

To assess the role of Coping skills, Self-efficacy and Social Support in Addiction Recovery

Kate Williams

Student Number 1109326

Submitted in partial fulfilment of the requirements of the Bachelor of Arts degree (Psychology Specialisation) at DBS School of Arts, Dublin.

Supervisor: Garry Prentice

Head of Department: Dr S. Eccles

April 2013
Department of Psychology
School of Arts
Dublin Business School

CONTENTS

ACKNOWLEDGEMENTS	page 5
ABSTRACT	page 6
1. INTRODUCTION	page 7
1.2 Addiction and Treatment.....	page 7
1.3 Relapse.....	page 9
1.4 Coping Skills and Self-Efficacy.....	page 11
1.5 Social and Peer Support.....	page 13
1.6 Quality of Life in Addiction Recovery.....	page 14
2. METHODOLOGY	page 17
2.1 Participants.....	page 17
2.2 Design.....	page 20
2.3 Materials.....	page 20
2.3.1 <i>Brief Cope Inventory</i>	page 21
2.3.2 <i>Generalised Self Efficacy Scale</i>	page 21
2.3.4 <i>Who Quality of Life - BREF</i>	page 22
2.3.5 <i>Multidimensional Scale of Perceived Social Support</i>	page 23
2.4 Procedure.....	page 23
3. RESULTS	page 24
3.1 Descriptives.....	page 23
3.2 Correlation.....	page 25
3.2.1 <i>Group A Correlations</i>	page 25
3.2.2 <i>Group B Correlations</i>	page 28

3.3 Comparison of means between test and re-test.....	page 31
3.4 Tests for Differences.....	page 36
3.4.1 <i>Differences between test and re-test for Group A</i>	page 36
3.4.2 <i>Differences between test and re-test for Group B</i>	page 40
3.4.3 <i>Differences between Males and Females</i>	page 44
3.4.4 <i>Differences between Group A and Group B</i>	page 48
4. DISCUSSION	page 52
4.1 Hypothesis 1 Coping.....	page 52
4.2 Hypothesis 2 Self-Efficacy.....	page 53
4.3 Hypothesis 3 Social and Peer Support.....	page 53
4.4 Hypothesis 4 Participants remaining in Treatment.....	page 54
4.5 Discussion1-Difference between Test and Re-tests.....	page 54
4.6 Discussion2-Difference between Group A and B.....	page 55
4.7 Discussion - Differences between Males and Females.....	page 56
4.8 Strength of Study.....	page 57
4.9 Limitations.....	page 57
4.10 Implications and Application.....	page 57
4.11 Conclusion.....	page 58
REFERENCES	page 59
APPENDIX	page 68
Questionnaire Pack.....	page 69

INDEX OF TABLES AND CHARTS

TABLES

Table 1.Descriptive Statistical results of Client Demographics.....	page 17
Table 2.Descriptives for all Participants.....	page 24
Table 3.Correlation between test and re-test Group A	page 25
Table 4.Correlation between test and re-test Group B.....	page 28
Table 5.Comparison of means remaining in Treatment.....	page 31
Table 6.Differences between Test and Re-test Group A.....	page 36
Table 7.Differences between Test and Re-Test Group B.....	page 40
Table 8, Differences between Males and Females.....	page 44
Table 9. Differences between Group A and Group B.....	page 48

BAR CHARTS

Bar Chart 1 Comparison of means between Test and Re-test Group A.....	page 38
Bar Chart 2 Comparison of means between Test and Re-Test Group B.....	page 42

PIE CHARTS

Pie Chart 1 Age Demographic attending Treatment.....	page 19
Pie Chart 2 No of participants in correlational study.....	page 20
Pie Chart 3 No of participants remaining in Treatment.....	page 33
Pie Chart 4 The progression of participants not remaining in Treatment.....	page 34

ACKNOWLEDGMENTS

I would sincerely like to thank both the staff and the clients of the Treatment Centres involved in this study for participating and co-operating anonymously, without whom this research would not have been possible.

A special thank you also to Dr. Garry Prentice for providing the supervision, support and direction that I needed to complete this research.

Finally I would like to acknowledge the support of my family, friends and also my classmates I am very grateful for all of the support I have received from you throughout the year and this Research Project.

ABSTRACT

Research has shown that there is a combination of many factors that influence recovery in addiction. The purpose of this research is to investigate positive correlations of Coping skills, Self-Efficacy and Social Support with Quality of life and also to investigate the differences of these variables throughout recovery. This study is longitudinal in nature and involves participation of 27 individuals attending two Drug Rehabilitation treatment programmes who are stabilising and drug-free. Differences between groups and gender are also measured. There was a statistically significant difference found with Social and Peer Support for both Groups; increasing for Group B ($p = .043$) and decreasing for Group A ($p = .285$). Females and Males differed significantly in Psychological Quality of life scoring ($p = .047$).

1. INTRODUCTION

1.1 Background

The aim of this study is to investigate if three specific variables (Coping skills, Self-efficacy and Social and Peer Support) have a positive influence on the role of recovery in Addiction. Research has shown that there are many favourable factors involved during the recovery process (Koski-Jannes & Turner, 1999) that can influence successful recovery. Clients at different stages of addiction recovery will participate in this research and will be measured on these three Variables which will be compared with their levels of Quality of life. Quality of life has shown to increase while in recovery and during recovery from Addiction (Martin, Bliven & Boisvert, 2008) therefore for the purpose of this study, Quality of life is the criterion variable as due to time constraints we are unable to measure variables on completion of treatment whom have recovered successfully. Client's at different stages of recovery will be measured; a Stabilisation group (Group A) and a combination of Stabilised and Drug-free (Group B). They will be measured twice at two different time points in order to ascertain if there is a significant difference in scoring of the three variables. Differences will also be measured between the two groups and between Males and Females.

1.2 Addiction and Treatment

Addiction is a complex illness that is often associated with the co-morbidity of mental health problems in addition to substance abuse (Regier, Farmer, Rae, Locke, Keith, Judd & Goodwin, p.1511, 1990) however it has been suggested that this could be both a cause and result of the abuse (Crome, 2004; National Advisory Committee on Drugs 2004, p.26). As well as mental health issues, substance abuse also be associated with social exclusion, homelessness, poor education, poverty, crime and high unemployment (Moran, O'Brien, Dillon, Farrell & Mayock, 2000). Addiction is a cross-cultural issue with The World Health Organisation (WHO, 2012) estimating that worldwide 230 million adults have used an

illicit drug at least once in 2010 and that up to 27 million people have severe drug problems. According to recent data released from The European Monitoring Centre for Drugs and Drug Addiction (2011), Ireland is the top EU country for heroin use which demonstrates that drug abuse is a real issue in Ireland and that the problem is worsening. In terms of the drug treatment effectiveness, research by Joe, Simpson & Sells (1994) suggest that treatment such as methadone maintenance, therapeutic communities and outpatient drug-free programs have shown to be very effective which has also been supported by further research by Fuller (2010) however the problem lies with treatment maintenance and avoiding drop-out which can result in a less favourable outcome. Recent statistics from the Drug Treatment Centre Board (2011) state that 1,763 individuals attended services in Ireland of which 864 entered into Drug rehabilitation treatment and the remaining 899 used other services such as psychiatric care, counselling, crisis support and so on. Males were found to be the highest in attendance with the ratio of males to females circa 2:1 and were also most likely to be aged between 31-35.

Positive treatment outcome (abstinence of drug abuse) is strongly associated with the continuation of drug treatment and treatment retention. Research emphasises the importance of investigating variables that can influence successful treatment completion (Fuller 2010). Therefore, identifying factors in the environment that can trigger a relapse and controlling for these factors appear key in ensuring that one remains within treatment and as a consequence, has a more successful chance of recovery. Recent research that examine factors which influence addiction recovery show that there appears to be a combination of a wide range of favourable factors, both internal and external, that can influence the successful completion of Drug treatment. Among these include client motivation (Longshore & Terya, 2006), the quality of interpersonal relationship with the therapist (Knuuttila, Kuusisto, Saarnio., & Nummi , pg. 361, 2012), drug of choice, frequency of drug use and social support (West, 2009), having had prior treatment experiences (Mangrum, pg. 898, 2009), a comprehensive treatment service including psychiatric services (Marrero et al, 2005, as cited by Fuller; 2010)

certain personality styles such as those with persistence (Cannon, Keefe & Clarke, 1997, as cited by Fuller, 2010), severity of psychiatric symptoms (Justus, 2006, as cited by Fuller 2010), age and gender (Fuller, 2010), family involvement in the treatment programme (Martin, Lewis, Josiah-Martin, Sinnott, pg.34, 2010), the use of support services after treatment discharge such as AA (Alcoholics Anonymous), aftercare programmes or the 12 steps (Aharon, 2000). (Minervini, Palandra, Bianchi, Bastiani & Paffi, pg. 1, 2011) found that having a 'self-efficacy' coping mechanism was a stable predictor to resist substance use at treatment intake, during and after treatment in relation to alcohol and substance use. Ilgen, McKellar and Tiet (2005) found with patients in residential treatment, having confidence in substance abstinence at discharge showed to be the strongest predictor of abstinence after one year while Koski-Jannes (et al., 1999) found that social and cognitive coping with treatment can predict successful recovery. On considering these wide range of different influences, it must be noted that stable factors such as demographics and personality styles are outside the control of both the individual and treatment provider therefore by focusing on variables that are within their control, one can argue is more practical in order to improve one's chance of successful recovery.

