helpful in bringing me some happiness and making me feel at ease when chatting with friends
(P012/Male/Age 29)

I took drugs because I had separated from my girlfriend.
(B005/Male/Age 27)

I did not know how to express my emotions. Drugs provided me with a private quiet space.
(B012/Female/Age 29)

I used drugs for beauty. Drug use keeps me slim.
(P010/Female/Age 29)

Reasons for Detoxification

Most of the participants reflected that family was the main reason for undergoing detoxification. They did not want their family members to be disappointed. Moreover, they did not want to give up their dreams and life ideals because of drug use. They also did not want their cognitive functions to be damaged by drugs.

I will lose my dreams if I use drugs again.

(P002/femal/Age 35)

I don't want to disappoint my daughter and my family members.

(P004/Female/Age 31)

I don't want to disappoint my family members and make them cry. I want them to be happy.

(P005/Male/Age 18)

I really did not want my family members to be disappointed.

(P011/Male/Age 22)

Two participants shared that the reason why they underwent detoxification was because drug use damaged their cognitive functions, and caused them to experience hallucination:

I was changed into another person. I mean, the drugs changed my personality... I couldn't think of anything, remember anything, and even think of my future.

(P010/Female/Age 29)

I didn't want to continue that kind of life. I was psychotic from the drug use... I suffered from auditory hallucinations. I had chaos in my brain. I was going crazy. I was having illusions that someone was going to use an infrared gun to shoot me in the head.

(B001/Female/Age 21)

Needs and Difficulties in Career Paths before taking the programme

Participants said that they had experienced difficulties finding jobs and being employed. When searching for jobs, academic history, career adaptability, childcare, and preparation for interviews were their main concerns.

Searching for Jobs. Firstly, academic history was the common difficulty faced by most of the participants:

A parent in a cram school asked me about my DSE results and asked me why I studied in that kind of school. I answered her honestly. She replied, "I don't need your tutorial class. Thank you." I felt I being discriminated against.

(B001/Female/Age 21)

There aren't many jobs for me to choose from. Because I don't have a high educational level, I don't have many choices when looking for a job. I'll consider any job so long as the job doesn't require a high educational level.

(B003/Male/Age 30)

I was afraid that I would make mistakes again. And whenever I did, I needed to change my job. I didn't have a qualified academic history, and no work experience. I was confused and things felt difficult.

(B012/Female/Age 29)

The second difficulty concerned career adaptability. Participants worried that they could not adapt to a new working environment because of their lifestyle.

First, I give up easily. Second, I enjoy a relaxing life, I do not want to be bound by jobs.
(B007/Female/Age 28)

I am worried that if I get an unfamiliar job, I won't be able for it. I want to do the kind of work I did before. I stayed in residential home for two years. Although it wasn't a long time, it wasn't a short time either. I think I am disconnected from the society.
(B010/Female/Age 32)

Thirdly, participants communicated that they needed to take care of their children. Therefore, their working hours needed to be compatible with the schooling schedule of their children.

I'm considering part-time jobs because I can't spend all my energy on work and not spend time taking care of my daughters.
(B010/Female/Age 32)

I'm a part-time shop assistant. I'm not able to be a full-time saleswoman because I need to take care of my children.
(B011/Female/Age 31)

Lastly, participants shared their worries about job interviews and preparation of resumes, with communication during interviews being a recurring main concern.

I was impatient. I couldn't wait, so I looked for another job immediately. I wasn't good at communicating during the job interviews.
(P005/Male/Age 18)

(I) need to prepare my CV and hope the teachers can help me prepare for job interviews.
(P006/Male/Age 22)

Being Employed. When employed, the side effects caused by drug abuse and their own interpersonal communication abilities were the main issues faced by the participants. These side effects primarily affected their work performance, with deterioration of memory, loss of concentration, and loss of physical energy being reported. A participant pointed out that drug abuse had had a negative influence on her ability to communicate well in her job.

Loss of memory, I could not concentrate, was getting tired easily, and I was not healthy.
(B009/Female/Age 29)

Actually, I like chatting with people. However, having abused drugs in the past, my ability to express myself are limited. I was a drug abuser for many years. My communication abilities are limited. I thought that I should be controlled by drugs at that time.
(B010/Female/Age 32)

Because I was a drug abuser in the past, I wasn't physically healthy, and I didn't have enough energy to do my work, and so I quit my job. After some time, I needed to find another job because I needed to earn money.
(B011/Female/Age 31)

In addition to work performance, interpersonal relationships was an issue that participants needed to cope with when employed. Typical difficulties faced by the participants included following company policies, having issues with hierarchy, and communicating successfully with customers.

I had conflicts with my colleagues. They thought I was wrong because I didn't like wearing a mask. (P002/Female/Age 35)

Possibly it is because there were a lot of people in the company, and also the stressful environment, ... In addition, the atmosphere was complicated. My company was very hierarchical. (B008/Female/Age 26)

Because of the nature of the service industry, some people wouldn't communicate in a reasonable way, and some are impolite. (B011/Female/Age 31)

Participants reflected that the jobs might not be suitable for them. A participant reflected that the job she had was boring. In the control group, participants also reported that they did not stay in a job for long. The following is an example:

I was a beer promoter. It's a boring job. It wasn't like days wore on like years; it was seconds that wore on like years. It was really boring. Sometimes I questioned what I was there for... (P001/Female/Age 34)

The longest time for me to stay in a job is one to two years... I've been a saleswoman on and off for around ten years. I've been a shop assistant for an even shorter time, around one to two years, part time. (B011/Female/Age 31)

Meaning of Work

Many participants agreed that the meaning of work was to earn money. In the intervention group, participants hoped that they could learn new skills, find fulfilment, help themselves and others, and be able to reflect their values through their jobs. In the control group, the interviewees reflected that they earned money to meet their basic needs only, and that they found no special meaning in their jobs.

Learn to be independent. Earn money by myself for my daily needs. (P001/female/Age 34)

My clients spend all their savings. As their agent, I will feel happy if I can help them buy their favourite flats. (P002/female /Age 35)

To earn an income. I can learn some new things sometimes. (P005/Male/Age 18)

I can reflect my values [through my work]. (P006/Male/Age 22)

I will be happy if I can continue to experience self-actualisation by fulfilling my potential.

(P014/male /Age 33)

In the control group, participants pointed out that earning an income was crucial in order to meet basic needs. Moreover, one participant wanted to earn money in order to repay debts.

[Having a job]is an important thing. I need to work to earn money and repay debts.

(B005/Male/Age 27)

I think having a job is necessary because I'm not rich.

(B008/Female/Age 26)

You need to have a job if you want to maintain your daily life, otherwise you will not have money.

(B009/Female/Age 29)

Ideas on Future Career Directions

Both the intervention and control groups shared their ideas on future career directions. In the intervention group, participants described their future career directions clearly. They could even name what fields and positions they wanted to go for. The following are examples from the intervention group.

I hope that I can have my own shop called 'Sugar'.

(P001/Female/Age 34)

I want to become a sincere and helpful estate agent.

(P002/Female/Age 35)

I hope I can use my experience to accompany and support other peers. This role is very important.

(P004/Female/Age 31)

I hope that I can do something related to the arts and humanistic creativity and music in the future.

(P007/Male/Age 32)

I really want to become a social worker in the future, because I have received a lot of help from social workers.

(P011/Male/Age 22)

In the control group, while most of them had some idea of their future direction, some were unsure. They thought that it was too distant and unpredictable to know their career direction after five years:

I want to learn about plumbing and electricity, and to become a plumber/electrician.

(B004/Male/Age 18)

I haven't thought about it...

(B002/Female/Age 35)

I don't think about it. I don't have any ideas at this moment.

(B006/Female/Age 33)

It's really hard to imagine and plan for a career in five years' time.

(B009/Female/Age 29)

I don't think about life in five years' time. My daughter will be in secondary school by then, and I don't know what the arrangements will be. Moreover, I think housing will also be a worry for me.

(B010/Female/Age 32)

Intervention Group: Reflection on the Programme

Participants in the intervention group shared their reflections about the programme. They spoke about their self-growth, the supportive relationships they enjoyed with group members, and their expressive arts therapy experiences.

Self-Growth. Most participants shared that they now had a better understanding of their own strengths and abilities. Moreover, they found that they had clearer pictures of their future career directions.

I can calm myself down now and am able to take time to think about my future. This is good. I hope that I can take action in the future.

(P001/Female/Age 34)

I've gained more understanding about myself and have identified a clear goal and direction for a future job.

(P003/Male/Age 25)

I have discovered my own story, and my different abilities. I now have more courage to face myself. Moreover, I now understand my career goal and life direction. I can take care of my three children with my heart and participate in their growth enthusiastically.

(P004/Female/Age 31)

I can affirm my own way more certainly now and remind myself that I need to cherish the people around me more.

(P005/Male/Age 18)

I have a clearer picture about my direction in the future.

(P006/Male/Age 22)

I now have a clearer picture of myself through understanding my own life story, life portrait and my personality test. Moreover, I have more understanding about a job direction.

(P008/Female/Age 27)

I realised the direction of my job, and how my abilities relate to my job.

(P012/Male/Age 29)

Supportive Relationships with Group Members. The participants had all taken part in the expressive arts group sessions, and built up their relationship with each other. They

reported that they had learnt from others' sharing and reflection. Some of them decided to meet again in another programme and continue their friendships.

I have learnt more from other group members.
(P013/Female/Age 29)

I have met friendly group members. This is really precious
(P015/Male/Age 34)

The closure of the group sessions here is not an ending. We will meet each other again in another programme.
(P014/Male/Age 33)

Intervention Group: Reflections on the Expressive Arts Therapy Sessions

Expressive arts therapy was relatively new to most of the participants. Some felt a little bit frustrated in the beginning. However, they became more open in the later sessions. They discovered their own potential and possibilities. Participants shared that they had experienced personal breakthrough and became hopeful through the expressive arts therapy sessions.

Expressiveness of emotions. Although some participants were not used to use arts to express themselves at the first expressive arts session, they learnt to express freely their deep feelings with different art forms throughout group sessions. One participant discovered that different people would perceive the same art piece from different perspectives.

I think I was the first one to join the group. In fact, for a long period of time I didn't think that I would participate the expressive arts sessions because I felt a little bit awkward in the first session. However, I've found that it's quite interesting. I was able to express my emotions through art. I discovered that different people can have different feelings and thoughts towards an art piece...
(P014/Male/Age 33)

Expressiveness fostering self-understanding. Participants reflected that art and artmaking help them express what they found hard to express verbally. The art making process and the artwork help them understand themselves better and discover new aspects of themselves.

It's not easy to express my feelings by using words. However, after finishing the art piece, I have discovered something in my heart and expressed it. I understand myself more.
(P001/Female/Age 34)

Achieving breakthrough. Some participants discovered their inner source and experienced self-breakthrough via different art modalities.

