

**Post-treatment Life Planning and Relapse Prevention: An
Effectiveness Study of an Integrative Model of Vocational Life
Design for Young Rehabilitated Drug Abusers (BDF 180061)**

戒毒後生涯規劃與重吸預防：為青年戒毒人士康復後提供綜合模式的生涯規劃的效度研究

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Background

- Two previous longitudinal local studies funded by the BDF have demonstrated the significant and strong consistent effects of life satisfaction on the continuation or discontinuation of drug use among treated addicts of chronic drug abusers or psychoactive drug abusers (Cheung, 2009; Cheung & Cheung, 2018)
- Other studies also show that drug abuse behaviours are influenced by life satisfaction of people (Bogart et al., 2007; Shek, 2003; Zullig et al., 2001)
- Quality of life as a protective factor against drug relapse should be included in treatment and rehabilitation programmes (Smith & Larson, 2003; Torrens, 2008)



Career Planning and Life Satisfaction

- People with drug abuse typically face challenges in returning to work, seeking a job, and deriving work satisfaction (Siu et al., 2019)
- Life satisfaction and meaning in life have a positive relationship with career decision-making self-efficacy (Sari, 2019)
- Vocation or career satisfaction and life satisfaction are positively correlated (Judge & Watanabe, 1994)
- Future planning, self-efficacy and life satisfaction are interrelated (Azizli et al., 2015)



Research Question

Research Question

- Can life planning improve life satisfaction, thereby preventing relapse among rehabilitated drug abusers?

Purpose of the Study

- This study aims at designing, implementing and testing the effectiveness of a life planning programme a life planning programme to strengthen the relapse prevention ability of young rehabilitated drug abusers that will continue into their posttreatment periods.
- A life planning programme refers to a structured programme that aims to help young people to discover their character strength, meaning in life, life theme and preferred career.

Outcome Indicators

- Self-efficacy to refuse drugs is one of the main predictors of intrapersonal factors for decreasing risk in substance abuse (Cheung, 2009; Chong & Lopez, 2008; Giordano, 2016; Norozi et al., 2017; Taylor & Williams-Salisbury, 2015; Uzun & Kelleci, 2018)
- Other outcome indicators: abstinence from using drugs, life satisfaction, meaning in life, self-esteem, hope, functions of identity, career decision self-efficacy; and career adaptability

An Integrative Life Planning Programme



Motivational Interviewing

Effectiveness

- Enhance intrinsic motivation for change (Miller & Rollnick, 2002)

Application

- Effective intervention for drug abusers (Lundahl & Burke, 2009; see also Bertrand et al., 2015; Satre et al., 2016)
- Commonly used in Hong Kong

Techniques

- “RULES” (Hall et al., 2012) and “OARS” (Clifford & Curtis, 2015)
 - help facilitators build up relationships with participants
 - create an atmosphere for positive change
 - participants are guided in meaningful reflection

Narrative Vocational Counselling

Effectiveness

- Increases in career decision making self-efficacy (Di Fabio & Maree, 2012)
- Higher levels of career adaptability & life satisfaction (Nota et al., 2016)

Application

- HK: higher-educational institutes (Education Bureau, 2018; Leung, 2005)
- Special population: Drug abusers (Platt, 1995)

Dealing with drug abuse by

- Emphasizing internal voices (von Braun et al., 2013)
- Reaching a certain self-understanding and writing own stories for healing (Bosch, 2020)
- Rewriting and living out preferred life stories (Clark, 2014)