On reviewing all variables, having sufficient social support, being able to draw on a resource of different coping mechanisms and having a self-belief in drug abstinence appear to be consistent as a positive influence in the addiction recovery process. This study was conceptualised to highlight the importance of these three variables within the context of Addiction Recovery; Coping skills, Self-efficacy and Social and Peer Support.

1.3 Relapse

Relapse is a challenge that an individual must overcome when attempting to modify a poor habit or health behaviour and has been described as 'the tendency for people to relapse to their previous behaviour following initial successful behaviour change' (McCaul, Glasgow & O'Neill, 1992, pg. 101) and is common particularly in the area of Drug addiction

(Brownell, Marlatt, Lichtenstein & Wilson, 1986). Individuals who are seeking treatment to assist them to becoming drug-free can often 'drop out' of treatment and revert to substance use. However, it has been argued that relapse is not necessarily a failure and may be in fact a considered an inevitable stage of the recovery process (Prochaska, DiClemente, & Norcross, 1992 p.1102). Relapse is a complex phenomenon and factors that have shown to influence relapse can range from genetic, conditioning, self-efficacy, stress and social and peer support according to Coyne, T., Tims, F., Leukefield, C., (1986) when analysing different relapse theories. It is interesting to note that the same factors have shown to influence successful recovery can also be responsible for triggering a relapse which further demonstrates how important these constructs are in the context of recovery. Witkiewitz & Marlatt (2004, p.224) suggest that relapse is more likely when the individual has low self-efficacy for performing the health behaviour which is supported by research by The Centre for the Advancement of Health, (2000), as cited by Taylor (2012) who proposed that there are a number of different factors that are highly correlated with successful completion of alcohol treatment programmes such as coping skills and a strong involvement with family. While this current study involves clients attending Drug treatment it is proposed that similar variables will have an influence. The two groups analysed involve individuals who are both stabilising (methadone maintenance and other substances) and drug-free.

Treatment involves modules such as drug education awareness with regular group-work, a timeframe of 3-6 months with Group A (stabilising) and 6-12 months with Group B (both stabilising and drug-free), linking in with the family programme and with aftercare support.

A recurring theme that appears to influence recovery while at the same time can also be responsible for relapse are Self- Efficacy, Social and Peer support and Coping skills. Upon researching the wide variety of psychological, emotional, environmental and physical factors that influence successful recovery there was yet a study that focused specifically on these three constructs. It is hoped that following this research, further support can be given to the

importance of these three variables with the view that both the individual, the treatment provider and the surrounding family and friends can give further consideration to these constructs which are also within the individual's control to develop and thus can improve their chance of successful recovery.

1.4 Coping Skills and Self-Efficacy

Relapse Cognitive Behavioural Models focus on the individual building up an effective resource of coping skills while also increasing their self-belief that they can cope with problems that they may encounter in their daily lives so that they can avoid a relapse. In this context, 'relapse is a function of people encountering high risk situations combined with a failure to cope effectively with these situations without use' (Annis & Davis, 1989 p.170; Marlatt et al., 1985). Coping can be a subjective term as it has a different meaning for people due to individual experiences, resources, values, beliefs and environments however it has been defined as 'the thoughts and behaviours used to manage internal and external demands of a situation that are appraised as stressful' (Folkman & Moskowitz, 2004, p.745; Taylor & Stanton, 2007). Different variables such as types of personality, locus of control, self-efficacy, and type of coping style are considered to be factors that influence the way in which an individual can perceive an event as stressful and can therefore determine how they may react to it. The Cognitive Behavioural model of Relapse prevention has shown strong support when compared with other models (Miller, Longabaugh & Connors, 1996). In particular, (Larimar, Palmer & Marlatt, 1999) proposed a 'Cognitive Behavioural Model of the Relapse Process' where they demonstrated that when a person is trying to change a negative health habit and they face a high risk situation, such as a challenge to overcome or a disappointment, that once they have enough coping resources to deal with this situation that that they are then more likely to resist temptation and this can therefore lead to a lower likelihood of relapse. Having sufficient coping skills and developing coping strategies can be considered very necessary for the individual as they can lead to the individual believing that

they can cope, thus influencing how they cope with life's ups and downs, for example an upset in the family, financial worries, unemployment, social skills and so on. In this study, the BRIEF cope (Carver 1997) measures a range of different cope scales such as instrumental support seeking (seeking assistance, information or advice on what one should do), emotional support (getting sympathy or emotional support from someone) and so on.

Self-efficacy has also shown to be an influence with the Relapse model as (Monti, Rosenhow, Colby, & Abram's, 1995). Marlatt (1985) and Annis and Davis (1989) both suggest that increasing self-efficacy in handling situations that place substance abusers at high risk for relapse is key in relapse prevention. It relates to coping skills also as without having adequate coping resources in place, the individual's perceptions of self-efficacy may decline which in turn can increase the appeal of substance use and therefore lead to relapse.

Research has shown that self-efficacy is very important in encouraging one to complete their goals and that teaching individuals the skills necessary to engage in behaviour aimed at attaining a desired outcome will increase their sense of self-efficacy (Bandura, 1977).

Therefore Self Efficacy has an important influence on the chance of relapse and can be developed from building a resource of positive coping skills. Identifying possible high-risk situations and developing skills necessary to cope with situations can, in turn, increase self-efficacy. Some studies have even shown that Self Efficacy was the most important factor that influenced successful recovery from addiction. P., D., Lee (2003) found that Self-efficacy was the sole predictor of successful recovery on a study of males attending Treatment and Smyth and Wiechelt (2005) also investigated drug use abstinence, self-efficacy and coping skills among individuals with multiple drug use and personality disorders and found that reverting to drugs was used as a coping mechanism if they experienced negative emotions, physical discomfort or conflict within their environment. This study will aim to build further on these studies and investigate if Self-Efficacy has an influence in an individual's successful recovery in addiction.

1.5 Social and Peer Support

Taylor (2007) defines social support as ‘information from others that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligations’ and sources of support can come from a wide variety such as ‘parents, a spouse or lover, relatives, friends, social and community contacts (Rietschlin, 1998). Having a good source of social support has shown to be a positive influence on health outcomes. Social support has been found to aid recovery from illness or treatment (Krohne & Slangen, 2005) and in relation to drug treatment has even shown that it can be a positive predictor of client retention (Dobkin, De Civita, Paraherakis & Gill (2002). The lifestyle of a drug user can often lead one to isolate themselves from their family and friends, the people whom they may be closest to and who care for them which can impact their support. Research indicates that there are high levels of social deprivation among treated drug users (O’Hare & O’Brien, 1992). Social and Peer support is considered very important for the individual in treatment and can have a significant positive impact on assisting them through the recovery process. (Martin et al., 2010) suggest that family involvement in treatment can be a positive predictor of programme completion and (West, 2009) also suggests that social support through recovery from addiction can have a positive influence. Some studies even recommend that this should be taken into account in drug treatment as Boisvert, Martin, Grosek & Clarie (2008) suggest that a peer-supported community treatment model has a significant positive impact on recovery from substance addiction. Drug treatment programmes that facilitate this concept are the ‘Therapeutic Communities’ whose aim is to promote change and positive growth in their clients by emphasising group work and the individual taking personal responsibility while they live in a structured and routine environment. An emphasis is also placed on creating a strong social network support in order to help them succeed.

This study involves two groups who will be recovering at different stages in a peer supported environment. In this study, the first group is a drug rehabilitation group with a community culture where clients contribute to the general running of their community in addition to their

own recovery by actively participating in activities and in group-work and the second group is a community employment programme that offers adult education in addition to drug intervention and education with an emphasis also placed on group and individual support.

1.6 Quality of Life in Addiction Recovery

Assessing Quality of life in addiction is of huge relevance as the individual can compromise one's life in many aspects such as physical health, mental health, education, career, relationships and so on by becoming dependent and addicted to substance use. The American Psychiatric Association (APA) recognise this and state that; 'substance abuse affects nearly all areas of functioning—vocational, social/familial, physical and mental health, residential status, and access to services' (APA, 2004). Quality of life plays a critical role in addiction recovery as it can be considered that the ultimate aim of addiction treatment is to improve the person's overall quality of life in addition to assisting in abstinence of drug use, as noted by (Laudet, 2011) due to support often being required with education, job training, housing, social skills and so on however it is also noted that it is still a relatively new concept in the field of addiction as there have been fewer than 100 studies of quality of life among substance abuse populations in the last 20 years. Quality of Life can measure many aspects of a person's life as it measures constructs in a physical context, psychological context and social context (Kahn & Juster, 2002). With quality of life measures, participants are asked to rate statements that relate to how satisfied they are with their life, quality of sleep, energy levels, personal relationships, engaging in hobbies and so on. Therefore one can suggest that as individuals are progressing through addiction recovery that they are also gaining a better quality of life due to the fact that as their substance uses diminishes, they are then able to enjoy their social relationships better, are able to eat better, have better quality sleep, attain goals such as career and so on and that in general their quality of life improves. Research findings have been supportive of this and Martin et al., (2008) found during a longitudinal study of 4-6 months there was a significant improvement on quality of life found between

intake and discharge. This study relies upon this fact as the criterion variable measured is Quality of life as opposed to successful completion of treatment due to time constraints.