I discovered that I had certain values inside my heart. (For the art piece about frame and freedom), I couldn't help drawing another picture at home after the group session... After this, my unconsciousness seems to have changed. After these expressive arts sessions, I have broken through something...
(P015/Male/Age 34)

I can reconstruct my thoughts through drawings. I felt something during this process. In the beginning, I only drew the sun and sea, or a mountain. And now, there is a rainbow in my drawing, it reminds me to have hope in my life.
(P016/Female/Age 27)

Reflections on the Individual Sessions (Collected by the Counsellors)

Some feedback collected by the counselors after the four individual sessions for evaluating the effectiveness. Some participants felt confused and lost before the individual sessions and expected to sort out which jobs were suitable for them. After the four individual sessions, some effectiveness of this programme has reflected by the feedback of the participants. They reflected the gains from the individual sessions, including enhanced self-understanding, clearer ideas of career directions, increased motivation of changing, and more self-acceptance.

Better Self-understanding and Clearer Career Directions

Participants reflected they have more ideas about their future career directions after they had more understanding on themselves. Some of them affirmed their thoughts on career development. The process of self-understanding could enhance the motivation for making changes in their career development.

I understand myself better, especially the career direction.
(Male/Age 28)

More self-understanding, and thus had a clearer goals and directions of my life.
(Male/Age 25)

More determined about my directions (on vocation).
(Male/Age 17)

(I thought) my directions are clearer and determined.
(Male/Age 22)

I had a better understanding of my career development. Meanwhile, this process could let myself have more motivation to develop my career directions.
(Male/Age 23)

I start understanding myself and my directions.
(Male/Age 18)

Motivations for Attempting the Changes

Participants reflected that their motivations could be enhanced for positive changes even if they faced difficulties. They had more motivations for acting out new lives and accepting challenges.

I will keep trying and be persistent even it's hard. I can't be lazy. I want to meet the standards which I will be satisfied.
(Male/Age 17)

I am having goals now. I am becoming a down-to-earth person.
(Male/Age 16)

I will try not to dispute. I will challenge myself and make a change.
(Male/Age 28)

Foster Self-Acceptance

Some participants showed enhanced self-acceptance when they reflected the gains from these four individual sessions. “Drug abuse” is a stigma which might lower their self-esteem. However, they reflected that they appreciated their strengths and characteristics, and they were willing to accept their limitations.

I affirmed some of my characteristics, and more understanding of what kind of person I want to be.
(Male/Age 22)

I am willing to accept the different parts of myself, including the parts which I dislike.
(Female/Age 25)

I will restart to face myself.
(Male/Age 35)

Case Studies

Two case studies are presented here to show the process and progress of the participants through the intervention of the integrative life-design programme.

Case 1: Yvonne

Yvonne, a 27-year-old mother, is a volunteer in a social service centre. She is responsible for the clerical work. She is a Christian. She is living in a half-way house (中途宿舎) alone. Her two children are living in residential home and receiving foster care, respectively. The highest education level Yvonne has is secondary two. She first took drugs with her friends in a park when she was 15 years old. Yvonne has undergone detoxification three times. At the time of the programme, she had been free from drug use for over half a year.

Through this life design programme, Yvonne found her life theme, “caring”. She wanted to take care of the children in her family. She also wanted to work by taking care of elder people.

Exploring Self. At the time of the first session, Yvonne was searching for a job. She expressed that she wanted to understand herself more through this project, as well as find a future career direction. Yvonne had little self-understanding when she first came to the programme. In the first session, she did not talk much about herself. She thought that she was slow-to-warm-up. She also thought that she was not good at expressing herself, and seldom shared her feelings and thoughts with other people. Moreover, she said that she did not have any ideas for a favourite story or favourite saying in the individual life design sessions. However, she could share about her hobbies, which included cycling, hiking, playing piano and playing video games. She also talked about her role models, which included Sakura

Momoko (小丸子), her mother and her friends. Through exploring the characteristics of these three role models, Yvonne found that family warmth was a common characteristic for her and a trait of her role models. Moreover, she also discovered that she was optimistic. She hoped that she could be more hardworking in future and be able to take care of her family.

Among my three role models, they had some common characteristics, which included family warmth, being good to family members, and having the love of people around them.

I hope that I can be more hardworking and take care of my family.

Family: An Important Life Theme. Caring about her family is important to Yvonne. This was also reflected by her favourite story, shared in the second individual session, *Demon Slayer: Kimetsu no Yaiba* (鬼滅之刃). She stated that the main character fought for his sister and coped with a lot of difficulties. She first thought that she had some similarities with the female main character because she was told by her mother she was like a ghost after abusing drugs, but that she pretended to protect people rather than hurting them. Later, she thought that she was more like the male main character because she was also fighting for her family members. She expressed that she thought her family members were “cold” before her detoxification. However, she later found that her family members were warm, and that she treasured her relationship with her family members.

I thought that my family members were cold before, especially when I was still using drugs. However, it is totally different now. I feel happy and the warmth of my family. Moreover, I treasure my relationship with my family members more.

Persistence in Coping with Difficulties. After discussing with the counsellor, Yvonne found her favourite saying, “Success comes with persistence” (「堅持到底，必有野睇」). She thought that she had needed this persistence in many aspects of her life, not only during her period of detoxification, but also when fighting for opportunities to have her children returned. She was persistent because of her family members, especially her children.

Character Strengths. When reflecting on her own character strengths, Yvonne was impressed by the characteristics of “forgiveness” (「寬恕和慈悲」). She shared that she was optimistic because of this character strength. Another impressive character strength was “to love and to be loved” (「愛和被愛」). She emphasised that relationships were important to her, especially those with family members. Another character strength related to family members was “fairness and justice” (「不偏不倚、公平和公正」). She did not think that she was fair when staying with her children before the character strength test.

Career Paths and Personality Test. Before the Holland code test, Yvonne expressed that she was not a reflective person and had little understanding about her possible career directions. After reviewing the test results, she understood that the reason why she did not like the job duties of a clerk were because her scores in “conventional” were relatively low. She thought that the jobs including “realistic” and “social” would be more suitable for her. She shared that she was interested in elderly and child service, especially elderly service. She thought that this could remind her of the memories and feelings she had had from staying with her grandparents.

I have thought of participating in elderly service and child service, especially elderly service. It's because I think that I could get back the feelings of staying with my grandpa and grandma in my childhood.

Yvonne had not explored her career path previously because her family had not supported her to further her studies.

It was because my family members did not support me to study, and also, I did not have the opportunity for further study.

Difficulties in Finding Jobs. Yvonne was not confident about finding jobs related to the social services because of her academic history. She stated that she had no opportunities because she had only attended school to secondary two level. However, after the session, she thought that working in the social services industry was a feasible option, and was more confident. Most importantly, she wanted to “reconnect” with her grandparents through this work. She stated that she was willing to put aside her worries about her academic history.

I can equip myself again. The services of helping people may be more suitable for my long-term career development. Most importantly, this kind of job can allow me to feel a connection with my grandparents. Therefore, I think it is feasible. I will try to put aside my worries about education level requirements.

I am happy because I have more self-understanding. It's because I found my character strengths and career interests in the two tests. Moreover, I know that some jobs are suitable for me.

Planning and Action. After understanding more about her character strengths, Yvonne started to plan her career and take action after the first three individual life design sessions. She searched for some stable paying jobs. However, she stated that she could only find jobs related to store keeping and logistics because of her limited schooling and work experience. It was a transition period for her. She planned to earn some money and be able move house next year. However, she felt nervous.

I have not worked for a long time, so I feel a little bit nervous.

When Yvonne realised that her character strengths found in the individual life design sessions were persistence and care for family members, she affirmed that she would find a way to realise her dream of working in the elderly services. She also added that “mother” was also her life-long career. She stated that she wanted to become a caring person.

These character strengths were really found in my life. I also expect that I can become the person with these character strengths in my future.

Meaning in Life. After exploring her own character strengths and the core values, Yvonne reflected that “life is a challenge” because there are a lot of hurdles to overcome in life. To Yvonne, the meaning in life is family, career, and recreation. She explained these elements in a reverse way. “Recreation” was important because she was a playful person. For the meaning in having a career, she thought that everyone needed a job to be independent. Moreover, it would be more meaningful if her work involved helping and taking care of others. Most importantly, family was what gave most meaning to her life. Her family members were crucial to her. Therefore, she chose “mother” as her lifelong “career”.

Life is a challenge. This is because I think in a whole life, there will always be different things to solve, and there must be many challenges in it.

The greatest meaning in life is family, work, and recreation. I think I have always been playful, so having fun must be an important part. As for work, I believe that everyone needs work and they should not just rely on others. And that work can be helping others, which will definitely be meaningful. My family are my most important thing and the meaning of my life. My family includes my children and my original family. This is also why I want to take “mother” as my lifelong career.

Life Planning. In the last part of the last individual life design session, Yvonne planned that she would use half of her lifetime for family, a quarter for work, and the rest would be evenly distributed between play and being a volunteer. This distribution reflected the core values of Yvonne, including being volunteer to help other people. She stated that she had received a lot of help when she needed it. She understood that giving a helping hand when someone needed it was important, so she wanted to help people in need in the future.

Working as a volunteer is a must for me. It is because I received a lot of help in the past. I understand how important it is that someone can help if people are in need. Therefore, I hope I can help other people in need in the future.

Assistance and Resistance. Yvonne also identified where her assistance and resistance lay in her life. Her resistances included playfulness, laziness, excuses and COVID-19. For dealing with these resistances, her assistances included the future of her children, job search websites, the assistance of the residential-hall director and her persistence. She thought that she had the confidence to cope with the resistances. Persistence and her children were her motivation for meeting her goals, which included finding a job with a ten-thousand-dollar salary, saving fifty-thousand dollars in a year, and maintaining face-to-face contact once a week.

I can attain these goals. I am confident I can cope with these obstacles myself because I am persistent. Moreover, my children give me a lot of motivation. I can cope with any challenges and attain these goals by thinking about their future.

Expressive Arts. After completing the four individual life design sessions, Yvonne was ready to join the expressive arts group sessions. In the group sessions, she developed a deeper self-understanding. She also explored the “faces” she wore in front of other people, and compared these with those she wore within. The following art pieces are by Yvonne:



Yvonne stated that she liked cats, so she drew three lines on the cheeks to represent a cat. The three stars represented the lights of Jesus. She said that she would cover her sadness and present a happy face to other people.

The colours represent the happy face I wear in front of most people.

I originally wanted to colour the whole of the inside black. However, I felt tired after colouring half of the mask. There are some tears on the face; it is sad. In fact, I saw that the face was sad before I drew anything. Therefore, I just followed the lines to draw.

When she was asked if she left tears for herself, and left happiness for other people, she agreed with this. During the discussion, her groupmates observed that the mouth behind the mask was like a sunrise, and that the tears were like birds flying at midnight. She noted this and thought that her drawings could also be viewed in this upside-down new perspective.