Expressive Arts Techniques

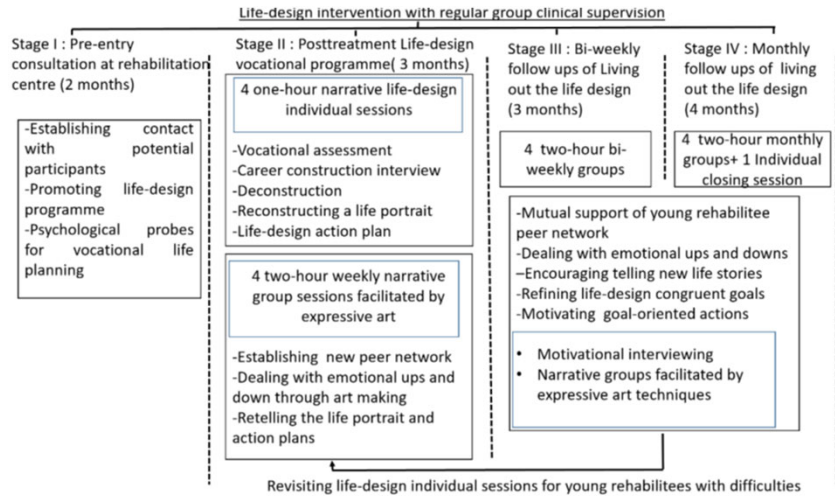
Effectiveness

- self-exploration process (Liebmann, 2005)
- Self-discovery, healing and change (Malchiodi, 2005)
- Searching for new resources (Levine & Levine, 2011)
- Enhancing more therapeutic possibilities (e.g. Carlson, 2007)
- Enhancing life satisfaction (Michalos & Kahlke, 2010; Meyer DeMott et al., 2017) and happiness (Michalos & Kahlke, 2010)

In the process

- Use five senses and different art modalities
- Encourage in-depth expression of the youth's inner journeys at kinesthetic, sensory, perceptual, affective, cognitive and symbolic levels (Lusebrink, 2010)

An Integrative Life Planning Programme



- Four one-hour individual vocational counselling sessions
- Twelve 2-hour expressive arts groups
- Motivational Interviewing techniques: aid the will to change

Narrative Individual Life Design Sessions

Session	Goal	Activity
1	<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
2	<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
3	<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
4	<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

Expressive Arts Group Sessions

Session	Clusters	Topic	Objective
1	Lifestyle	My Journey	<ul style="list-style-type: none"> • Build up therapeutic relationships • Facilitate participants' imagination
2		My Story	<ul style="list-style-type: none"> • Tell and retell a favourite story mentioned in the individual sessions
3		My Space	<ul style="list-style-type: none"> • Build up a sense of security
4		My Voice	<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	<ul style="list-style-type: none"> • Explore the meaning of names: Self-identity I
6		Light and Shadow	<ul style="list-style-type: none"> • Accept one's past self: Self-identity II
7		House of Light	<ul style="list-style-type: none"> • Build up boundaries and a secure base
8		Frame and Freedom	<ul style="list-style-type: none"> • Reflect on limitations and freedom
9	Strength and Future	Lamp in the Dark	<ul style="list-style-type: none"> • Explore inner strengths and inner resources
10		Mask of Life	<ul style="list-style-type: none"> • Review life
11		Dream Island	<ul style="list-style-type: none"> • Welcome dreams and future
12		One Piece	<ul style="list-style-type: none"> • Link up "me" and "we"

Artwork in the Expressive Arts Groups



Research Design

- A longitudinal mixed method of quantitative and qualitative research
- Data Collection:



Participants

	Intervention N=35	Control N=35	Total N=70
Gender			
Male	21	20	41
Female	14	15	29
Age	<i>M</i> = 26.91 <i>SD</i> = 5.94	<i>M</i> = 28.77 <i>SD</i> = 4.72	<i>M</i> = 27.84 <i>SD</i> = 5.41

- Participants
 - Inclusive criteria: (1) aged between 15 and 35, and (2) receiving typical rehabilitation treatment for drug abuse
 - Exclusive criterion: suffering from severe mental disorders
- Both groups were similar in terms of gender composition, age, housing status, education level, religious affiliation, family monthly income, individual monthly income
- Significant differences in marital status and employment status (Intervention group: 1 married, 17 employed; Control group: 11 married and 26 employed)