Successful recovery from addictive behaviours therefore appear to result from a combination of different favourable factors and circumstances however the influence of social support, having adequate coping skills and one's own self-belief (or self-efficacy) appear to be key in contributing to completion of treatment therefore improving one's chance of maintaining addictive free behaviour. This study aims to prove that having higher coping skills, self-efficacy and social and peer support can assist one's chances of a successful recovery in addiction. It is hypothesised that there will be a strong positive correlational relationship between scores in coping skills, self-efficacy and social and peer support with scoring in Quality of life scoring and it is also hypothesised that those who scored highly in these three variables are more likely to remain in treatment. Clients attending two drug rehabilitation programmes will be measured on the above three variables and assessed as a follow up to measure the successful progression of addiction recovery. It is longitudinal in nature however due to time constraints factors are measured with a timeframe of three months and not at the completion of the Treatment programme. Therefore, for the purpose of a criterion variable, Quality of life is utilised as it is associated with the cessation of Drug treatment (Martin et al., 2008). In addition, differences of scores will be compared between the initial testing and the re-test with both groups. Differences will also be compared between the two treatment programmes themselves to determine if the same factors can prove influential during the stabilisation stage as well as the drug-free stage and there will also be a comparison between males and females. There are therefore four hypotheses; 1) There will be a statistically significant positive relationship between scores of coping skills and quality of life, 2) There will be a statistically significant positive relationship between self-efficacy quality of life, 3) There will be a statistically significant positive relationship between social and peer support with quality of life, 4) It is also predicted that those who report higher scores

will remain in treatment three months later. In addition to this, discussions will also be held regarding the differences between the first tests and the re-test with the two groups, the differences between the groups and also Gender differences.

2. METHODOLOGY

2.1 Participants

For this study, the samples obtained are clients attending two Drug Rehabilitation centres in Dublin city centre; Group A (stabilising clients only) and Group B (a mixture of stabilising clients and drug-free). Participants are drawn from a population of individual's attending Drug rehabilitation treatment programmes and who are therefore currently in the recovery process. Group A is a programme for individuals who are not yet drug-free but who have a willingness to become so. Group B also incorporate a similar programme where clients may not be necessarily drug free however are working towards becoming Drug-free and if successful will progress to the next programme, the Drug-free Day programme where clients attend treatment for one year. Participants were selected by contacting both Treatment centres and requesting access to Clients for the purpose of research that involves analysing factors that influence the recovery process and this access was granted.

Thirty seven questionnaires were distributed in total between both groups and both tests (eighteen participants in the first test and nineteen in the re-test) with all twenty seven Clients participating voluntarily. Ten of the initial eighteen participants remained in treatment three months later therefore only ten measures can be analysed comparatively between the two tests. An overall analysis of the responses to the demographic questions (table 1) offers an insight to the general characteristics of the participants. The participants ranged in age between 22 and 50 (mean age 37).

Table 1

Descriptive Statistical results of responses received from the Demographic Questions highlighting characteristics of Participants attending Treatment.

Descriptive Statistics/	N	%
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Demographic Questions

Gender

Male	20	74
Female	5	19
Unidentified	2	7

Age

20-30	3	11
30-40	13	48
40-50	8	30
50-60	1	3
Unidentified	2	7

Marital Status

Single	17	63
Cohabiting	3	11
Married	3	11
Divorced/Separated	2	7
Unidentified	2	7

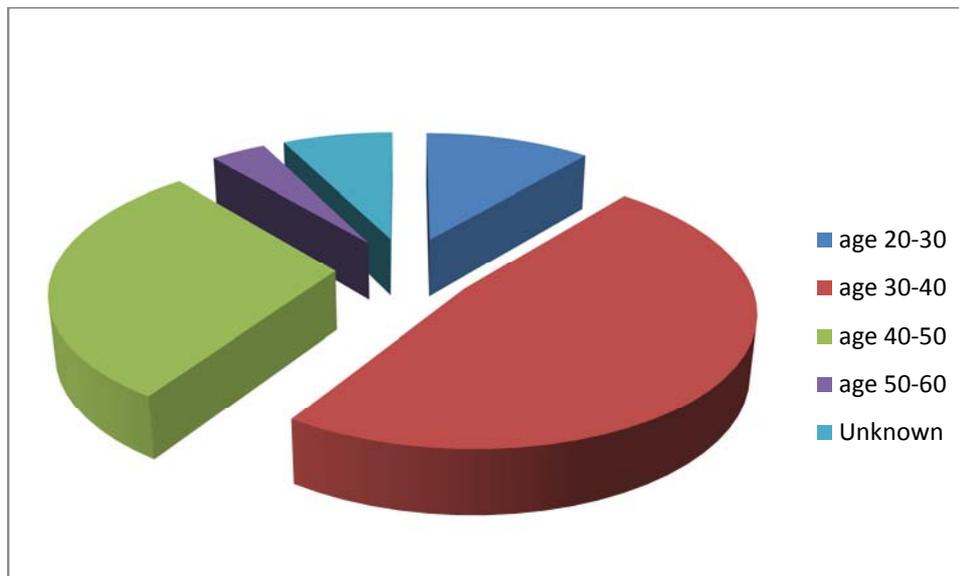
Education

None	3	11
Primary School completed	7	20
Junior Certificate	4	15
Leaving Certificate	4	15
Certificate	2	7
Diploma	3	11
Unidentified	2	7

Employment Status

Employed	12	44
Unemployed	11	41
Unable to work	1	3
Unidentified	3	11

Pie chart 1 showing Age Demographic of Participants attending Treatment



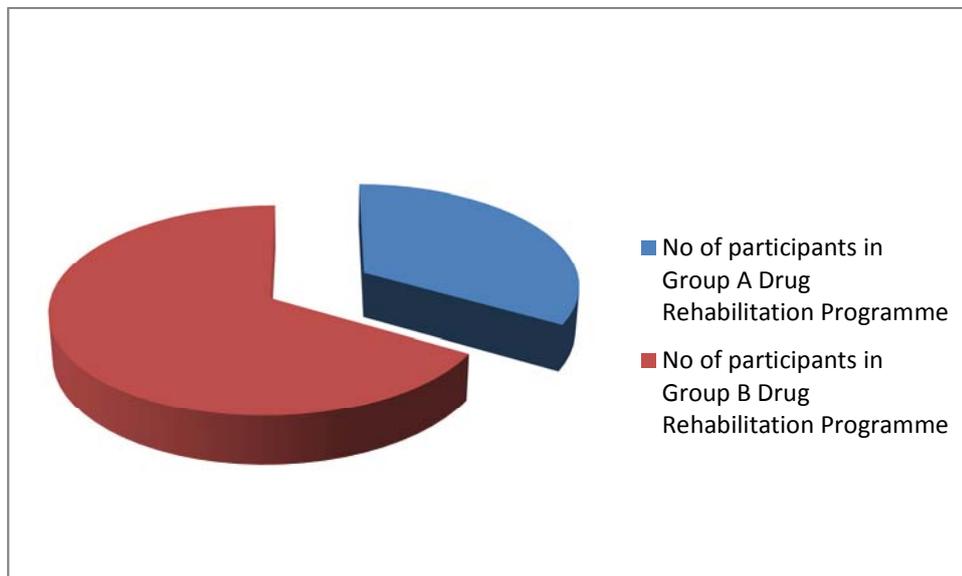
In the first study, 88% (N=16) were male and 12% (N=2) were female. In the re-test, 73% (N=14) of the 19 participants were males, 12% (N=3) were females and 3% (N=2) were unidentified as Gender was not completed in error with the Demographic sheet. These Demographics are similar to the profile reported by (Drug Treatment Centre Board, 2011) with males being the majority gender attending treatment however the ratio of males to females in this study is larger at 7:1 and the mean age is slightly greater at 37.2.

Overall, 55% (N=10) of the participants were present in the re-test that were identifiable, with 16% (N=3) remaining in Group A and 45% (N=7) in the Group B.

44% (n=12) of participants state that they are currently employed. Group B is an employment scheme in addition to a Drug Rehabilitation programmes.

Group A had a total of 9 participants across both tests, with 3 remaining in the second study and Group B had a total of 18 participants, with 7 remaining in the second study, therefore ten remaining in total for the comparative study. Of Group B, nine participants were drug-free and three participants were stabilising in the first study.

Pie Chart 2 to showing proportion of Participants in correlational study per group. Group A are 'Stabilising' and Group B are a mixture of Stabilising and Drug-free



2.2 Design

This research is a Correlational Longitudinal Between-participants Research Design where two groups at different stages of the recovery process are measured on three variables that influence recovery from Addiction. It is predicted that those with higher scores on Coping skills, Self-efficacy and Social and peer support will also correlate with a higher scoring in the Quality of Life measure. It is also predicted that participants with positive scoring across the 3 Variables will remain in treatment three months later. Participants were measured for these four Variable scores twice and three months apart during the Recovery process. The Predictor Variable (PV) is a high score in the measurement of Quality of Life. The Criterion Variables (CV) will be a high or a positive scoring in the following three measurements; Self-efficacy, Coping skills and Social and peer support.