Feelings from Nature. “Sun” and “Sea” were commonly found in the art pieces of Yvonne. She stated that the sun and the sea could bring her warmth and happiness. The theme of the narration was quite similar to the core values found in the individual sessions. She wanted to help people who were in need because she knew that it would bring warmth to those people.

| | |
|---|---|
|  |  <p data-bbox="804 689 1267 734">「日出又日落，帶走悲情送溫暖」</p> |
| <p data-bbox="204 775 628 842">She encouraged herself to “keep going”.</p> | <p data-bbox="676 775 1394 842">After creating a story, she described the warmth brought by sunrise:</p> <p data-bbox="708 875 1394 987"><i>The light from the sunrise can bring warmth to other people. People who are sad can also feel the warmth and come out of the sadness.</i></p> |

In the later session, although Yvonne again drew the sun, the sun had changed. She always drew the sun in a half in the previous group sessions. However, the sun was drawn as a whole sun in its complete full round shape in the later sessions. This was a significant change, which indicates the inner change of the client.

| | |
|---|--|
|  |  |
| <p data-bbox="204 1832 1347 1906"><i>The difference found this time was the sun. I drew it as a half sun in the previous session. But this time, I don't know why, but I drew it whole.</i></p> | |

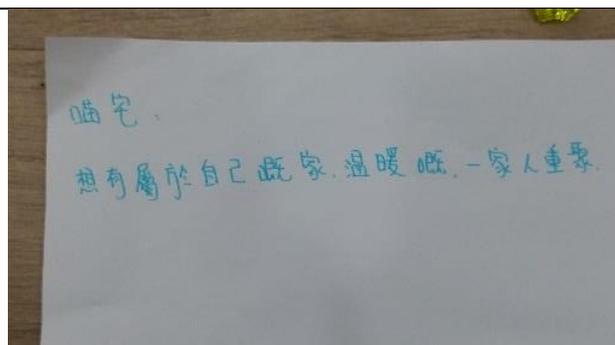
When asked for the title of the drawing, Yvonne answered “The Sun”. She then made up some lyrics related to her drawing. The lyrics were about the warmth of the Sun (「就像太陽般溫暖」).



Yvonne created her dream island using clay. She put her favourite elements on her island, including the sun and the sea. The sun was the main element in her created story. She expressed the beauty of the sun.

The sun is nice and beautiful. One day, a stone was swimming in the sea. Then, it heard the conversation between the big birds and the small fish. They were talking about the beauty of the sun. Today was a nice day for swimming. Therefore, the fish are swimming.

Core Values Reflected through Art Pieces. For Yvonne, her core value was family relationships, which was also found in her art pieces. The wish to live with her children was expressed in her art. She wanted to have a warm family. Furthermore, she stated that she would save money to decorate a new flat if she could get public housing.



| | |
|--|--|
| | <p>The words written: 「喵宅： 想有屬於自己嘅家，溫暖嘅，一家人重聚」</p> |
| <p><i>This is my own home. The reason why I coloured it in red and blue is because of a promise to my son. He really likes Spiderman, so he said that red and blue must be in his room... I have stuck this (flower sticker) for him. The house, this home, is so warm.</i></p> <p><i>I need to save my money. I hope that I can live with my family members. Yes, I am in the queue applying for public housing.</i></p> <p>When Yvonne was asked the name of the house, she named it as “Meow House”. <i>Meow House. I will have a lot of cats.</i></p> | |

The following art piece was an extension of her expression on future dreams. Yvonne expressed that she wanted her own home. She imagined that the house was under a beautiful sky and by the sea. There were a lot of coloured balls inside the house. Yvonne stated that she was saving money to decorate her future home.



This is my dream house. Because my children are in a residential home and a foster home, I want to have my own home as soon as possible. I want to take back my own children. It is because I am still living in a residential home. It's inconvenient if I don't have my own home... Here is the beautiful sky—sky again. Then there is the sea. (Groupmates: it's warm; there are a lot of shiny balls inside the house). The house needed to be decorated in a beautiful way. I am saving money for this now.

Conclusion by Yvonne. In the last session, Yvonne related how things had become very difficult. Her son had to move because his foster family did not want to continue to take care of him. However, she still held on to her hope. She drew a picture at the conclusion of the programme. She drew sky, the sun, and a rainbow. She named this drawing “Hope (「盼望」)”. In the process, she identified the different colours as having different meanings. For example,

orange represented health, yellow represented the seaside, green represented hills and grass, and blue represented the sea. Nature was the common themes in Yvonne's art pieces, and she found renewed energy on finishing this drawing:

Oh! I feel positive energy, all of a sudden.



Life is beautiful. Although there will be wind and rain (ups and downs), afterwards a rainbow appears.

There are a lot of meanings in the rainbow, such as the contract between God and us. After raining, there will be a rainbow. I think everyone will have a rainbow inside their hearts.

Yvonne explained the meaning of the different colours of the rainbow:

Purple: Because Jesus is in the Heaven, and He has a gown of purple. Therefore, I painted the colour purple on the outer layer. It means that God is in us no matter what happens. He will protect me and my life. He is like a protective film protecting me.

Red: It is just like giving me a warning.

When Yvonne was asked if the colour red could warn us to be careful, she agreed.

Orange: Orange (fruit). A fruit a day, keeps the doctor away.

Yellow: It just like I was on the beach.

Green and Light Green: Green and light green are my favourite colours, mountains, grass...

Blue: Blue is the sea

After explaining all the colours of the rainbow, Yvonne noticed the recurring nature theme:

There is a mountain, grass, sea, and a beach. It is nature.

Gains from the Programme. After this programme, Yvonne reflected that she had more self-understanding now, especially through her own life story, life portrait and the personality test. She understood why she wanted to work with the elderly. She also reflected on her memories:

A lot of memories appeared in my mind throughout this whole process. I am so happy that I can recall these memories.

To review this process, she found that she need only draw the sun, the sea, or a mountain. Although the theme was the same, the elements kept changing. In the previous session, she had drawn the sun as a half sun; however, the sun was drawn as a “complete circle” in the later session. In the last session, she added a rainbow. This process reminded her that there was hope in her life. She said that rainbows represent life. She also drew three people to represent her two children and her, and put them near the rainbow. She stated that God would give her what she needed if she kept holding “hope”.

At the beginning, I only drew a sun and the sea, or a mountain. And now a rainbow appears in my drawing. It reminds me I can have hope in my life. Rainbows represents hope. This rainbow has appeared two times. These three characters are next to the rainbow. It is okay if my wish is not fulfilled. Keep the hope, God will give us what we need.

Follow-up. Yvonne is searching for work. She says she aims to find a job through the programme first, because she wants to have a stable income so she can have her children with her.

To sum, it was found that “caring” was the life theme of Yvonne in the narrative life design session. During further exploration of self, “nature” gave energy to Yvonne. Although Yvonne was worried about the relationship with her children and where they would go, she was reminded by her art pieces that hope was inside her heart. She believed that “there was a rainbow after the storming rain (「風雨過後有彩虹」)”, and she would be persistent in building her dream.

Case 2: Wilson

Wilson is a 34-year-old unmarried male. He lives with family members, and the highest education level he attained was secondary one. He is currently working full-time as a peer counsellor in a non-governmental organisation. He had his first drug use with classmates in a park at the age of 11, and received drug rehabilitation service once.

Wilson said that he had sufficiently good self-understanding before participating in this programme. However, he reported having new insights from the individual narrative life design sessions and the expressive arts group sessions. Moreover, he also affirmed his career directions through this programme.

Session One: My Favourites. In session one, Wilson made some new discoveries by answering the career construction interview (CCI) questions.

Role Model. Wilson chose Brian Cha (車志健), Vegeta from Dragon Ball (《七龍珠》裏的比達) and Paul the Apostle from Bible (聖經人物保羅) as his role models. He stated that the three role models and he had similar traits, including being hardworking, having ambition and being thick-skinned (好努力、不認輸和不要面子). He said that he wanted to own these characteristics. He would be successful if he had more ambition. He wanted to be more competitive instead of being “sluggish”.

I think I want to have more persistence and ambition. What they have are the things that I need.

Maybe not to be sluggish. I did not have enough determination when I wanted to achieve a goal. I think I don't own entirely these characteristics at this moment.

Hobbies. Wilson said that he had a lot of hobbies. He chose “watching inspirational video”, “singing”, “composing songs” and “chatting on the phone” as his hobbies because these were the usual activities for him. His reason for watching inspirational videos was because he thought that these could inspire him in his creative work. He would express his feelings by singing and composing songs. Whenever someone appreciated his creative work, he would feel happy. Moreover, he joined different competitions and performances with the help of his artwork; his creative work brought him a lot of experience and memories. He added that he would not create songs just to pursue click-through rate, and only write songs when he was inspired. Another way for Wilson to express his emotions and thoughts was to chat on the phone with his girlfriend. Expressing feelings and thoughts through his hobbies was crucial to Wilson.

I don't think that I need affirmation from others. I will create songs when I am inspired. I will not create songs when I am not inspired. The main purpose of the products is not the appreciation of others.)

Favourite Story. Wilson shared the biblical story of Peter in the session. He stated that his early behaviour were similar to those of Peter early in the story. The similarities included being reckless (「亂嚟」), irrational and irreverent when communicating with others. In the Bible, Peter denies and disowns Jesus three times. He stated that it was a reference to his own belief, and he hoped that his story would develop like Peter's. He wished to change and rejuvenate his life once he became certain about his callings. In addition, Wilson thought that

he had become more mature and no longer needed the appreciation of others after having gained more self-understanding.

In the past, I only wanted other people to think highly of me.

I realised that, if I take up my callings, there will be a way out. My life can then change.

Favourite Saying. Wilson used the verse from the Bible, “Forgetting what is behind and striving for what is ahead (「忘記背後，努力向前，向着標竿直跑。」)” as his favourite saying. He reflected that sadness from the past and the opinions of others could influence him negatively, and even become a force pulling him back or affecting him badly. Here, he also discovered the reason for his desiring the recognition of others. He shared that he was always rejected in his childhood. Therefore, he wanted to become “somebody (「威返」)” when he grew up.

A force will pull you back if you look back. The sadness, worries, the unpleasant issues of the past, or the thoughts and opinions of others – these affected me. I was so influenced by these things. However, after some experience, I discovered that I can ignore these things.

Early Recollections. Wilson shared three of his early recollections, with titles including “Don't Go On Like This (「不要再這樣下去」)”, “Vaguely Injured (「依稀的受傷」)” and “First Wish (「第一個願望」).” “Don't go on like this” described how he had listened to his classmates in kindergarten and trampled on excrement, and was then teased by them. “Vaguely Injured” described how he was bitten by a good friend, and how his mother had made a complain, which led the two no longer being friends. He felt regret and was perplexed. Lastly, “First Wish” was about Wilson looking out at fireworks, and making a wish that his family members would not die and hoping that the wish would come true. After sharing these events, he was surprised that he could still recall these memories.

Gains from CCI Questions. Wilson made many new discoveries. He gained more self-understanding in being affected by his own reflections while answering the CCI questions. He needed the characteristics and beliefs of his role models to guide and embolden himself.

I think all (my answers) were new discoveries. I have more self-understanding, such as my role models. I discovered that I was affected by the answers. I need to have the beliefs and characteristics of the role models to support me.