Measures

Scales	Sources / References
Self-Efficacy to Refuse Drug Use (SE)	Questionnaire Set 4, 5, 6,7 (Beat Drugs Fund, 2018)
The Meaning in Life Questionnaire (MLQ)	(Steger et al., 2006)
The Satisfaction with Life Scale (SWLS)	(Diener et al., 1985)
Rosenberg's Self-Esteem Scale (RSE)	(Rosenberg, 1965)
The Herth Hope Index (HHI)	(Herth, 1992)
The Functions of Identity Scale (FIS)	(Serafini & Adams, 2002)
The Career Decision-making Self-Efficacy Scale - Short Form (CDSE-SF)	(Betz, Klein, & Taylor, 1996)
The Career Adapt-Abilities Scale (CAAS)	(Maggiori, Rossier & Savickas, 2017)

Challenges Faced in Recruitment

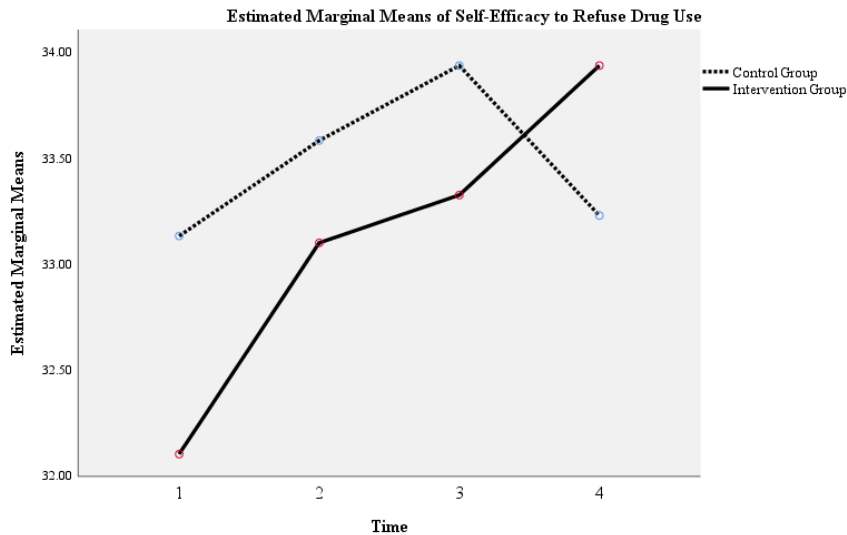
Impossibility to do randomisation

- Social movement in 2019 and the COVID-19 outbreak since 2020
- Services at most agencies were suspended and group activities were discouraged
- Many rehabilitated young drug users were reluctant to participate in longitudinal intervention and research studies out of health concerns and because of social distancing policies

Completion and Dropout

- The completion rate is 88.6% and the dropout rate is 11.4%. Eight cases dropped out by the end of the reported period.
- Small number of dropouts will not affect the statistical reliability of our study. G*power (Faul, Erdfelder, Buchner, & Lang, 2009) is used to determine the minimum sample size: N=54

Changes in Self-Efficacy to Refuse Drug Use



Drug Use Behaviors

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%)

- Drug use in the intervention group: dropped from 11.43% at T1 to 3.23% at T4
- Drug use in the control group: increased from 5.71% at T1 to 9.68% at T4

Self Efficacy to Refuse Drug Use

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%

- Enhancing the participants' level of self-efficacy
- Strengthens their ability to remain drug-free

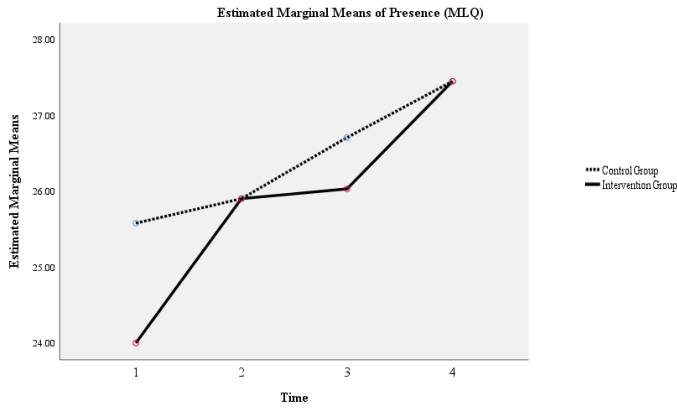
Score Changes in the Psychometric Scales of the Intervention Group at Different Time-points