2.3 Materials

This study relies on a self-administered questionnaire that each participant will respond to individually. The Questionnaire has five parts comprising of (1) A Demographic overview

with five questions (2) the twenty eight item Brief Cope Inventory (Carver, 1997) (3) the ten item Generalised Self Efficacy Scale (Schwarzer, 1993) (4) the twelve item Perceived Social Support Measure (Zimet, Dahlem, Zimet & Farley, 1988) and (5) the twenty eight item WHO Quality of Life Scale (World Health Organisation, 1998). Four items were omitted from the measures in total as are outlined in the relevant scales section below. These four psychometric scales were chosen for their simplicity, reliability and validity.

2.3.1 Brief Cope Inventory

The 28 item BRIEF COPE (Abbreviated of COPE Inventory - The Department of Psychology of the University of Miami; Carver, 1997). These items set out to measure the different ways that an individual deals with problems and the particular way of coping. Participants are asked to value each statement between 1-4 meaning as follows; 1 = 'I haven't been doing this at all, 2 = I've been doing this a little bit, 3 = I've been doing this a medium amount and 4 = I've been doing this a lot. Therefore, higher scores indicate a greater use of these coping strategies. The 26 statements are then linked to corresponding methods of coping such as Denial, Active coping etc. and are computed with no reversal of coding required. Two items were removed from this questionnaire in order to adapt to the sample being used who are in the process of recovery from Addiction which was Statement number 4; 'I've been using alcohol or drugs to make myself feel better' and number 11; 'I've been using alcohol or other drugs to make myself feel better'. Five Subscales were utilised for this research as they are considered to be the most relevant for this study because they are positive coping skills that are often used; Self-Distraction, Emotional Support, Instrumental support, Venting and Positive reframing). The BRIEF Cope inventory has proven to be useful in health related research (Carver , Scheier, Weintraub & Jagdish, 1989)

2.3.2 General Self Efficacy GSE

The General Self Efficacy Scale (Schwarzer, 1992; Jerusalem & Schwarzer, 1992) is a ten

item Psychometric measure that was created to predict how an individual can cope with daily hassles as well as adaptation after experiencing various kinds of stressful life events. The ten items are represented as statements where there are scores from 1 to 4; where 1 = not true at all, 2 – hardly true, 3 = moderately true and 4 = exactly true. Participants are requested to select a number that represents how they feel the statement applies to them. For example, one question states ‘‘I can always manage to solve difficult problems if I try hard enough’’ and the participant can choose the any number between 1 – 4, above. Responses to all 10 items are added to yield a final score (range from 10 to 40) with the higher score representing a greater sense of Self- Efficacy. There is no recoding required. The GES scale has shown strong validity in previous studies where positive associations have been found with favourable emotions, dispositional optimism, and work satisfaction (Luszczynska, Guti rrez-Do a, & Schwarz, 2005).

2.3.3 WHO-QOL BREF (World Health Organisation)

The WHOQOL-BREF (World Health Organisation, 1998; Calman 1987, p.1) assesses individuals' perceptions of their satisfaction with their life in the context of their goals, expectations and health issues. It has many uses in medical practice and research and can also be used to assess Quality of life across different cultures. Questions such as ‘How well are you able to concentrate?’ and ‘Are you able to accept your bodily appearance?’ are asked and participants are asked to score each answer numerically with values between 1 – 5. Different questions result in different values. The WHOQOL-Bref produces a profile with four domain scores about an individual’s overall perception of quality of life and health. Higher scores indicate a higher quality of life with three items to be reversed before scoring. After item recoding, scores are then computed by a sum of each item in each of the four domain and transformed as follows: Physical Health=28, Psychological=24, Social Relationships=12 and Environment=32 (World Health Organisation, 1998).

2.3.4 Multidimensional Scale of Perceived Social Support (MSPSS)

This is a twelve item self-report measure (Zimet et al., 1988; Carty-Mitchell & Zimet, 2000) which subjectively assesses social support using three subscales, with four items corresponding with three different sources of support, (a) Family, (b) Friends, and (c) Significant Other through 12 different statements that request the participant to score whether they agree with this statement between the values of 1 -7 ranging from 1 = Very Strongly Disagree to 7 = Very Strongly Disagree. For example, one statement is 'There is a special person who is around when I am in need' and the participants scores a value between 1-7 and this relates to 'Significant Other' support whereas 'My family really tries to help me' relates to Family support. Zimet et al., (1998) states that the MSPSS scale is shown to be psychometrically sound and also demonstrates good reliability. The MSPSS is simple to use and is ideal to use when subject time is limited and a number of measures are being administered at the same time and it is for these reasons that this measure has been selected.

2.4 Procedure

This is a pen and paper questionnaire where participants completed as part of group work in attendance at their treatment centre with staff and researcher both present. Permission was granted from both treatment centres to allow clients to participate in this study. It was advised that participation was optional and that the participants could withdraw from the study at any time. Debriefing was also provided. Both Groups held a short discussion afterwards regarding their feedback with questions raised. Both groups had access to supports within the programme such as group and one-to one counselling as part of their treatment within the Centre. As this is a longitudinal study, there was a repeated measure three months later with the same groups. In total, 37 Questionnaires were completed; 12 with clients attending Group A and 25 with Group B with 27 individuals participating across both tests. Ethical guidelines as prescribed by the Psychological Society of Ireland and the Ethics committee of the college were adhered to.

3. RESULTS

While the sample size is small in order for a correlational study to be more accurate it must be understood within the context of the study that a specific group of participants (individuals in the process of Recovery from Addiction), were obtained. Due to the size, non-parametric statistical tests were deemed the most appropriate. Descriptives are shown for all 27 participants who took part in the correlational study (table 2). A Kendall Tau B Test was used to ascertain if there was a positive correlational relationship between Coping skills, Self-efficacy and Perceived Social and Peer Support with Quality of life for Group A (table 3) and Group B (table 4). A comparison of means of scoring was analysed between participants who remained in treatment with those who did not (table 5).

A Wilcoxon Test was then used to compare differences between the test and re-test for the Group A (table 6) and Group B (table 7). A Mann Whitney U test was used to measure the differences between Males/Females (table 8) and between Group A and B (table 9).

Table 2

3.1 Descriptives for all Participants

Variable	Mean	Standard Deviation
Age	37.20	6.74
Self-efficacy	31.20	5.17
Self-Distraction Cope	5.92	1.73
Emotional Support Cope	6.48	1.50
Instrumental Support Cope	7.16	1.18
Venting Cope	5.80	1.91
Positive Reframing cope	6.60	1.35

Social & Peer Support	58.20	15.51
Physical Quality of life	13.94	2.02
Psychological Quality of life	12.52	1.60
Social Quality of life	13.15	3.15
Environmental Quality of life	14.37	1.87

3.2 Correlation

3.2.1 Correlation - Hypothesis 1, 2 and 3 with Group A

Table 3

A Kendall Tau B showing the correlational relationship between coping skills, Self-Efficacy and Social and Peer Support with Quality of life with Group A

Variables	Subscale		Subscale	
	tau b	p	tau b	p
<u>Coping Skills Subscales</u>				
	<u>Self- Distraction</u>		<u>Emotional Support Coping</u>	
Domain 4 Physical	.222	p=.552	-.786*	p=.032
Domain 3 Psychological	-.072	p=.845	.276	p=.444
Domain 2 Social	.593	p=.113	.071	p=.846
Domain 1 Environmental	-.964**	p=.010	-.071	p=.846
	<u>Use of Instrumental Support</u>		<u>Venting</u>	
Domain 1 Physical	-.296	p=.428	-.806*	p=.037
Domain 2 Psychological	.215	p=.559	.389	p=.304
Domain 3 Social	.148	p=.692	.161	p=.676
Domain 4 Environmental	.445	p=.234	.000	p=1.000
	<u>Positive Reframing</u>			
Domain 1 Physical	-.741*	p=.048		
Domain 2 Psychological	.501	p=.173		
Domain 3 Social	.296	p=.428		

Domain 4 Environmental .000 p=1.000

	tau b	p
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Self -Efficacy

Domain 1 Physical	-.643	p=.080
Domain 2 Psychological	-.138	p=.702
Domain 3 Social	.071	p=.846
Domain 4 Environmental	.214	p=.559

Social and Peer Support

Domain 1 Physical	-.138	p=.702
Domain 2 Psychological	-.333	p=.348
Domain 3 Social	.552	p=.126
Domain 4 Environmental	.138	p=.702

**Correlation is significant at the 0.05 level (2-tailed)*

***Correlation is significant at the 0.01 level (2-tailed)*

A Kendall Tau B correlation was conducted with participants in Group A to investigate if there is a positive correlational relationship between Coping Skills, levels of Self-Efficacy and Perceived Social and Peer Support with the Four Domains of Quality of Life. There was no significant association found across any of the identified variables with Quality of life. A strong positive association was found between Self-Distraction and Perceived Social and Peer support with Social Quality of life. There was a moderate strong association found between Use of Instrumental support and Physical Quality of life, two coping subscales (Venting and Positive Reframing) and Perceived Social and Peer support with Psychological Quality of life. There was a significant negative association found between four of the Coping subscales; Emotional Support, Venting and Positive Reframing with Physical Quality of life and Self-Distraction cope with Environmental Quality of life. Results are as follows;

Coping Skills

Self -Distraction Cope

There was a significant negative association between Self Distraction Cope and Environmental Quality of life ($\tau b(6) = -.96, p = .010$) and a strong association was found between Self-Distraction cope and Social Quality of life ($\tau b(6) = .59, p = .113$). There was a weak association found between Self Distraction Cope and Physical Quality of life ($\tau b(6) = .022, p = .552$) and Psychological Quality of life ($\tau b(6) = -.07, p = .845$).