Session Two: The Unique Me. When Wilson was asked about the meaning of his name, he said that its original meaning was “senior official”, connoting “rich man”. Wilson reflected that he had pursued material things, but now wanted just to be meaningful and to pursue “steadiness” instead of “fame”. For him, “success” meant doing a good job in a certain area more than enjoying it.

Success? I also have my own definition. I will stop and enjoy when some job is completed well. It's okay to enjoy the achievement instead of being in endless pursuit of something.

In the practice of life worksheet, Wilson reviewed the five most important things in his life. The first important thing was drug rehabilitation. He found that his state of mind and his values changed after the treatment for drug abuse.

It turned out that I can live without drugs.

The second thing was that he managed to finish reading a complete book. He stated that he had not studied when he was young, and finish reading a book only when he was in his 20s. The third thing was his decision to join a church. Wilson wanted to know what he could learning church activities. Therefore, he got up enough courage to meet new friends in the church. He accepted the faith day by day. Thus, he found out that he could live in a very different way, as if living a second life.

I slowly accepted this faith. Then I discovered that I could be very different, as if I could have a second life.

Wilson added that his experience in participating in singing competitions in the church and in putting his products on social media were a process that needed courage on his part. He discovered that he could grow and that he had the potential to develop. He said that he had opportunities to communicate with others by playing in a band. In the process, he could also learn to respect others.

I could play in a band with others, and take the role of a vocalist. In church, I could learn how to communicate with others normally. I had not been able to do this because I had received no “respect” in my past social life.

The last important thing mentioned by Wilson was him joining the current company. He shared that he was surrounded by non-living things in his previous job, so he could act anyway he wanted. However, now, he had more opportunities to communicate with others. He now has to deal with interpersonal relationships in a flexible way; he needed to break his original frame and refresh the image of himself in his own mind. The process made him grow. Furthermore, Wilson reflected that drug abuse affected his life rhythm, work performance and emotions, pulling him away from a wonderful life and upset his self-growth.

Drug abuse would affect your life rhythm, or your working performance. You would get up late, you could not stop hanging out, you wasted a lot of time using drugs. You could not solve the anger. It could not help you grow, not to mention letting you have a wonderful life.

When reviewing his life portrait, he discovered that he liked parks because he needed space for personal time and for thinking. He could compose songs when he felt lively. He could play electronic games when he was not in an active mode, and drift back into a peaceful state. When he was feeling good, he could have self-dialogue while running, and dream about his future life or pray. He thought that a park was a suitable place for chatting, understanding oneself, and expressing oneself.

The life portrait of Wilson (Chinese version only):

面對這個過渡時期，我心底裏所關注的是希望。這個關注提醒了我一個不要再這樣下去的感覺。在我成長的環境中，為了解決不同的問題，我變得好努力、不認輸和不要面子。這些特質對我接下來的工作和人生都很重要。它們都把

怕輸的人 轉成 最佳版本的自己，形成了我之後的個性。基於我所建立的各種個性和特質，我喜歡與 真誠 和 會提醒自己 的人共處。我喜歡的地方是能帶給我 個人空間 和 藝術靈感。我比較喜歡用 反思和創作 的方法和程序去解決 工作上 問題。如果我選擇我最愛的故事作為我人生劇本的話，我會 承擔、堅毅不屈、穩重和踏實。我現時給自己最好的建議就是 繼續去，不要理會結果。

If I am in an active condition, I can sit in a park composing a song. I can write some lyrics for a song.

In my best condition, I can talk with myself while running. I can dream about my future or pray. This is when in my best condition.

I think these places (with personal space) were suitable for chatting, understanding oneself, expressing oneself, and expressing one's emotions.

Wilson managed to make a deep reflection at the end of the life portrait, which was “keep going (「繼續去啦」)。He would remind himself of this sentence. It said that he could let the past be the past. He could choose to live a splendid life, move towards success, and obtain what he wanted, and this process may bring him surprising rewards. He concluded that the most important point was how he would view himself when his life ends.

Don't focus on it. Just keep moving first.

It is important to know how I view myself rather than how others view me. When life comes to an end, it is crucial to know how I view myself.

Session Three: Dream Goals. In this session, the life design counsellor firstly discussed with Wilson the question “Who Am I?”. Wilson stated that the characteristics written in “Who Am I?” were a “standard”. Having a standard, his life would not go too far off track. He hoped he could keep being in the best condition. Moreover, Wilson thought that he adopted his working environment in order to communicate with other people, and to invite others to help themselves. These elements were important to his self-growth.

The content of “Who Am I?” (Chinese version only):

我是一個 努力的人，但在尋找一些機會，準備成功一刻的人。
我將成為一個 出色的人、成功的人、愛主的人。
我喜歡在一個 熱鬧、輕鬆、有一班幫自己手的人的環境工作。

Because I can give myself this standard, my life will not go off track.

I think communicating with others and inviting others to help themselves is very important.

Strength of Character and Holland Code. The top elements in strength of character for Wilson were spirituality (「靈修性、對目的的觀念和信念」), honesty (「誠實、真摯和直誠」), creativity (「創造力、靈巧性和獨創性」) and love (「去愛和被愛的能力」).

For the Holland code, “Artistic” was the highest score item (100 points). The second was “Enterprising” at 49 points. Two items had relatively low score, Social (9 points) and Conventional (0 point). Wilson thought the results were reasonable. He also thought that he was weak in dealing with administrative tasks. However, he understood that he needed to improve on “Conventional” because that skill was needed in his job.

I am weak in administrative tasks. But I know that it cannot be avoided; administrative tasks are related to my work.

Wilson was invited to choose his ideal job. He chose “Video” and “Creation” in the category of Industry. For the position of job, he chose “CEO” and “Boss”. Wilson pointed out that he might not be successful when he became a boss, but it was important for him to explore why he wanted to become a boss. As it is, he needed some time to improve himself, to work on his motivations, and \ on interpersonal relationships before he could become a boss.

Must I be successful when I become a boss? I think, I may not be successful. It is important to understand what motivates me to become a boss. If I am asked to be a boss now, I think I am not ready.

After this session, Wilson thought that he had more conviction about developing a career in creative art. That was because he could then use his talent, which was drawing. In future, he hoped that he could develop well along this career path. He was learning how to make good use of his resources, and to become a boss in the creative industry with his own brand name.

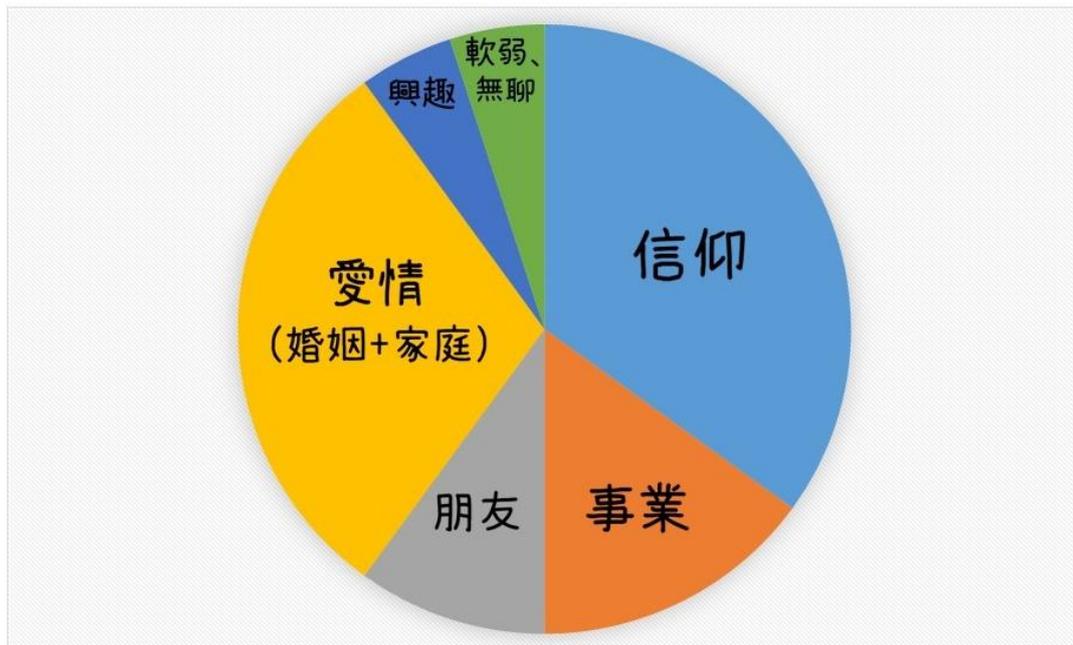
I think more strongly that I will use my whole life to continue being creative as my career path. Otherwise, I will waste my talent. I need to think how I can be better. Am I really to become a boss? How to develop it better? How to make good use of social media? How to make things popular? I am learning these things now. I hope I can develop better in the future.

Session Four: My Future. Wilson’s life metaphor was that life was test. To Wilson, the meaning of life was to experience pain and achievement, and how to face them and balance them. It was valuable to experience different emotions in life, and this would make a person more mature. He wanted to motivate himself to become a better self.

Do better in the future... This is a standard I promise myself.

After reflecting on the meaning of life, Wilson was invited to draw his life distribution chart. “Religion” occupied the most space in the chart. He reflected that religion was like a navigator. Without this navigator, he would easily get lost. Where marriage, romantic relationships and family were concerned, these elements could make his life happier, and nourish it. However, these should not dominate his life. The pie chart in Chinese version is shown below (captured from Wilson’s handbook):

我的生活分配圖



Wilson reflected that this depicted an ideal future, and it could describe one's lifestyle. It was a priority for him to be able to make decisions, and to be proactive in daily life.

Boredom and weakness, I think my life will have these elements. And I make some mistakes, or something bad. I think my life will have these elements. Therefore, I hope I can also accept these parts, but they shall never dominate my life.

Wilson had set up three SMART goals: (1) Achieve his own art product after six months; (2) Change his job for a 30% salary increase to his present salary, and; (3) Have his own business with his own brand name. He was invited to reflect on what would assist him and what would hinder him from obtaining his goals. He pointed out that religion was his assistance. He hoped that what he wanted to do could satisfy him and glorify God.

Wilson understood that he needed to ensure stability in himself. He shared that he was building some good habits, improving his time management, and improving himself through revising English regularly. Wilson said that the sense of success gained in the process would help him build these good habits.

Every time after my work, I will spend some time revising English. I think it is the same (when building good habits). Can I manage my time? Am I good at executing plans? I think I am building up my abilities to get things done. I can build up this ability starting from the revision. It is important to me to feel the sense of success through different methods.

Gains from the Individual Sessions. Wilson reflected he now had a deeper self-understanding. Moreover, he was improving himself, and had improved his ability of execution. He described himself as a guy who had started stepping into his dream.

I am changing myself at a higher level.

I discovered that my ability of execution has been improved.

I will describe myself as a guy who has started stepping into his dream. The focus of my work is evangelism.

Exploration in Expressive Arts Group Sessions. In the expressive arts group sessions, Wilson continued his self-exploration. During the group sessions, he faced some issue of interpersonal relationship in company and experienced various emotions. The following art pieces are selected for reflecting changes in Wilson throughout the group sessions.