	T1 M (SD)	T2 M (SD)	T3 M (SD)	T4 M (SD)	F (Sig.)	Partial η^2
Self-Efficacy to Refuse Drug Use	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 - Presence	24.00 (6.35)	25.90 (4.88)	26.03 (5.55)	27.45 (4.34)	4.940** (.003)	.141
The Meaning in Life Questionnaire - 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	19.42 (7.04)	21.35 (6.62)	22.42 (7.17)	24.52 (6.22)	9.710*** (.000) ^a	.245
Satisfaction of Life	2.95 (.72)	3.15 (.82)	3.27 (.86)	3.50 (1.06)	3.689* (.034) ^a	.109
Rosenberg's Self-Esteem Scale	27.68 (4.21)	28.94 (4.27)	29.16 (3.80)	30.81 (4.33)	7.906*** (.000)	.209
The Herth Hope Index - Inner sense of temporality and expectancy	11.52 (1.71)	11.97 (2.32)	11.84 (1.88)	12.74 (1.65)	5.429** (.002)	.153
The Herth Hope Index - Inner positive readiness and expectancy	12.13 (1.80)	12.65 (1.96)	12.55 (1.73)	13.35 (1.74)	4.996** (.007) ^a	.143
The Herth Hope Index - Interconnectedness with self and others	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 - Structure	9.58 (1.84)	10.48 (1.67)	10.48 (1.93)	11.35 (2.17)	6.989*** (.000)	.189
The Functions of Identity Scale - Harmony	10.03 (2.09)	10.68 (1.62)	10.90 (1.78)	11.81 (1.78)	8.217*** (.000) ^a	.215
The Functions of Identity Scale - Goals	9.90 (2.27)	10.29 (2.25)	10.61 (2.26)	11.48 (2.20)	5.976** (.001)	.166
The Functions of Identity Scale - Future	9.81 (2.36)	10.58 (2.14)	10.87 (2.29)	11.58 (1.96)	9.436*** (.000) ^a	.239
The Functions of Identity Scale - 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	85.13 (14.49)	90.13 (16.37)	92.71 (15.47)	95.87 (14.62)	7.395*** (.000)	.198
Career Adapt-Abilities Scale - Concern	7.84 (2.81)	9.16 (2.97)	9.52 (3.10)	10.84 (2.66)	12.553*** (.000)	.295
Career Adapt-Abilities Scale - Control	9.61 (2.99)	10.35 (2.83)	11.23 (2.72)	11.39 (2.43)	6.617*** (.000)	.181
Career Adapt-Abilities Scale - Curiosity	9.74 (2.59)	10.06 (2.50)	10.90 (2.62)	11.19 (2.50)	5.488** (.002)	.155
Career Adapt-Abilities Scale - Confidence	10.16 (2.84)	10.16 (2.48)	10.97 (2.70)	11.74 (2.67)	7.439*** (.000)	.199

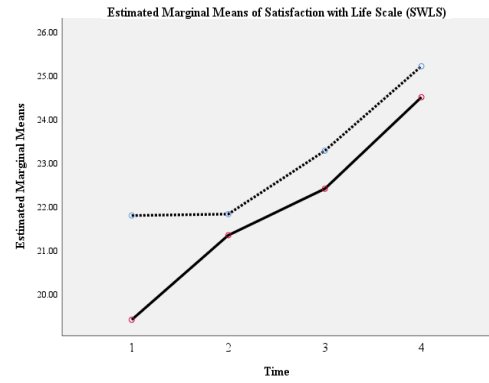
Note. ^aApplied Greenhouse-Geisser correction.