Emotional Support Cope

There was a significant negative association between Emotional Support Cope and Physical Quality of life ($\tau b(6) = -.79, p = .032$). There was a weak association between Emotional Support Cope and Psychological Quality of life ($\tau b(6) = .27, p = .444$) Social Quality of life ($\tau b(6) = .07, p = .846$) or Environmental Quality of life ($\tau b(6) = -.07, p = .846$).

Use of Instrumental Support Cope

There was a moderately strong association between Use of Instrumental Support Cope and Physical Quality of life ($\tau b(6) = -.30, p = .428$) and with Environmental Quality of life ($\tau b(6) = .45, p = .234$). A weak association was found between Use of Instrumental Support and Psychological Quality of life ($\tau b(6) = .21, p = .559$) and Social Quality of life ($\tau b(6) = .15, p = .692$).

Venting Cope

There was a significant negative association between Venting Cope and Physical Quality of life ($\tau b(6) = -.815, p = .037$). A moderately strong association between Venting Cope and Psychological Quality of life ($\tau b(6) = .39, p = .304$). A weak association was found between Venting cope and Social Quality of life ($\tau b(6) = .16, p = .676$) and Environmental Quality of life ($\tau b(6) = .0, p = 1$).

Positive Reframing Cope

There was a significant negative association between Positive Reframing Cope and Physical Quality of life ($\tau b(6) = -.741, p = .048$). There was a moderately strong association between Positive Reframing Cope and Psychological Quality of life ($\tau b(6) = .50, p = .173$) and Social Quality of life ($\tau b(6) = .30, p = .428$). There was a weak association found between Positive reframing cope and Environmental Quality of life ($\tau b(6) = .0, p = 1$).

Self-Efficacy

There was a strong association between Self-Efficacy and Physical Quality of life ($\tau b(6) = .64, p = .080$). There was a weak association found between Self-Efficacy and Psychological Quality of life ($\tau b(6) = -.138, p = .702$), Social Quality of life ($\tau b(6) = -.071, p = .846$) or Environmental Quality of life ($\tau b(6) = .21, p = .559$).

Perceived Social and Peer Support

There was a strong association found between Perceived Social and Peer Support and Social Quality of life ($\tau b(6) = .55, p = .126$). There was a moderately strong association found between Perceived Social and Peer Support and Psychological Quality of life ($\tau b(6) = .33, p = .348$). There was a weak association found between Perceived Social and Peer support with Physical Quality of life ($\tau b(6) = -.14, p = .702$) and Environmental Quality of life ($\tau b(6) = .03, p = .888$).

3.2.2 Correlation – Hypothesis 1, 2 and 3 with Group B

Table 4

A Kendall Tau B showing the correlational relationship between coping skills, Self-Efficacy and Social and Peer Support with Quality of life with Group B

Variables	Subscale		Subscale	
	tau b	p	tau b	p

Coping Skills Subscales

	<u>Self-Distraction</u>		<u>Emotional Support Coping</u>	
Domain 1 Physical	.354	p=.134	.157	p=.513
Domain 2 Psychological	-.137	p=.566	-.018	p=.942
Domain 3 Social	.090	p=.712	.187	p=.451
Domain 4 Environmental	.200	p=.393	-.017	p=.942

	<u>Use of Instrumental Support</u>		<u>Venting</u>	
Domain 1 Physical	.249	p=.318	.250	p=.288
Domain 2 Psychological	.105	p=.676	.068	p=.775
Domain 3 Social	.022	p=.931	.125	p=.607
Domain 4 Environmental	.247	p=.319	-.149	p=.524

	<u>Positive Reframing</u>	
Domain 1 Physical	.312	p=.202
Domain 2 Psychological	.019	p=.940
Domain 3 Social	.374	p=.140
Domain 4 Environmental	.219	p=.369

	<u>tau b</u>	<u>p</u>
<u>Self-Efficacy</u>		
Domain 1 Physical	.034	p=.887
Domain 2 Psychological	.000	p=.010
Domain 3 Social	-.090	p=.712
Domain 4 Environmental	.000	p=.670
<u>Perceived Social and Peer Support</u>		
Domain 1 Physical	-.063	p=.782
Domain 2 Psychological	-.095	p=.676
Domain 3 Social	.301	p=.196
Domain 4 Environmental	.202	p=.369

A Kendall Tau B correlation was conducted with participants of Group B to investigate if there is a positive correlational relationship between Coping Skills, levels of Self-Efficacy and Perceived Social and Peer Support with the Four Domains of Quality of Life. There were no significant positive associations found between the three Variables with

Quality of life. There was a moderately strong association found between two coping subscales (Self-Distraction and Positive reframing) with Physical quality of life and a moderately strong association found between Perceived social and peer support with Social Quality of life. Results as follows;

Coping Skills

Self-Distraction Cope

There was a moderately strong association between Self Distraction Cope and Physical Quality of life ($\tau b(12) = 0.35, p = .134$). A weak association was found with Self-Distraction cope and Psychological Quality of life ($\tau b(12) = -.137, p = .566$), with Social Quality of life ($\tau b(12) = .09, p = .712$) and with Environmental Quality of life ($\tau b(12) = .20, p = .393$)

Emotional Support Cope

There was a weak association between Emotional Support Cope and Physical Quality of life ($\tau b(12) = .16, p = .513$), Psychological Quality of life ($\tau b(12) = -.02, p = .942$) Social Quality of life ($\tau b(12) = -.02, p = .451$) and with Environmental Quality of life ($\tau b(12) = -.02, p = .942$).

Use of Instrumental Support Cope

There was a weak association between Use of Instrumental Support Cope and Physical Quality of life ($\tau b(12) = .25, p = .318$) Psychological Quality of life ($\tau b(12) = .105, p = .676$), Social Quality of life ($\tau b(12) = .02, p = .931$) and with Environmental Quality of life ($\tau b(12) = .025, p = .319$).

Venting Cope

There was a weak association between Venting Cope and Physical Quality of life ($\tau b(12) =$

.25, $p = .288$) Psychological Quality of life ($\tau b(12) = -.068$, $p = .775$) Social Quality of life ($\tau b(12) = .125$, $p = .607$) and with Environmental Quality of life ($\tau b(12) = -.149$, $p = .524$).

Positive Reframing Cope

There was a moderately strong association between Positive Reframing Cope and Physical Quality of life ($\tau b(12) = .31$, $p = .202$) and with Social Quality of life ($\tau b(12) = .38$, $p = .140$). A weak correlation was found between Positive Reframing cope and Psychological Quality of life ($\tau b(12) = .02$, $p = .940$) and with Environmental Quality of life ($\tau b(12) = .22$, $p = .369$).

Self-Efficacy

There was a weak association between Self-Efficacy and Physical Quality of life ($\tau b(12) = .034$, $p = .887$) Psychological Quality of life ($\tau b(12) = -.000$, $p = 1.0$) Social Quality of life ($\tau b(12) = -.10$, $p = .712$) or Environmental Quality of life ($\tau b(12) = -.10$, $p = .670$).

Perceived Social and Peer Support

There was a moderately strong association found between Perceived Social and Peer Support with Social Quality of life ($\tau b(12) = .301$, $p = .196$). A weak association was found between Perceived Social and Peer support with Physical Quality of life ($\tau b(12) = -.06$, $p = .782$) Psychological Quality of life ($\tau b(12) = -.095$, $p = .676$) and with Environmental Quality of life ($\tau b(12) = -.202$, $p = .369$).

3.3 Comparison of means between test and re-test – Hypothesis 4

Table 5

A Comparison of Means to analyse the scoring of the participants who remained in Treatment compared to scoring of those who did not with Coping skills, self-efficacy, social and peer support and Quality of life

Variables	Mean m	Standard Deviation s.d	Mean m	Standard Deviation s.d
<u>Coping Skills Subscales</u>				
	<u>Self-Distracton</u>		<u>Emotional Support</u>	
<u>Coping</u>				
Remained in Treatment	5.60	1.71	6.60	1.50
Did not remain	7.37	.92	6.25	1.59
	<u>Use of Instrumental Support</u>		<u>Venting</u>	
Remained in Treatment	7.20	1.47	5.80	2.15
Did not remain	6.87	1.26	6.00	1.41
	<u>Positive Reframing</u>			
Remained in Treatment	6.90	1.19		
Did not remain	6.50	.75		
<u>Quality of Life Domains</u>				
	<u>Physical</u>		<u>Psychological</u>	
Remained in Treatment	13.02	1.81	13.37	1.40
Did not remain	13.84	1.11	12.30	1.36
	<u>Social</u>		<u>Environmental</u>	
Remained in Treatment	13.00	2.30	14.00	1.82
Did not remain	13.33	2.76	14.60	2.43
Variables	m	s.d		