Exploration of Self. Wilson was invited to design a badge representing his name. After finishing the following art piece, he found that there could be another meaning to his name. In his name, there was a word related to “anser cygno”. In the past, he believed that that word symbolised material things or wealth. After he drew this badge, he realised that the word suggested ‘passing by’.



I think the meaning of my name is different. At the beginning, it meant just like to pursuit something. But it can also mean birds passing by, it is okay to just view this.

Wilson expressed himself as a tree. He wanted to “grow up” as a big tree. His desire for psychological self-growth was expressed by drawing this “tree of life”. He stated that the image of the big tree had a lot of roots, and was about grounding inside his heart.



My drawing? It is like a tree of life. It is because I think the most important thing to a big tree is to have a lot of roots.

Grasping the ground...I think I am not a big tree now, so I want to be a big tree.

I use a small tree to represent my current self. I want to become a big tree, a mature tree.

Expression of Emotions. The way Wilson releases emotions had changed. Before this session, Wilson had expressed stress and unpleasant feelings brought about by interpersonal relationships in the company. He used to suppress his emotion within his body. In this session, he was able to release those emotions through drawing and narration.



This picture is about something negative. This big fist is hiding a lot of emotions. I want to hit something. Another meaning of this fist is as if I can be capable in work and academic study, and to cope with a lot of difficulties. It is just like I have a sense of success.

How about the meaning of this one? This one is linked up to the heart, and taken out behind the heart. Then this thing is thrown on the wall. I am describing that my heart has been taken out. This is not what I want and what I can control. There are expectations from society and the company. This one is a two-faced person. This side is evil, another side is

human. The human being is crying.

This one represents the current me. This is about emotions and stress. This person is just like a model wearing branded clothes. But there is a lot of stress inside.

In another group session, Wilson showed courage in coping with difficulties. He drew a person who was scolding big wave. He shared that he had suppressed a lot of emotions inside his heart. The wave represented the stress of the outer environment. Thus, he wanted to have the power to “scold” the wave, and that had made a “hole” in it.



We wear a polite face in front of other people. But I want to say foul language or the words inside my heart when I am back home, to release the suppression. I may not notice that the outer environment has become a wave. I drew it like this, this is very similar to me...

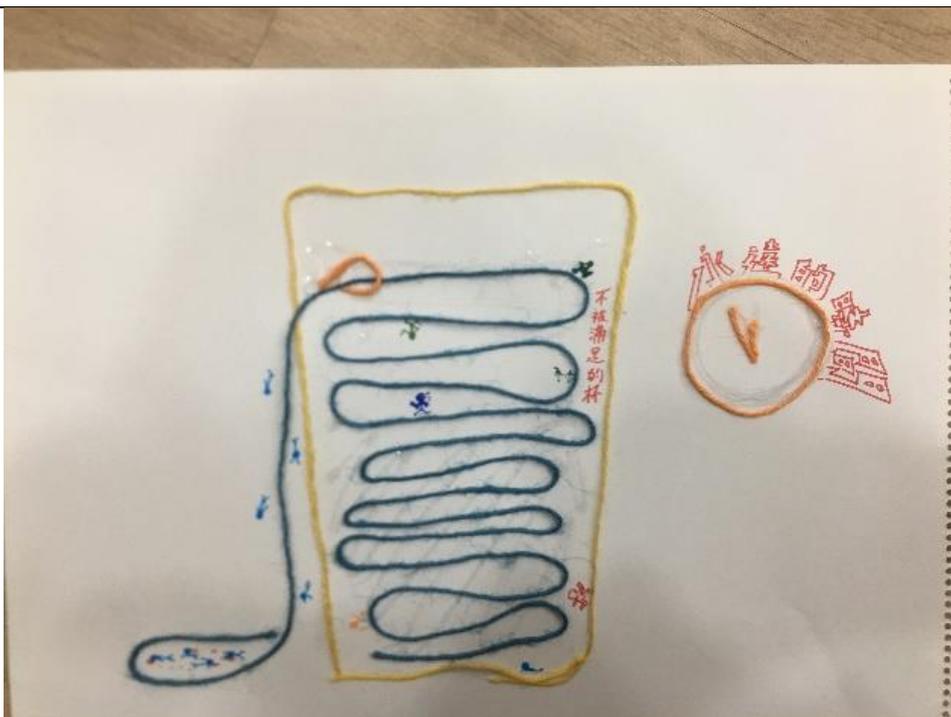
Although there is a wave, I will scold to it and “make a hole” in it, just like using Kame Hame Ha. It needs power. I hope I can do this. Although it did not explain if I received help from God, I think I still need to have courage to break the environment.

Achieving a Breakthrough in Personal Growth. Wilson was invited to think about the relationship between frame and freedom, and his relationship to frame and freedom. He shared that he needed some frame to limit himself, such as going to church. Then, Wilson discovered that the biggest frame was created by himself. He reflected that he needed to break this frame.



I think the original frame is myself. I need to break my frame to live out my potential and experience other things...

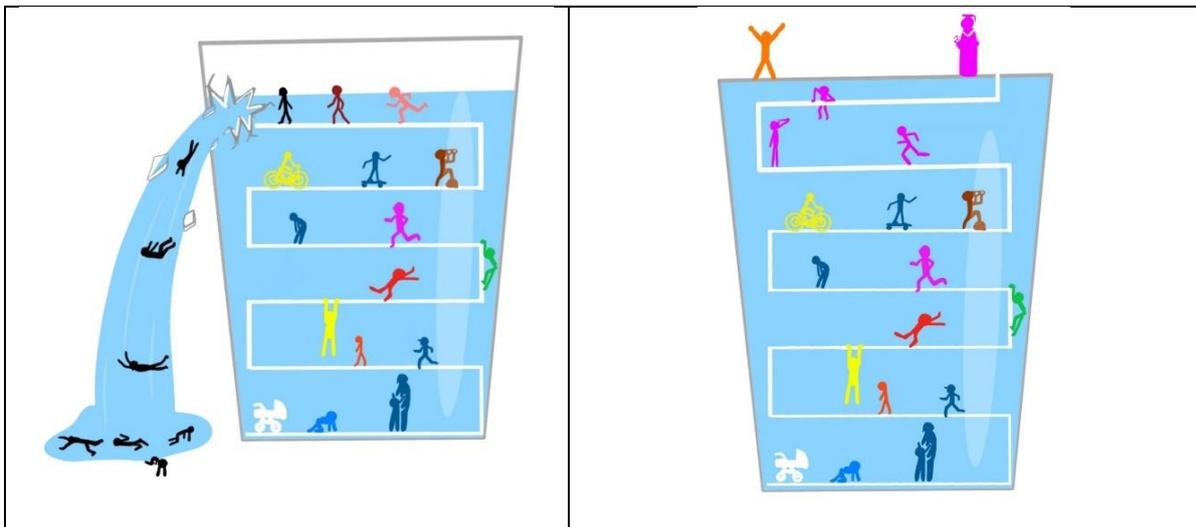
When Wilson explored the frame and the freedom through making the following visual art piece, he created a picture of a cup with a woolen string. There were a lot of “small characters” inside the cup. They were climbing up. However, those small characters would soon fall because the cup would soon be broken. Thus, the characters would never be able to reach the top of the cup.



This cup of water is just like what I am pursuing. I think the level of water in this cup will stay at this level. If the water reaches the full capacity of the cup, I may feel talented or professional. This would be painful.

I think this cup can never be fulfilled and that reveals a message for deep reflection. I don't know if you have tried it before. I thought I could attain my goals when the things were only completed by half. Thus, there is no pursuit of that thing, and to lose the original intention...Therefore, I will not let the cup become full, and will continue to chase the goals, so that there will be space (for improvement). This has been a looped pattern of me for many years.

Wilson reflected on his art piece again after the group session, after he went home. He drew the following figures to continue his deep personal reflection.



This time, I choose to break my old frame. I want to stay on the top of the cup. The old cup has a hole, which does not allow water to reach the top of the cup. I draw a new cup, one which allows the water to reach the top. This reminds me of a bible verse, my cup runneth over, in psalm 23.

Hope for the Future. In the following art piece, Wilson expressed what he wanted to do by making a pen pattern with plastic diamonds. He put three main elements in the pen—persistence, creation and humbleness. He wanted to use these elements to attain a specific goal, which was to complete his cartoon book within six months.



I have made a pen for representing what I want to do. In this pen, there are a lot of elements, including persistence and creation, or humbleness. I drew some pictures in my company today. I hope that I can finish the product in a limited time. After six months, I need to publish a book. Although I can paint the pictures by using a computer, it still needs time for publication, so I wanted to hurry up...

This pen is saying that I can finish the book, or I can make something happen via creating this booklet

Gains in the Group Sessions. Wilson reflected that he joined this expressive arts groups because he wanted to give himself a rest. He was facing stressful moments playing in a band with others. He later found that he was happy when joining the groups. He could discover himself more through the interactions in the group sessions.

Give some time and space for myself to have rest. It was because I was playing in a band, and facing some stressful moments.

I was happy when I joined the group. In the interactions in the group, I discovered myself more.

Moreover, in arts, I found I have my own pursuits. I think the group session could give me a feeling of peace.

Gains in the Whole Programme. Wilson stated that he originally had some sense of self-understanding. However, he could still find something new in this programme. Moreover, he was more willing to express himself because the environment was safe, and not related to his job. Overall, he was enjoying the whole process.

I originally thought that I had sufficient understanding about myself. However, I could settle down through this opportunity. I also gained some encouragement and discoveries. Group members gave me a lot of support and affirmations.

The group sessions did not have a relationship to my job. Therefore, I could talk more freely about my weaknesses. I could be my true self. I could also have rest, and to express my emotions of “wanting to quit the team”. This was transitional. I think things became better after joining this programme. I caught the opportunity and enjoy this programme.

To sum up, the programme provided space and time for Wilson to reorganise his mind and express emotions, facilitating his self-growth and breakthrough. Wilson also affirmed his future career path after joining this programme. He also had more confidence and paid less attention to the opinions from others.

Follow-up. After the efforts of these months, the first original book by Wilson is in the last stages of publication. Wilson is moving towards his dream.

Discussion

Summary of Findings

This study has attempted to test the effectiveness of a life planning programme in post-treatment relapse prevention of young rehabilitated drug abusers by comparing the drug-free/drug-reuse status and its psychometric correlates between participants of the intervention group (IG; $N = 35$) and those of the control group (CG; $N = 35$) at four time-points. A list of psychometric scales, including Self-Efficacy to Refuse Drug Use, Meaning in Life Questionnaire, Satisfaction with Life Scale, Rosenberg's Self-Esteem Scale, Herth Hope Index, Functions of Identity Scale, Career Decision Self-Efficacy Scale, and Career Adapt-Abilities Scale were used to measure and compare the psychometric changes in the two groups at the four time-points. The drug-free/drug-use statuses of the two groups were also compared at the four time-points in order to show whether positive psychometric changes have occurred and contributed to the maintenance of drug-free status.