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

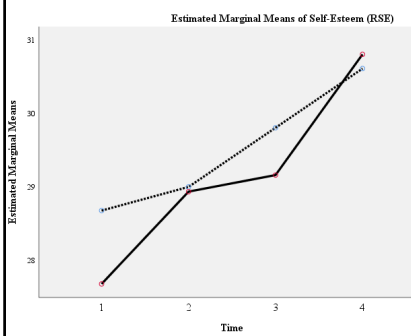
Meaning in Life



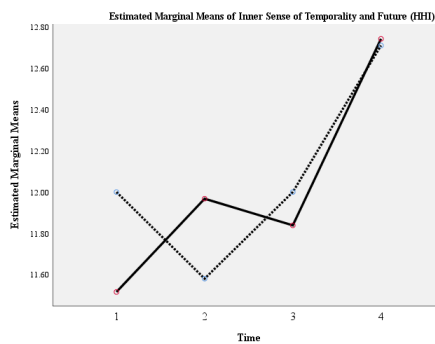
Life Satisfaction



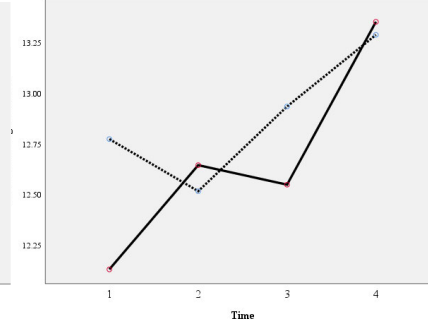
Self-Esteem



Hope

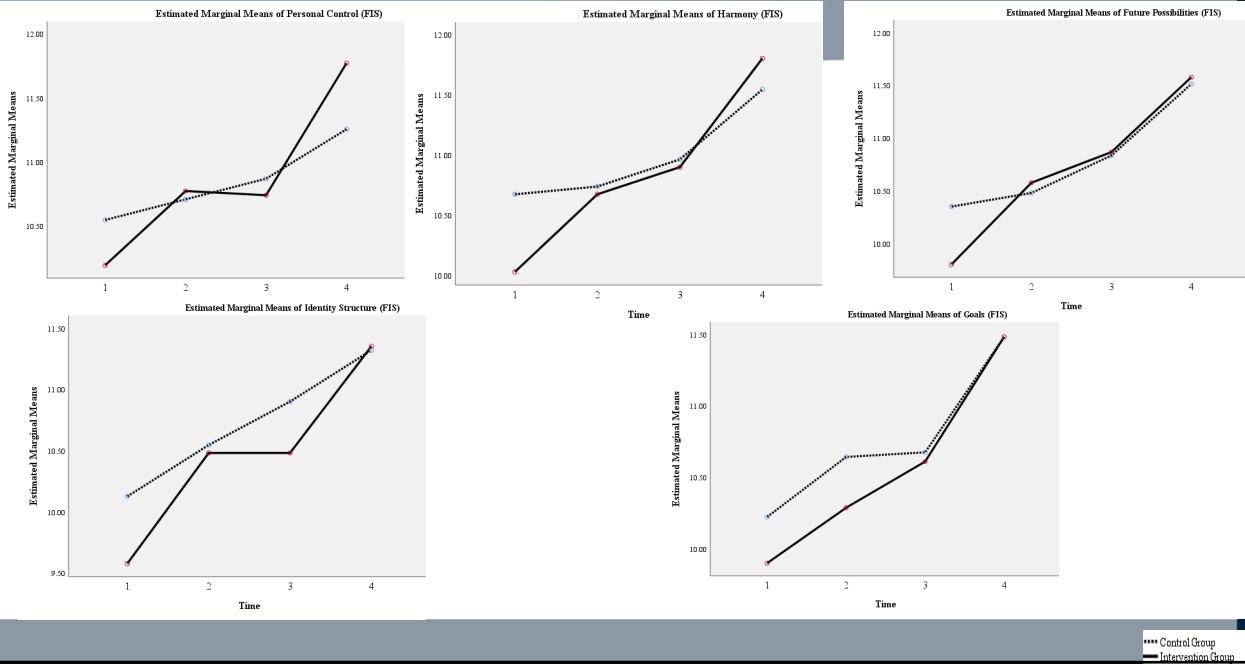


Estimated Marginal Means of Inner Positive Readiness and Expectancy (HBI)