Self-Efficacy

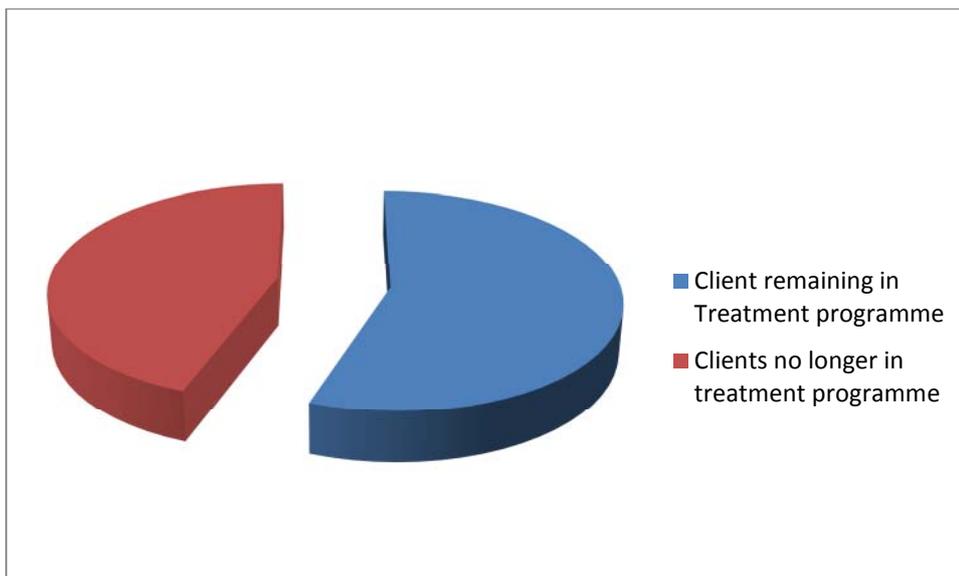
Remained in Treatment	30.60	4.83
Did not remain	32.62	4.27

**Perceived Social
& Peer Support**

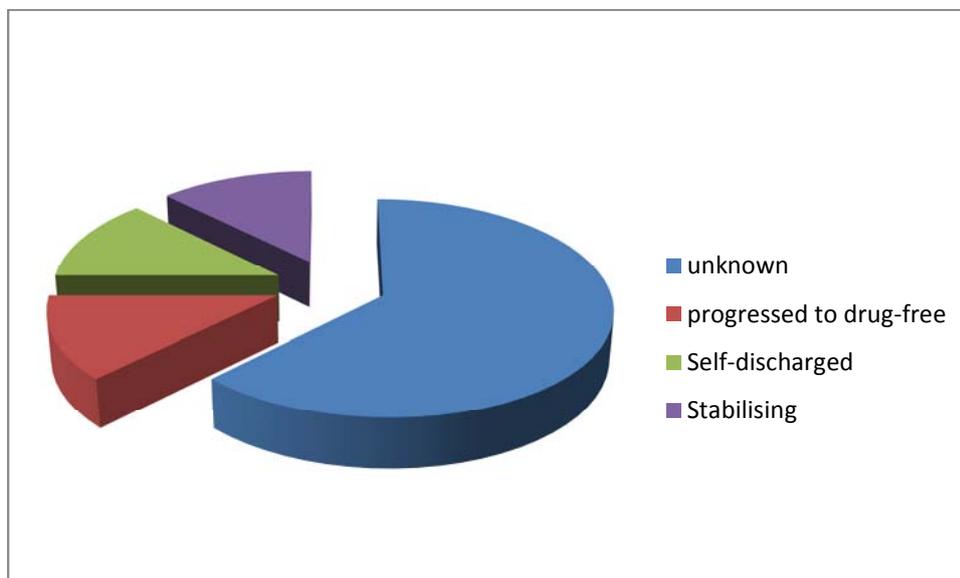
Remained in Treatment	61.80	16.35
Did not remain	54.62	19.28

On comparing means of scores across all identified Variables between participant's who remained in treatment to participant's who did not remain, it was found that those who remained in treatment scored higher on three of the Cope subscales (Emotional support, Use of Instrumental support and Positive reframing), on levels of Social support and also Psychological Quality of life. Participants who did not stay in treatment scored higher on two of the cope subscales (Self-Distraction and Venting), levels of Self-Efficacy and three of the domains of Quality of life (Psychological, Social and Environmental Quality of life). Results are as follows;

Pie Chart no 3 showing no of Participants who remained in Treatment three months later compared to those who did not



Pie Chart 4 showing how Participants progressed who did not remain in Treatment



Coping Skills

Self-Distracton Cope

Participants who did not remain in treatment scored higher on Self-Distracton cope (mean=7.37, s.d=.92) when compared to participants who remained in treatment (mean=5.60, s.d=1.72).

Emotional Support Cope

Participants who remained in treatment scored higher on Emotional support cope (mean=6.60, s.d=1.50) when compared to participants who did not remain in treatment (mean=6.25, s.d=1.59).

Use of Instrumental Support Cope

Participants who remained in treatment scored higher on Use of Instrumental support cope (mean=7.20, s.d=1.47) when compared to participants who did not remain in treatment (mean=6.875, s.d=1.12).

Venting Cope

Participants who did not remain in treatment scored higher on Venting cope (mean=6.00, s.d=1.41) when compared to participants who remained in treatment (mean=5.80, s.d=2.15).

Positive Reframing Cope

Participants who remained in treatment scored higher on Positive Reframing cope (mean=6.90, s.d=1.20) when compared to participants who did not remain in treatment (mean=6.50, s.d=.75).

Self-Efficacy

Participants who did not remain in treatment scored higher on Self-Efficacy (mean=32.62, s.d=4.83) when compared to participants who remained in treatment (mean=30.6, s.d=4.27).

Perceived Social and Peer Support

Participants who remained in treatment scored higher on Perceived Social and Peer support (mean=61.80, s.d=16.35) when compared to participants who did not remain in treatment (mean=54.62, s.d=19.28).

Quality of life

Physical

Participants who did not remain in treatment scored higher on Physical Quality of life (mean=13.84, s.d=1.81) when compared to participants who remained in treatment (mean=13.02, s.d=1.11).

Psychological

Participants who remained in treatment scored higher on Psychological Quality of life (mean=13.37, s.d=1.40) when compared to participants who did not remain in treatment (mean=12.30, s.d=1.36).

Social

Participants who did not remain in treatment scored higher on Social Quality of life (mean=13.33, s.d=2.29) when compared to participants who remained in treatment (mean=13.00, s.d=2.76).

Environmental

Participants who did not remain in treatment scored higher on Positive Reframing cope (mean=14.60, s.d=1.82) when compared to participants who remained in treatment (mean=14.00, s.d=2.42).

3.4 Tests for Differences

3.4.1 Differences between test and re-test for Group A

Table 6

A Wilcoxon Test analyses the differences between the Test and Re-test for Group A with respect to Coping skills, self-efficacy, social and peer support with Quality of life

Variables	Mean m	Standard Deviation s.d	Mean m	Standard Deviation s.d
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Coping Skills Subscales

	<u>Self-Distraction</u>		<u>Emotional Support Coping</u>	
Test	7.33	1.15	5.00	1.00
Re-test	6.67	.58	5.33	1.53
	<u>Use of Instrumental Support</u>		<u>Venting</u>	
Test	6.33	1.53	4.67	1.15
Re-test	6.67	1.53	6.00	1.73

Positive Reframing

Test	5.67	1.15
Retest	7.33	.58

Quality of Life Domains

	<u>Physical</u>		<u>Psychological</u>	
Test	14.48	1.32	12.44	1.02
Re-test	15.46	3.04	12.67	1.76

	<u>Social</u>		<u>Environmental</u>	
Test	14.67	1.33	14.50	2.60
Re-test	11.11	4.68	14.67	5.01

Variables	m	s.d
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Self-Efficacy

Test	32.06	7.21
Re-test	29.67	2.89

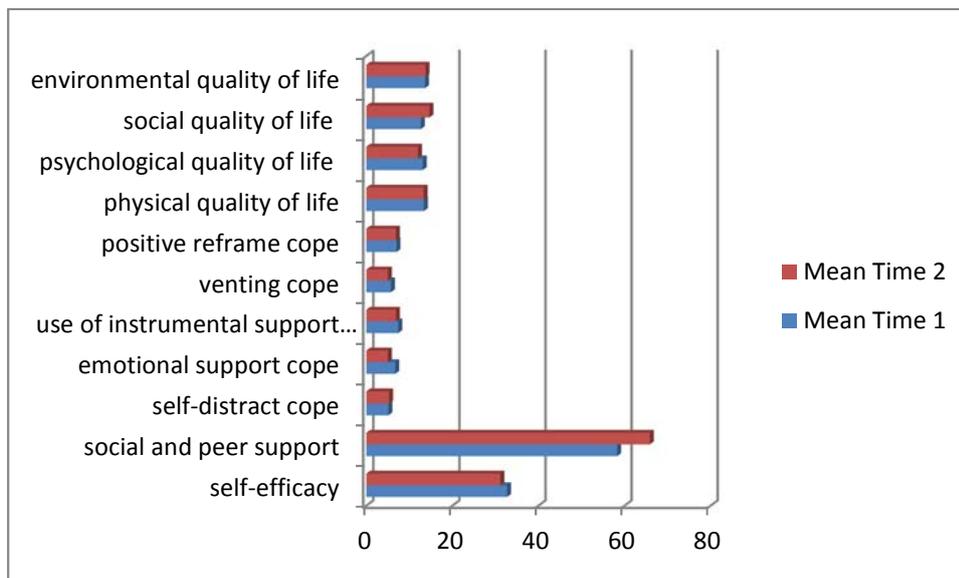
Perceived Social & Peer Support

Test	61.67	8.50
Re-test	54.00	18.25 *

**P is significant at the 0.05 level*

A Wilcoxon Test found that there was a statistical significant difference found between levels of Social and Peer support between the first test and the re-test of Group A with scores decreasing. There was no statistical difference found with the remainder three Variables (Coping Skills, Self-Efficacy and Quality of life) of participants attending Group A (stabilising group). Results are as follows;

Bar Chart 1 showing comparison of means between Test and Re-test for Group A



Coping Skills

Self-Distraction Cope

There was no statistically significant difference on Self-Distraction coping styles between Test 1 and 2 ($z = -.816$, $p = .414$). There was a decrease in scores found in the re-test with the mean score reducing from 7.3($s.d=1.15$) to 6.67($s.d=.58$).