An examination of the changes in the psychometric scales shows that the intervention group has significantly improved in most of the psychometric scales from T1 to T4. The control group has exhibited improvements over time, but the changes have not been as robust as in the intervention group. In fact, as shown in Figures 15 to 33, out of the 19 psychometric items, the intervention group was able to catch up with the control group in five items, and even overtake the control group in six items at T4, even though the intervention group started with a lower score than the control group in most psychometric items at T1. This demonstrates that the life planning programme was able to greatly improve the psychometric conditions of participants of the intervention group.

Although the growth of the control group is not so robust as in the intervention group and most scoring of the intervention group also dropped in the follow up test, a certain degree of improvement is shown in the scoring of both groups throughout the timepoints. The improvement of the scoring of the psychometrical scales in the control group is likely to be attributed to the following reasons:

First, a large number of participants in the control group are employed and married. Existing studies have shown that employment is a crucial element for rehabilitation from drug abuse (Hall et al., 2004; Manuel et al., 2017; Petry et al., 2014) and psychological well-being (Beier et al., 2019; Gray et al., 2019; Perreault et al., 2017; Winefield & Tiggemann, 1990). Marital status and relationship closeness are also protective factors to prevent drug abuse (Duncan et al., 2006; Heinz et al., 2009; Merline et al., 2008) and enhance psychological well-being (Grundström et al., 2021; Hsu & Barrett, 2020; Williams et al., 2010). The Chi Square tests show that participants in the intervention group and the control group differ statistically in their demographic status of employment ($\chi^2 = 4.884$, $df = 1$, $p < .05$) and marital status ($\chi^2 = 11.246$, $df = 3$, $p < .05$). In intervention group, 18 participants were unemployed and 17 were employed whereas 26 participants in the control group were employed but only 9 of them were unemployed. Thirty of the participants in the intervention group were single. Only two participants in the intervention group were in a relationship, i.e., cohabitation ($N = 1$) and married ($N = 1$). However, more participants in control group were in a stable relationship (cohabitation, $N = 1$; married, $N = 11$). The intervention group out performed control group in their mean scores of almost all psychometric scales including, Self-Efficacy to Refuse Drug Use, Presence in Meaning, life satisfaction Rosenberg's Self-Esteem Scale, the Herth Hope Index the Functions of Identity Scale, Career Decision Self-Efficacy Scale, and Career Adapt-

Abilities Scale at the pre-test stage (T1), except only one scale “Search for meaning in life” (See Table 8). Better employment status and marital status are factors that may lead to the improvement in control group at the time-points.

Second, the data collection the intervention group and the control group in different stages of pandemics may be another reason to explain the improvement of the control group. Most follow-up test data of the control group were collected during May and August, 2021 where the pandemic situation in Hong Kong was relatively under control. In contrast, the data collection of the post tests and the follow up tests of the intervention group spread from early 2020 to July, 2021, in which Hong Kong has experienced the 1st, the 2nd, the 3rd and the 4th pandemic waves.

In addition, resilience can be another factor that explains the improvement in the control group. Social instabilities and pandemic were the unpredictable and major adversities in our society that happened in these two to three years. Malhi et al., (2019) found that psychosocial factors were enhancing the building and strengthening of resilience. Matos et al. (2021) found that social connection can facilitate post-traumatic growth. As more participants in control group have more opportunities to connect with society such as employment and other social activities, their resilience in facing the instabilities in society is improving. Smith et al. (2017) had analyzed that people would have posttraumatic growth such as enhancing connection with society, inner resources (a stronger self), interpersonal relationships, better perceptions on life, and spiritual or philosophical change.

Would the life planning programme have any effect on the ability to resist relapse among participants of the IG? Here, attention is paid to both the attitudinal and behavioural components of drug use. As mentioned earlier, there has been a large pool of literature supporting a strong and negative relationship between self-efficacy and drug use (e.g., Abdollahi et al., 2014; Berman et al., 2010; Rounds-Bryant et al., 1997; Cheung, 2009). In this study, the attitudinal variable of self-efficacy to refuse drug use can be taken as having contributed to the drug-free status of participants as well. Based on Tables 8, 9 and 14, a comparison between the intervention group and the control group in regard to their differences in self-efficacy to reject drugs and drug-free status between T1 and T4 is summarised as follows:

Table 19

Differences in Self-Efficacy to Refuse Drug Use and Drug-Free Status between T1 and T4 of the Intervention Group and the Control Group

| | Self-Efficacy to Refuse Drug Use (scores) | | | Drug-Free Status (% drug-free) | | |
|--------------------|--|-------|---------|-----------------------------------|-------|---------|
| | T1 | T4 | T4 - T1 | T1 | T4 | T4 - T1 |
| Intervention group | 32.10 | 33.94 | 1.84 | 88.57 | 96.77 | 8.20 |
| Control group | 33.13 | 33.23 | 0.1 | 94.29 | 90.32 | -3.97 |

In Table 19, the average score of self-efficacy to refuse drug use of the intervention group was 32.1 at T1 and 33.94 at T4, showing an increase of 1.84. For the control group, its average score at T1 was 33.13, and 33.23 at T4, an increase of only 0.1. In terms of percentage of participants with drug-free status, the intervention group achieved 88.57% at T1 and 96.77% at T4, an increase of 8.20% points. However, the control group’s drug-free percentage was

94.29% at T1 but decreased to 90.32% at T4, showing a decrease of 3.97% points. These results suggest that the life planning programme in the study was able to raise the participants' level of self-efficacy to reject drugs, and at the same time also strengthens their ability to remain drug-free.

While self-efficacy to reject drugs was able to help participants to ward off relapse, it was also affected by other psychometric variables, which would have indirectly strengthened the effect of self-efficacy of refuse drug use. Two psychometric variables were significantly related to self-efficacy to refuse drug use at baseline measurement (T1), namely, life satisfaction and presence of meaning in life. Life satisfaction has been demonstrated in many studies to be a strong protective factor against drug use (Cheung, 2009; Cheung and Cheung, 2018; Bogart et al., 2007; Shek, 2003). It is thus not surprising that it would also affect self-efficacy to refuse drug use. The presence of meaning in life was also a significant factor in self-efficacy, and its beta was even greater than that of life satisfaction when a regression was performed to regress self-efficacy on presence of meaning and life satisfaction (see Table 7). Consistent with existing findings (Zhang and Leung, 2002; Uzman and Maya, 2019), self-esteem was positively correlated with life satisfaction (see Table 6). The future subscale of the functions of identity scale affected the presence subscale of meaning in life scale (see Table 6), as the expectation of future potential could foster the meaning in life (Serafini & Maitland, 2013).

The objective of this study was to evaluate the effectiveness of a life planning programme on relapse prevention during the post-treatment period. The quantitative data presented in this report have lent support to the effectiveness of the life planning programme conducted in this study. For the participants of the intervention group, the programme has raised the levels of various psychometric variables such as self-esteem, meaning in life, function of identity, and life satisfaction, which has increased the level of self-efficacy to refuse drug use and the ability in relapse prevention. The implementation of the life planning programme has been presented in the qualitative data part of this report. It supplements the report with real life stories of success and failure in the countless struggles of the participants, which nicely echo the quantitative findings.

Despite the achievement of the research objective, a cautionary note should be made here. The findings should somehow be treated as suggestive rather than definitive, because it was not possible for the study to meet all the requirements of the originally proposed study due to the adversary social conditions arisen from social movement events in 2019 and the COVID-19 Pandemic since 2020. These weaknesses are discussed in the section below.

Limitations of the Study

No one could have predicted the coming of the social movement incidents and the COVID-19 Pandemic, which have wrecked many social research projects in 2019, 2020 and 2021. The present study was hit hard by these two events. The study started in June 2019, when social movement incidents were gathering momentum. Half a year later, the Pandemic had brought devastating obstacles. The earliest, and greatest, problem encountered by the study was the difficulty in recruiting participants. This difficulty generated a number of problems, as follows:

Delay in Forming Intervention Group and Control Group

When the research team was beginning to contact various T&R agencies in late summer 2019 to introduce the study to them and request for clients to be volunteer participants, the societal instability and uncertainty due to social movement events had seriously reduced the willingness of clients to commit to the eight-month long life planning programme. There was, therefore, a long delay in forming the two groups. The arrival of the Pandemic after several months of poor recruitment only made things worse.

Randomisation or Matching was not Possible

In the original plan, eligible clients of agencies would be assigned to the intervention group and the control group through a process of randomisation before their departure from their respective agencies. As the number of clients recruited to the study was small (agencies were able to recommend only one or two leaving clients every time they had any graduating clients), it was not possible to randomly assign participants to the intervention group and the control group. The same situation also precluded the use of the matching method. As it was important for the IG to be formed as soon as possible so that the life planning programme would not be delayed, clients were more encouraged to join the intervention group than the control group. The shortfall of members for the control group was made up only after the intervention group was secured.

Although randomisation and matching were not performed in the formation of the intervention group and the control group, the two groups ended up being quite “matched” (no statistically significant differences) in a variety of sociodemographic features, except employment and marital status. Clients of agencies who had a job or had been married were less likely to join the intervention group because of limited time available (see Table 4). Despite the differences in employment and marital status, the two groups ended up sharing quite similar sociodemographic characteristics, as if they had satisfied the matching principle.

Moving the First Part of the Life Planning Programme into Agencies

The original study aimed to recruit clients who had just finished the T&R programmes of their respective agencies, as it was the “post-treatment period” that was relevant to the test of the present life planning programme. However, the slow process of recruitment of participants from agencies, and the lack of motivation to join the study during the Pandemic, prompted the study team to make adjustments to the recruitment method. It negotiated with agencies to move the first part of the life planning programme, which was the individual sessions spanning 2 to 3 months, up so that it could be conducted inside the agencies (note that it was difficult to find venues in the community for conducting individual sessions during the Pandemic). This arrangement made it easier for the study to recruit clients, as it was easier for them to join the study while they were still receiving services in their respective agencies. After they finished the individual sessions of the programme, it was time for them to finish receiving services from their agencies. After leaving their respective agencies, they would have a stronger motivation to continue their role as participants of the study and finish the rest of the programme, which were the group sessions. Also, in order to minimise dropouts, the length of group sessions was carefully shortened from five months to three months.

The above arrangement compromised the length of the “post-treatment” period required for testing the effects of the life planning programme, but it was a necessary adjustment in

order to balance the shortcoming of reducing the post-treatment period and the need to recruit enough participants.

Small Number of Relapse Cases

One of the shortcomings related to the shortening of post-treatment period was the small number of relapses that had occurred in the intervention group and the control group during the four time-points. Since the participants were mainly recruited from their respective agencies when they departed, they had only gone through about three months of post-treatment when they completed the present life planning programme. This was not a long post-treatment period, and their ability to remain drug-free acquired in their agency services was still quite strong. That explained why in both the intervention group and the control group, the number of relapsed cases had been very small from T1 to T4. If the post-treatment period had not been shortened, i.e., remained at five months rather than three months, then the chances for the participants (in both IG and CG) to relapse would have increased after leaving their agencies. If the number of relapses had been larger, then more sophisticated statistical manipulations, such as a rigorous regression analysis of the dependent variable of drug-free/drug-use status with respect to self-efficacy to reject drugs, life satisfaction, and other psychometric variables would have been performed.