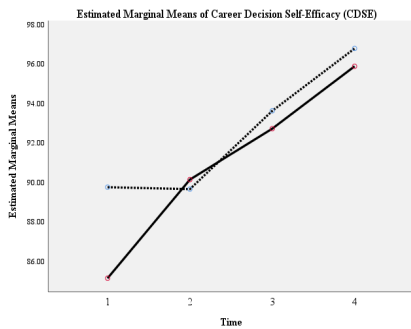


**** Control Group
 — Intervention Group

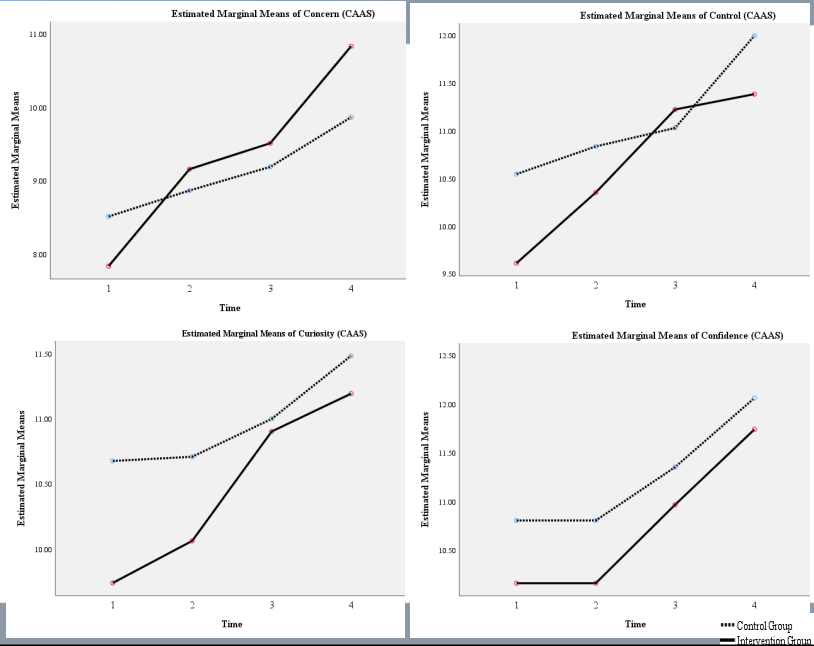
Functions of Identity



Career Decision Self-Efficacy



Career Adapt-Abilities



Stepwise Hierarchical 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; Dependent variable: Self-efficacy to Refuse Drug Use

Qualitative Results: Focus Group Interviews

Demographic Data of Participants

	Intervention	Control	Total
Gender			
Male	8	3	11
Female	8	9	17
Total	16	12	28
Mean Age	28.1	28.3	28.2

Results

Reasons for Drug Use

- A desire to release unpleasant emotions
- Escaping from the suffering of the reality
- Excitement caused by drugs
- Chat with friends
- A quiet personal space

Reasons for Detoxification

- Preventing family members from being disappointed
- Avoiding giving up their dreams and life ideals
- Preventing their cognitive functions from being damaged by drugs

Needs and Difficulties in Career Paths

- Searching for jobs: Academic history, Career adaptability, Childcare, Preparation for interviews)
- Being Employed: Side effects caused by drug abuse, Interpersonal communication abilities, Interpersonal relationships, Suitability of jobs)

Results

Meaning of Work

- Both Groups: Income
- Invention Group: hope to learn new skills, Life fulfilment, helping themselves and others, and reflecting their value and meaning in work

Ideas on Future Career Directions

- Invention Group: Clear description of their future career directions clearly
- Control Group: uncertainty (“Unsure. It was too distant and unpredictable”)

Feedback from Intervention Group

Reflection on the Programme

- Self-growth: better understanding of their own strengths and abilities
- Clearer picture of future career directions
- Supportive relationships with group members

Reflection on the Expressive Arts Therapy Sessions

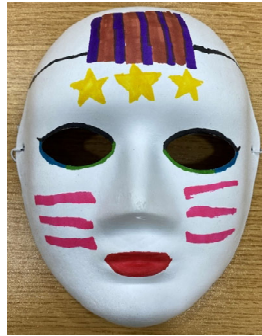
- Anxiety of using art the beginning; becoming more open in the later sessions
- Discovering their own potential and possibilities
- Experiencing personal breakthroughs
- Perceiving hope