Emotional Support Cope

There was no statistical significant difference on Emotional Support coping styles between Test 1 and 2 ($z = -1.00$, $p = .317$). There was an increase in scores found in the re-test increasing from 5.00($s.d=1.00$) to 5.33($s.d=1.53$).

Use of Instrumental Support Cope

There was no statistical significant difference on the Use of Instrumental Support coping styles between Test 1 and 2 ($z = -.447$, $p = .655$). There was an increase in scores found in the re-test increasing from 6.33($s.d=1.53$) to 6.67($s.d=1.53$).

Venting Cope

There was no statistical significant difference on Venting coping styles between Test1 and 2 ($z = -1.342$, $p = .180$). There was an increase in scores found in the re-test increasing from 4.67(s.d=1.15) to 6.00(1.73).

Positive Reframing Cope

There was no statistical significant difference on Positive Reframing coping styles between Test 1 and 2 ($z = -.1.633$, $p = .102$). There was an increase in scores found in re-test increasing from 5.67(s.d=1.15) to 7.33(s.d=0.58).

Self-Efficacy

There was no statistical significant difference on levels of Self-Efficacy between Test 1 and 2 ($z = -.816$, $p = .414$). There was a decrease in scores found in the re-test with scores decreasing from 32.08(s.d=7.21) to 29.67(s.d=2.89).

Perceived Social and Peer Support

There was a statistical significant difference on Perceived Social and Peer Support between the Test 1 and 2 ($z = -1.069$, $p = .285$). There was a large decrease in scores found in the re-test with scores decreasing from 61.67(s.d=8.50) to 54.00(s.d=18.25).

Quality of life

Physical

There was no statistical significant difference on Physical Quality of life between Test 1 and 2 ($z = -.272$, $p = .785$). There was an increase in scores found in the second capture with scores increasing from 14.48(s.d=1.15) to 15.46(s.d=0.58).

Psychological

There was no statistical significant difference on Psychological Quality of life between Test 1 and 2 ($z = -.577$, $p = .564$). There was an increase in scores found in the re-test with scores increasing from 12.44(s.d=1.02) to 12.67(s.d=1.76).

Social

There was no statistical significant difference on Social Quality of life between Test 1 and 2 ($z = -1.069$, $p = .285$). There was a decrease in scores found in the re-test with scores decreasing from 14.67(s.d=1.33) to 11.11(s.d=4.68).

Environmental

There was no statistical significant difference on Environmental Quality of life between Test 1 and 2 ($z = .0$, $p = 1$). There was an increase in scores found in the re-test with scores increasing from 14.50(s.d=2.60) to 14.67(s.d=5.01).

3.4.2 Differences between test and re-test for Group B

Table 7

A Wilcoxon Test analyses the differences between the test and re-test for Group B with respect to coping skills, self-efficacy, social and peer support and Quality of life

Variables	Mean m	Standard Deviation s.d	Mean m	Standard Deviation s.d
<u>Coping Skills Subscales</u>				
	<u>Self-Distraction</u>		<u>Emotional Support Coping</u>	
Test	5.14	1.67	6.71	1.60
Re-test	5.29	.95	6.83	1.17
	<u>Use of Instrumental Support</u>		<u>Venting</u>	

Test	7.43	1.51	5.71	2.36
Re-test	6.86	1.56	5.00	2.08

Positive Reframing

Test	7.00	1.15
Re-test	6.86	1.46

Quality of Life Domains

	<u>Physical</u>		<u>Psychological</u>	
Test	13.37	1.96	13.10	1.43
Re-test	13.31	1.22	12.00	1.54

	<u>Social</u>		<u>Environmental</u>	
Test	12.67	2.21	13.64	1.41
Re-test	14.67	3.17	13.77	1.23

Variables	m	s.d
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Self-Efficacy

Test	32.71	4.11
Re-test	31.14	4.02

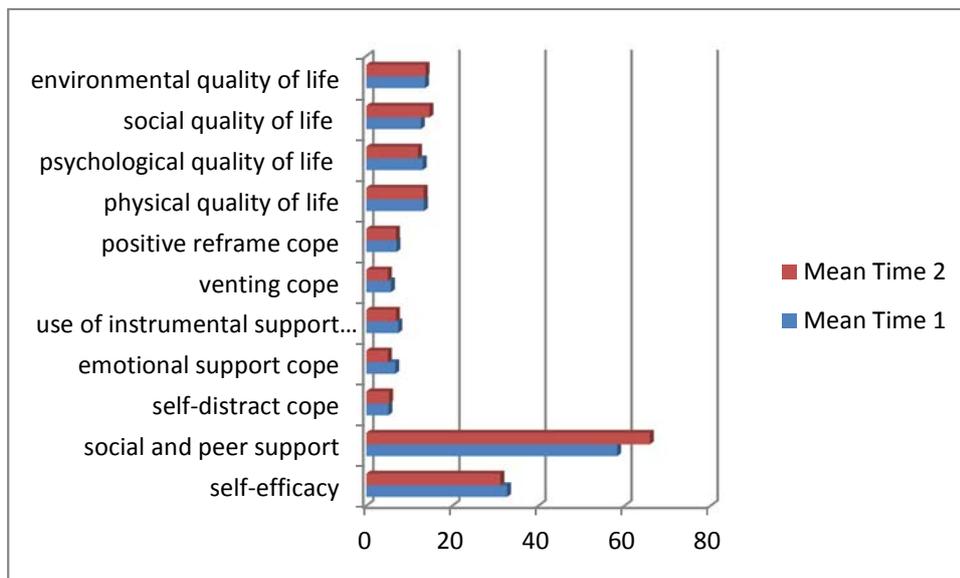
**Perceived Social
& Peer Support**

Test	58.29	17.23
Re-test	65.86	10.85 *

**P is significant at the 0.05 level*

A Wilcoxon Test found that there was a statistical significant difference found in levels of Perceived Social and Peer support with participants of Group B between the test and re-test. There was no statistical significant difference found between the two studies with the three remainder variables Coping skills, Self-Efficacy and Quality of life. Results are as follows;

Bar Chart 2 showing comparison of mean scores between Test and Re-test Group B



Coping Skills

Self-Distract Cope

There was no statistically significant difference on Self-Distract coping styles between Test 1 and 2 ($z = -.276$, $p = .783$). There was an increase in scores found in the re-test with the mean score increasing from 5.14($s.d=1.67$) to 5.29($s.d=.95$).

Emotional Support Cope

There was no statistical significant difference on Emotional Support coping styles between Test 1 and 2 ($z = 1.414$, $p = .157$). There was an increase in scores found in the re-test increasing from 6.7($s.d=1.60$) to 6.83($s.d=1.17$).

Use of Instrumental Support Cope

There was no statistical significant difference on the Use of Instrumental Support coping styles between Test 1 and 2 ($z = -1.069$, $p = .285$). There was a decrease in scores found in the re-test reducing from 7.43($s.d=1.51$) to 6.86($s.d=1.56$).

Venting Cope

There was no statistical significant difference on Venting coping styles between Test 1 and 2 ($z = -.962$, $p = .336$). There was a decrease in scores found in the re-test with the mean score decreasing from 5.71 (s.d=2.36) to 5.00 (s.d=2.08).

Positive Reframing Cope

There was no statistical significant difference on Positive Reframing coping styles between Test 1 and 2 ($z = -.322$, $p = .748$). There was a decrease in scores found in re-test with the mean decreasing from 7.00 (s.d=1.15) to 6.86 (s.d=1.46).

Self-Efficacy

There was no statistical significant difference on levels of Self-Efficacy between Test 1 and 2 ($z = -1.802$, $p = .072$). There was a decrease in scores found in the re-test with the mean score decreasing from 32.71 (s.d=4.11) to 31.14 (s.d=4.02).

Perceived Social and Peer Support

There was a statistically significant difference on Perceived Social and Peer Support between test 1 and 2 ($z = -2.028$, $p = .043$). There was an increase in scores found in the re-test with the mean score increasing from 58.29 (s.d=17.23) to 65.86 (s.d=10.85).

Quality of life*Physical*

There was no statistical significant difference on Physical Quality of life between Test 1 and 2 ($z = -.085$, $p = .933$). There was a decrease in scores found in the re-test with the mean decreasing from 13.37 (s.d=1.96) to 13.31 (s.d=1.22).

Psychological

There was no statistical significant difference on Psychological Quality of life between Test 1

and 2 ($z = -1.270$, $p = .204$). There was a decrease in scores found in the re-test with mean score decreasing from 13.10(s.d=1.43) to 12.00(s.d=1.54).

Social

There was a no statistical significant difference on Social Quality of life between Test 1 and 2 ($z = -1.59$, $p = .112$). There was an increase in scores found in the re-test with scores increasing from 12.67(s.d=2.21) to 14.67(s.d=3.17).