Special Implementation of the Programme

In the original programme design, Stage II expressive arts group interventions were held every week, stage III group interventions every two weeks and stage IV group intervention every four weeks. Since some agencies can only accommodate weekly expressive arts groups, bi-week and monthly interval of interventions were not implemented. Nevertheless, the content of the group sessions remains identical with the original design of expressive arts groups.

Practical Implications

Despite the above-mentioned inadequacies of the study resulting from social movement incidents and the COVID-19 Pandemic, its findings do suggest that the life planning programme has been an effective means to help rehabilitated drug abusers to prevent relapse in their post-treatment period. Consistent with previous studies, self-efficacy to refuse drug, life satisfaction, self-esteem, meaning in life, and functions of identity played their role in enhancing drug-free status and preventing relapse.

If the quantitative results of this study, beset with the adjustments and compromises made to cope with adversary societal conditions, were not strong enough to definitively conclude a positive evaluation of the effectiveness of the life planning programme, the rich qualitative data presented in this report should wave strong support. Through narrative career design and expressive arts therapy, young people in the programme were able to express their inner thoughts and feelings through telling their own stories or artistic creations. They tried to break through themselves and use their creativity to face and solve difficulties. After participating in the programme, many of them were able to develop clear ideas about their expectations of their own work and lives in the future. This was indeed an effective model for young people rehabilitated from drug abuse to continue to strengthen their ability of relapse prevention. As a matter of fact, the Intervention group participants had rated very highly on ten aspects of the life planning programme (see Table 18).

The research finding and the experience of implementing this integrative life-design programme provide the following implications to practitioners: First, in addition to the life satisfaction, meaning of life was found to be a positive predictor for the youths' self-efficacy to refuse drug use. We highly recommend service providers or practitioners to facilitate youth to explore and achieve their meaning of life in drug prevention service. Second, the integrative life design programme was found suitable for career planning of youth and preventing them from the relapse of drug use. In individual counselling sessions, youth were facilitated to find their life themes. In expressive arts groups, they had the opportunity to express their emotion, discover new resources, heal their inner wound from their traumatic experiences, and build new friendship and relationship. Our practice and collaboration with agencies inform us that the practitioners can adjust the length of group sessions according to the needs and characteristics of the service users and the agency context. The length of the expressive arts group sessions can be shorted to six to eight sessions. Third, most of youth in this programme is able to find their life themes and identify their dreamed career. However, it is hard for them to identify the pathways to achieve their career goal. It would be highly recommended if career coaches or vocational counsellors (people who work in the preferred occupation of the youth) can show them the pathway and guide them in their career path.

This study has echoed the idea that more post-treatment services should be provided to youth rehabilitated from drug addicts (Cheung & Lee, 2020). If the life planning programme in this study could help participants to remain drug-free in their first three or four months of post-treatment period, then there is reason to believe that its relapse prevention function would be even more needed for longer post-treatment periods. Life planning has become a professional practice applicable to a range of special populations, including drug addicts. This study has demonstrated the effectiveness of the present life planning programme for rehabilitated drug abusers. Policymakers, experts in the drug field, service providers, and life planning professionals should join hands and make further efforts to refine, improve and integrate existing life planning programmes so that the most suitable post-treatment life planning programme for rehabilitated drug addicts can be designed for use in Hong Kong.

References

- Abdollahi, Z., Taghizadeh, F., Hamzehgardeshi, Z., & Bahramzad, O. (2014). Relationship between addiction relapse and self-efficacy rates in injection drug users referred to maintenance therapy center of Sari, 1391. *Global Journal of Health Science*, 6(3), 138–144. <https://doi.org/10.5539/gjhs.v6n3p138>
- Azizli, N., Atkinson, B., Baughman, H., & Giammarco, E. (2015). Relationships between general self-efficacy, planning for the future, and life satisfaction. *Personality and Individual Differences*, 82.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.
- Beat Drug Fund (2018). Beat Drug Fund Evaluation Question Set. https://www.nd.gov.hk/en/beat_questions_2010R2.htm. Access date: September 16, 2018.
- Beier, M., Bhattarai, J. “Jackie,” Hartoonian, N., D’Orio, V. L., Terrill, A. L., Paisner, N. D., & Alschuler, K. N. (2019). Relationship of perceived stress and employment status in individuals with multiple sclerosis. *Work*, 62(2), 243–249.
- Berman, A. H., Forsberg, L., Durbeej, N., Källmén, H., & Hermansson, U. (2010). Single-session motivational interviewing for drug detoxification inpatients: Effects on self-efficacy, stages of change and substance use. *Substance Use & Misuse*, 45(3), 384–402.
- Bertrand, K., Roy, É., Vaillancourt, É., Vandermeersch, J., Berbiche, D., & Boivin, J. (2015). Randomized controlled trial of motivational interviewing for reducing injection risk behaviours among people who inject drugs. *Addiction*, 110(5), 832–841.
- Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the career decision-making self-efficacy scale. *Journal of Career Assessment*, 4(1), 47-57.
- Bogart, L. M., Collins, R. L., Ellickson, P. L., & Klein, D. J. (2007). Are adolescent substance users less satisfied with life as young adults and if so, why? *Social Indicators Research*, 81(1), 149–169.
- Bosch, H. (2020). Integrating narrative practice into alcohol and other drugs counselling. *International Journal of Narrative Therapy & Community Work*, 2, 68–77.
- Brott, P. E. (2005). A constructivist look at life roles. *The Career Development Quarterly*, 54(2), 138–149. doi: 10.1002/j.2161-0045.2005.tb00146.x
- Burgstahler, S. (2001). A collaborative model to promote career success for students with disabilities. *Journal of Vocational Rehabilitation*, 16(3–4), 209–215.
- Cardoso, P., Gonçalves, M. M., Duarte, M. E., Silva, J. R., & Alves, D. (2016). Life Design Counseling outcome and process: A case study with an adolescent. *Journal of Vocational Behavior*, 93, 58–66.
- Carlson, T. (2007). Using art in narrative therapy: Enhancing therapeutic possibilities, *The American Journal of Family Therapy*, 25 (3), 271-283.

- Cheung, Y.W. (2009), *A Brighter Side: Protective and Risk Factors in the Rehabilitation of Chronic Drug Abusers in Hong Kong*. Hong Kong: The Chinese University Press.
- Cheung, Y. W., & Cheung, N. (2018). *Psychoactive drug abuse in Hong Kong: Life satisfaction and drug use*. <https://doi.org/10.1007/978-981-10-6154-7>
- Cheung, Y. W. & Lee, K. F. (2020). The role of research in drug policy in Hong Kong: Highlighting life satisfaction from two longitudinal studies. *China Journal of Social Work* 13(2), 172-189.
- Chong, J., & Lopez, D. (2008). Predictors of relapse for American Indian women after substance abuse treatment. *American Indian and Alaska Native Mental Health Research: The Journal of the National Center*, 14(3), 24–48.
- Clark, A. A. (2014). Narrative therapy integration within substance abuse groups. *Journal of Creativity in Mental Health*, 9(4), 511–522.
- Clifford, D., & Curtis, L. (2015). *Motivational interviewing in nutrition and fitness*. Guilford Publications.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Di Fabio, A., & Maree, J. G. (2012). Group-based life design counseling in an Italian context. *Journal of Vocational Behavior*, 80(1), 100-107.
- Duncan, G. J., Wilkerson, B., & England, P. (2006). Cleaning up their act: The effects of marriage and cohabitation on licit and illicit drug use. *Demography*, 43(4), 691–710.
- Education Bureau (2018). Life planning education and career guidance. https://careerguidance.edb.hkedcity.net/edb/opencms/lifeplanning/students/?__locale=en Access date: Sept. 9, 2018.
- Erikson, E.H. (1980). *Identity and the Life Cycle*. W.W. Norton & Company, New York.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Giordano, A. L., Prosek, E. A., Loseu, S., Bevely, C. M., Stamman, J., Molina, C. E., Callahan, M. M., & Calzada, R. (2016). Self-efficacy among adults in substance abuse treatment: The role of religious coping. *Journal of Addictions & Offender Counseling*, 37(1), 35–48.
- Gray, B. J., Grey, C. N. B., Homolova, L., Song, J., & Davies, A. R. (2019). Employment status and impact on mental wellbeing in the UK working age population: A cross-sectional analysis. *The Lancet*, 394, S44.
- Grundström, J., Konttinen, H., Berg, N., & Kiviruusu, O. (2021). Associations between relationship status and mental well-being in different life phases from young to middle adulthood. *SSM - Population Health*, 14, 100774.

- Hall, E. A., Prendergast, M. L., Wellisch, J., Patten, M., & Cao, Y. (2004). Treating drug-abusing women prisoners: An outcomes evaluation of the forever free program. *The Prison Journal*, *84*(1), 81–105.
- Hall, K., Gibbie, T., & Lubman, D. I. (2012). Motivational interviewing techniques: Facilitating behaviour change in the general practice setting. *Australian Family Physician*, *41*(9), 660–667.
- Heinz, A. J., Wu, J., Witkiewitz, K., Epstein, D. H., & Preston, K. L. (2009). Marriage and relationship closeness as predictors of cocaine and heroin use. *Addictive Behaviors*, *34*(3), 258–263.
- Herth, K. (1992). Abbreviated instrument to measure hope: Development and psychometric evaluation. *Journal of Advanced Nursing*, *17*(10), 1251–1259.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments*. Lutz, FL: Psychological Assessment Resources.
- Hsu, T.-L., & Barrett, A. E. (2020). The association between marital status and psychological well-being: Variation across negative and positive dimensions. *Journal of Family Issues*, *41*(11), 2179–2202.
- Judge, T. A., & Watanabe, S. (1994). Individual differences in the nature of the relationship between job and life satisfaction. *Journal of Occupational and Organizational Psychology*, *67*(2), 101–107.
- Kang, S.Y., Magura, S., Blankertz, L., Madison, E., & Spinelli, M. (2006). Predictors of engagement in vocational counseling for methadone treatment patients. *Substance Use & Misuse*, *41*(8), 1125–1138.
- Knill, P. J., Levine, E. G., & Levine, S. K. (2004). *Principles and practice of Expressive Arts Therapy: Toward a therapeutic aesthetics*. Jessica Kingsley Publishers.
- Krok, D., & Gerymski, R. (2019). Self-efficacy as a mediator of the relationship between meaning in life and subjective well-being in cardiac patients. *Current Issues in Personality Psychology*, *7*(3), 242–251.
- Leung, S. A. (2005). Life Planning: Trans-theoretical hypotheses and implementation strategies (in Chinese), *Asian Journal of Counselling*, *12* (1&2), 79-93.
- Levine, E. G., & Levine, S. K. (2011). *Art in action: Expressive arts therapy and social change*. Jessica Kingsley Publishers.
- Liebmann, M. (2005). *Art therapy for groups* (2nd ed.). London: Routledge.
- Lloyd, C., & Waghorn, G. (2007). The importance of vocation in recovery for young people with psychiatric disabilities. *British Journal of Occupational Therapy*, *70*(2), 50-59.
- Lundahl, B., & Burke, B. L. (2009). The effectiveness and applicability of motivational interviewing: A practice-friendly review of four meta-analyses. *Journal of Clinical Psychology*, *65*(11), 1232–1245.