Case Sharing: Yvonne

Gender	Female
Age	27
Occupation	Mother, a volunteer in a social service centre for clerical work
Highest Education Level	F.2
Detoxification Experience	Undergone detoxification three time
Current Status	Living in a half-way house alone, her two children are living in different residential childcare homes
Holland Code	SRA(Social, Realistic, Artistic)
Life Theme	Caring
Character Strengths	Forgiveness, teamwork, love, fairness, curiosity
Preferred Occupation	Elderly and child service, especially elderly service

Case Sharing: Yvonne

A deeper self-understanding in EXA sessions:



Case Sharing: Yvonne

- Feelings from Nature: warmth and happiness
- Common elements "Sun and Sea"

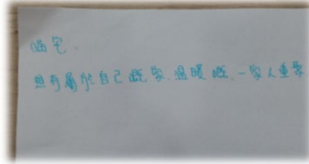
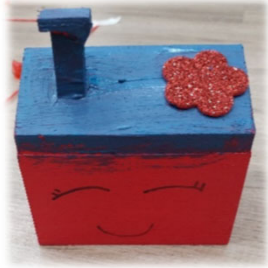


「日出
又日落，
帶走悲
情送溫
暖」



Case Sharing: Yvonne

- Core value mentioned in the individual sessions: Family



「啱宅：想有屬於自己嘅家，
溫暖嘅，一家人重聚」



Case Sharing: Yvonne

- Rainbow appeared in her drawing in the last session



Meaning of colors of the rainbow

Purple	Protection from God
Red	Warning and reminder of refusing drugs
Orange	Health(A fruit a day keeps a doctor away)
Yellow	Inner Peace (Color of Beach)
Green and Light Green	Nature (Favourite color of mountains and grass)
Blue	Sea

Discussion

- Although the intervention group started with lower scores at most psychometrical scales than those of the control group at T1, it has
 - caught up with the control group in five items at T4
 - overtaken the control group in six items at T4
- Through the integrative life planning programme, the intervention group was able to improve statistically significantly in their self-efficacy to refuse drugs, presence of meaning in life, life satisfaction, self-esteem, hope, functions of identity, career decision-making self-efficacy and career adaptability

Discussion

The integrative life design programme was shown to be able to help young people rehabilitated from drug abuse to improve their self-efficacy to refuse drug use and to prevent relapse through enhancing their meaning in life and life satisfaction.

Limitations of the Study

- The present study was hit hard by both the social movement incidents and the COVID-19 Pandemic
- Difficulty in recruiting participants has generated a number of problems:
 - Delay in forming the intervention group and the control Group
 - Randomisation or matching was not possible
 - Special Implementation of the Programme: Moving the first part of the life planning programme into the agencies, resulting in the participants not being entirely in their post-treatment period during the whole programme.

Practical Implications

Highly recommend service providers/practitioners to facilitate the clients' search for meaning of life through a life planning programme implemented towards the end of their service periods so that the relapse prevention effects will continue during their posttreatment periods(i.e., after they leave the service programmes of the agencies)

Highly recommend career coaches to help show the career pathway once their clients become clear of their preferred careers and life themes.

The integrative life planning programme can be adjusted to better suit the participants' needs and the extent to which the agency can accommodate the programme (e.g., in this project, we held 12 sessions expressive arts groups. Agencies can reduce session numbers of the expressive groups according to their own resources and the needs of their service users).

Bring in life and career planning professionals to work with service providers, experts and policy makers in the design and implementation of drug rehabilitation services for young drug abusers so that their relapse prevention ability will not only be present during treatment, but also sustain during their posttreatment periods.

Knowledge Transfer: Brochure

Future Vision

- Share the integrative life design manuals and experiences with professionals and agencies working with people with drug issues.
- Promote integrative life design in working with people rehabilitated from drug abuse



Cover design by a project participant Mr. Wong Kwan Hong

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