- Lusebrink, V. B. (2010). Assessment and therapeutic application of the Expressive Therapies Continuum: Implications for brain structures and functions. *Art Therapy, 27*(4), 168–177.
- Maggiore, C., Rossier, J., & Savickas, M. (2017). Career adapt-abilities scale-short form (CAAS-SF): Construction and validation. *Journal of Career Assessment, 25*, 312–325.
- Malchiodi, C. A. (2005). Expressive therapies: History, theory, and practice. In C. A. Malchiodi (Ed.), *Expressive therapies* (pp. 1–15). New York, NY: Guilford.
- Malhi, G. S., Das, P., Bell, E., Mattingly, G., & Mannie, Z. (2019). Modelling resilience in adolescence and adversity: A novel framework to inform research and practice. *Translational Psychiatry, 9*(1), 1–16.
- Manuel, J. I., Yuan, Y., Herman, D. B., Svikis, D. S., Nichols, O., Palmer, E., & Deren, S. (2017). Barriers and facilitators to successful transition from long-term residential substance abuse treatment. *Journal of Substance Abuse Treatment, 74*, 16–22.
- Maree, J. G., & Twigge, A. (2015). Career and self-construction of emerging adults: The value of life designing. *Frontiers in Psychology, 6*, 2041.
- Marlatt, G.A. (1985), Relapse prevention: Theoretical rationale and overview of the model. In G.A. Marlatt & J.R. Gordon (Eds.), *Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors* (pp.3-70). New York, NY: Guilford Press.
- Matos, M., McEwan, K., Kanovský, M., Halamová, J., Steindl, S. R., Ferreira, N., Linhares, M., Rijo, D., Asano, K., Vilas, S. P., Márquez, M. G., Gregório, S., Brito-Pons, G., Lucena-Santos, P., Oliveira, M. da S., Souza, E. L. de, Llobenes, L., Gumiy, N., Costa, M. I., & Habib, N. (2021). The role of social connection on the experience of COVID-19 related post-traumatic growth and stress. *PLoS ONE, 16*(12), 1–26.
- Merline, A. C., Schulenberg, J. E., O'Malley, P. M., Bachman, J. G., & Johnston, L. D. (2008). Substance use in marital dyads: Premarital assortment and change over time. *Journal of Studies on Alcohol and Drugs, 69*(3), 352–361.
- Meyer DeMott, M. A., Jakobsen, M., Wentzel-Larsen, T., & Heir, T. (2017). A controlled early group intervention study for unaccompanied minors: Can expressive arts alleviate symptoms of trauma and enhance life satisfaction? *Scandinavian Journal of Psychology, 58*(6), 510–518.
- Michalos, A. C., & Kahlke, P. M. (2010). Arts and the perceived quality of life in British Columbia. *Social Indicators Research, 96*(1), 1–39.
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people to change* (2nd ed.). New York: Guilford Press.
- Miller, W. R., & Rollnick, S. (2013). *Applications of motivational interviewing. Motivational interviewing: Helping people change* (3rd edition). New York, NY, US: Guilford Press.

- Mohamad, M., Mohammad, M., Mat Ali, N. A., & Awang, Z. (2018). The impact of life satisfaction on substance abuse: Delinquency as a mediator. *International Journal of Adolescence and Youth, 23*(1), 25–3
- Narcotics Division, Security Bureau (2020). CRSA Statistics. https://www.nd.gov.hk/en/statistics_list.htm. Access date: Aug. 26, 2021.
- Norozi, E., Miri, M. R., Eslami, A. A., Harivandi, A. R., & Dastjerdi, R. (2017). Predictors of motivation for substance abuse treatment in a sample of Iranian addicts. *Journal of Substance Use, 22*(2), 123–128.
- Nota, L., Santilli, S., & Soresi, S. (2016). A Life-Design-Based Online Career Intervention for Early Adolescents: Description and Initial Analysis. *The Career Development Quarterly, 64*(1), 4-19.
- Perreault, M., Touré, E. H., Perreault, N., & Caron, J. (2017). Employment status and mental health: Mediating roles of social support and coping strategies. *Psychiatric Quarterly, 88*(3), 501–514.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. New York: Oxford University Press and Washington, DC: American Psychological Association
- Petry, N. M., Andrade, L. F., Rash, C. J., & Cherniack, M. G. (2014). Engaging in job-related activities is associated with reductions in employment problems and improvements in quality of life in substance abusing patients. *Psychology of Addictive Behaviors, 28*(1), 268–275.
- Platt, J. J. (1995). Vocational rehabilitation of drug abusers. *Psychological Bulletin, 117*(3), 416–433.
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 51*(3), 390–395.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rounds-Bryant, J. L., Flynn, P. M., & Craighead, L. W. (1997). Relationship between self-efficacy perceptions and in-treatment drug use among regular cocaine users. *The American Journal of Drug and Alcohol Abuse, 23*(3), 383–395.
- Sampson, J. P., Reardon, R. C., Peterson, G. W., & Lenz, J. G. (2004). *Career counseling and services: A cognitive information processing approach*. Belmont, CA: Thomson/Brooks/Cole.
- Sari, S. V. (2019). Attaining career decision self-efficacy in life: Roles of the meaning in life and the life satisfaction. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues, 38*(5), 1245–1252.

- Sarpkaya, A., & Kirdök, O. (2019). The mediating role of self-esteem in understanding relationship between teachers' job satisfaction and life satisfaction. *Acta Didactica Napocensia*, 12(1), 213–223.
- Satre, D. D., Leibowitz, A., Sterling, S. A., Lu, Y., Travis, A., & Weisner, C. (2016). A randomized clinical trial of Motivational Interviewing to reduce alcohol and drug use among patients with depression. *Journal of Consulting and Clinical Psychology*, 84(7), 571–579.
- Savickas, M. L. (2006). *Career counseling. (Treatment for Specific Population Video Series)*. Washington, DC: American Psychological Association.
- Savickas, M. L. (2012). Life design: A paradigm for career intervention in the 21st century. *Journal of Counseling & Development*, 90(1), 13-19.
- Savickas, M. (2015). *Life design counseling manual*. Retrieved from www.Vocopher.com
- Savickas, M., Nota, L., Rossier, J., Dauwalder, J. P., Duarte, M., Guichard, J., Soresi, S., Esbroeck, R., & van Vianen, A. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, 75, 239–250.
- Serafini, T. E., & Adams, G. R. (2002). Functions of identity: Scale construction and validation. *Identity: An International Journal of Theory and Research*, 2(4), 361–389.
- Serafini, T. E., & Maitland, S. B. (2013). Validating the Functions of Identity Scale: Addressing methodological and conceptual matters. *Psychological Reports*, 112(1), 160–183.
- Shek, D. (2003). Economic stress, psychological well-being and problem behavior in Chinese adolescents with economic disadvantage. *Journal of Youth and Adolescence*, 32, 259–266.
- Siu, A. M. H., Fung, M. S. M., Cheung, P. P. P., Shea, C. K., & Lau, B. W. M. (2019). Vocational evaluation and vocational guidance for young people with a history of drug abuse. *Work: Journal of Prevention, Assessment & Rehabilitation*, 62(2), 327–336.
- Smith, K. W., & Larson, M. J. (2003). Quality of life assessments by adult substance abusers receiving publicly funded treatment in Massachusetts. *The American Journal of Drug and Alcohol Abuse*, 29(2), 323–335.
- Smith, R., McIntosh, V. V. W., Carter, J. D., Colhoun, H., Jordan, J., Carter, F. A., & Bell, C. J. (2017). In some strange way, trouble is good for people. Posttraumatic growth following the Canterbury earthquake sequence. *Australasian Journal of Disaster & Trauma Studies*, 21(1), 31–42.
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53(1), 80.

- Super, D. E. (1990). A life-span, life-space approach to career development. In *Career choice and development: Applying contemporary theories to practice, 2nd ed* (pp. 197–261). Jossey-Bass.
- Taylor, O. D., & Williams-Salisbury, E. (2015). Coping skills and the self-efficacy of substance-using women versus non-substance-using women. *Journal of Human Behavior in the Social Environment, 25*(4), 351–359.
- Torrens, M. (2008). Quality of life as a means of assessing outcome in opioid dependence treatment. *Heroin Addiction Related Clinical Problems, 11*, 33–36.
- Uzman, E., & Maya, I. (2019). Self-leadership strategies as the predictor of self-esteem and life satisfaction in university students. *International Journal of Progressive Education, 15*(2), 78–90.
- Uzun, S., & Kelleci, M. (2018). Substance abuse in high school students: Their self-efficacy to avoid substance abuse and related factors. *Düşünen Adam: Journal of Psychiatry and Neurological Sciences, 31*(4), 356–363.
- Vernick, S. H., & Reardon, R. C. (2001). Career development programs in corrections. *Journal of Career Development, 27*(4), 265–277.
- von Braun, T., Larsson, S., & Sjöblom, Y. (2013). Narratives of clients' experiences of drug use and treatment of substance use-related dependency. *Substance Use & Misuse, 48*(13), 1404–1415. <https://doi.org/10.3109/10826084.2013.817148>
- Wang, X., Zhang, J., Wu, S., Xiao, W., Wang, Z., Li, F., Liu, X., & Miao, D. (2021). Effects of meaning in life on subjective well-being: The mediating role of self-efficacy. *Social Behavior & Personality: An International Journal, 49*(4), 1–11.
- White, M. (2007). *Maps of narrative practice*. New York: W.W. Norton.
- Williams, K., Frech, A., & Carlson, D. L. (2010). Marital status and mental health. In *A handbook for the study of mental health: Social contexts, theories, and systems, 2nd ed.* (pp. 306–320). Cambridge University Press.
- Winefield, A. H., & Tiggemann, M. (1990). Employment status and psychological well-being: A longitudinal study. *Journal of Applied Psychology, 75*(4), 455–459.
- Wong, S. (2021). Life themes of a slash worker in Hong Kong identified through a Career Construction Interview. *British Journal of Guidance & Counselling, 49*(4), 524–532. <https://doi.org/10.1080/03069885.2021.1921697>
- Zhang, C., Hirschi, A., Herrmann, A., Wei, J., & Zhang, J. (2017). The future work self and calling: The mediational role of life meaning. *Journal of Happiness Studies, 18*(4), 977–991.
- Zhang, L., & Leung, J. P. (2002). Moderating effects of gender and age on the relationship between self-esteem and life satisfaction in mainland Chinese. *International Journal of Psychology, 37*(2), 83–91.

Zullig, K. J., Valois, R. T., Huebner, E. S., Oeltmann, J. E., & Drane, W. (2001).
Relationship between perceived life satisfaction and adolescents' substance abuse.
Journal of Adolescent Health, 29(4), 279–288.