Environmental

There was no statistical significant difference on Environmental Quality of life between Test 1 and 2 ($z = -.512$, $p = .609$). There was an increase in scores found in the re-test with scores increasing from 13.64(s.d=1.41) to 13.77(s.d=1.23).

3.4.3 Differences between Males and Females

Table 8

A Mann-Whitney U test to show Gender differences across the four identified Variables.

Means and Standard Deviations are also compared to show differences.

Variables	Mean m	Standard Deviation s.d	Mean m	Standard Deviation s.d
<u>Coping Skills Subscales</u>				
	<u>Self-Distraction</u>		<u>Emotional Support Coping</u>	
Male	5.73	1.72	6.45	1.53
Female	7.33	1.15	6.67	1.53
	<u>Use of Instrumental Support</u>		<u>Venting</u>	
Male	7.14	1.21	5.59	1.92
Female	7.33	1.15	7.33	1.15

Positive Reframing

Male	6.55	1.40
Female	7.60	1.00

Quality of Life Domains

	<u>Physical</u>		<u>Psychological</u>	
Male	13.68	1.82	12.75	1.54
Female	15.81	2.82	10.89	1.02*

	<u>Social</u>		<u>Environmental</u>	
Male	13.06	3.08	14.33	1.96
Female	13.78	4.29	14.67	1.15

Variables	m	s.d
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Self-Efficacy

Male	31.32	5.43
Female	30.33	3.21

**Perceived Social
& Peer Support**

Male	57.45	14.54
Female	63.67	14.83

**P is significant at the 0.05 level*

A Mann Whitney U Test was used to find if there was a Gender difference between all Variables. The Mann Whitney U test found that there was a statistically significant difference with scores of Psychological Quality of life between Males and Females with Males scoring much higher however there was no statistical significant difference found with Coping skills, Self-Efficacy, Perceived Social and Peer Support or with the remainder three domains of Quality of life. Means and Standard Deviations for both Males and Females were used to compare differences. There were 22 males compared with 3 females. Results are as follows;

Coping Skills

Self-Distraction Cope

Females and males and Males did not differ significantly in Self-Distraction Cope ($U = 14.00$, $p = .101$). Males (mean=5.73; s.d=1.723) scored higher when compared with females (mean=7.33, s.d=1.155)

Emotional Support Cope

Females and Males did not differ significantly in Emotional Support cope ($U = 31.00$, $p = .863$). Females (mean=6.67; s.d=1.528) scored higher when compared with males (mean=6.45, s.d=1.533).

Use of Instrumental Support Cope

Females and Males did not differ significantly in Use of Instrumental Cope ($U = 30.50$, $p = .812$). Females (mean=7.33; s.d=1.155) scored higher when compared with males (mean=7.14, s.d=1.207).

Venting Cope

Females and Males did not differ significantly in Venting Cope ($U = 15.00$, $p = .120$), Females (mean=7.33; s.d=1.919) scored higher when compared with males (mean=5.59, s.d=1.155).

Positive Reframing Cope

Females and Males did not differ significantly in Positive Reframing cope ($U = 28.00$, $p = .665$). Females (mean=7.60; s.d=1.00) scored higher when compared with males (mean=6.55, s.d=1.405).

Self-Efficacy

Females and Males did not differ significantly in levels of Self-Efficacy ($U = 27.5$, $p = .643$).

Males (mean=31.32; s.d=5.428) scored higher when compared with males (mean=30.33, s.d=3.215).

Perceived Social and Peer Support

Females and Males did not differ significantly in Perceived Social and Peer Support ($U = 21.5$, $p = .335$). Females (mean=63.67; s.d=24.826) scored higher when compared with males (mean=57.45, s.d=14.543).

Quality of life

Physical

Females and Males did not differ significantly in Physical Quality of life ($U = 14.50$, $p = .119$). Females (mean=15.81; s.d=2.819) scored higher when compared with males (mean=13.68, s.d=1.824).

Psychological

Females and Males differed significantly in Psychological Quality of life ($U = 9.5$, $p = .047$). Males (mean=12.75; s.d=1.543) scored higher when compared with females (mean=10.89, s.d=1.018).

Social

Females and Males did not differ significantly in Social Quality of life ($U = 33.00$, $p = 1.0$). Females (mean=13.78; s.d=3.084) scored higher when compared with males (mean=13.06, s.d=4.286).

Environmental

Females and Males did not differ significantly in Environmental Quality of life ($U = 27.5$, $p = .643$). Females (mean=14.67; s.d=1.155) scored higher when compared with males

(mean=14.33, s.d=1.964).

3.4.4 Differences between Group A and Group B

Table 9

A Mann Whitney U Test to show for differences across all Variables between Group A and Group B. Means and Standard Deviations are compared between the two groups.

Variables	Mean m	Standard Deviation s.d	Mean m	Standard Deviation s.d
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Coping Skills Subscales

<u>Coping</u>	<u>Self-Distracton</u>		<u>Emotional Support</u>	
Group A	6.56	1.01	6.00	1.22
Group B	5.56	1.96	6.75	1.61

	<u>Use of Instrumental Support</u>		<u>Venting</u>	
Group A	6.67	1.12	5.89	1.27
Group B	7.44*	1.15	5.75	2.23

	<u>Positive Reframing</u>	
Group A	6.33	1.22
Group B	6.75	1.44

Quality of Life Domains

	<u>Physical</u>		<u>Psychological</u>	
Group A	14.16	1.96	12.37	1.67
Group B	13.82	2.09	12.61	1.60

	<u>Social</u>		<u>Environmental</u>	
Group A	13.04	2.96	15.00	2.16

Group B	13.21	3.34	14.62	1.65
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Variables	m	s.d
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Self-Efficacy

Group A	29.33	4.66
Group B	32.25	5.28

Perceived Social & Peer Support

Group A	57.11	13.73
Group B	58.81	16.83

*Note 1: * p was approaching statistical significance.*

A Mann Whitney U Test was used to find if there was a difference between all Variables between the two Drug Rehabilitation Programmes. The Mann Whitney U test found that there was no statistically significant difference with scores of Self-Efficacy, Perceived Social and Peer Support or Quality of life however it was found that Instrumental Support cope a approached a significant difference. There was no statistical significant difference in the remainder Cope styles. Means and Standard Deviations were also compared across the two groups Results are as follows

Coping Skills

Self-Distraction Cope

The two groups did not differ significantly in Self Distraction Cope ($U = 52.00$, $p = .243$) with group A (mean=6.56; s.d=1.014) scored higher when compared with Group B (mean=5.56, s.d=1.965).

Emotional Support Cope

The two groups did not differ significantly in Emotional Support Cope ($U = 45.00$, $p = .115$).

Group B (mean=6.00; s.d=1.225) scored higher when compared with the Group A (mean=6.75, s.d=1.612).

Use of Instrumental Support Cope

The differences between the two groups approached a significant difference in the Use of Instrumental Support ($U = 42.5$, $p = .057$). Group B (mean=7.44; s.d=1.153) scored higher when compared with Group A (mean=6.67, s.d=1.118).

Venting Cope

The two groups did not differ significantly in Venting cope ($U = 67.5$, $p = .792$). Group 1 (mean=5.89; s.d=1.269) scored higher when compared with the Group 2 (mean=5.75, s.d=2.236).

Positive Reframing Cope

The two groups did not differ significantly in Positive Reframing Cope ($U = 55.00$, $p = .319$). Group B (mean=6.75; s.d=1.438) scored higher when compared with the Group A (mean=6.33, s.d=1.225).

Self-Efficacy

The two groups did not differ significantly in Self-Efficacy ($U = 39.5$, $p = .063$). Group 2 (mean=32.25; s.d=5.285) scored higher when compared with the Group 1 (mean=29.33, s.d=4.664).

Perceived Social and Peer Support

The two groups did not differ significantly in Perceived Social and Peer support ($U = 58.00$, $p = .103$). Group B (mean=58.81; s.d=16.833) scored higher when compared with Group A (mean=57.11, s.d=13.734).

Quality of life

Physical

The two groups did not differ significantly in Physical Quality of life ($U = 63.00$, $p = .608$).

Group A (mean=14.16; s.d=1.995) scored higher when compared with Group B (mean=13.82, s.d=2.084).

Psychological

The two groups did not differ significantly in Psychological Quality of life ($U = 66.50$, $p = .753$). Group B (mean=12.61; s.d=1.670) scored higher when compared with Group A (mean=12.37, s.d=1.602).

Social

The two groups not differ significantly in Social Quality of life ($U = 65.5$, $p = .711$). Group B (mean=13.21; s.d=2.965) scored higher when compared with Group A (mean=13.04, s.d=3.340).

Environmental

The two groups did not differ significantly in Environmental Quality of life ($U = 52.5$, $p = .266$). Group A (mean=15.00; s.d=2.165) scored higher when compared with Group B (mean=14.62, s.d=1.653).

4. DISCUSSION

The aim of this study is to ascertain if there is a positive association between Coping skills, self-efficacy and social and peer support with successful recovery in Addiction. It is hypothesised that there will be a positive correlational relationship between high scoring in Coping skills, self-efficacy and social and peer support with scoring in Quality of life This study is longitudinal in nature and the same participants are measured twice on the same variables. It is also hypothesised that those who score higher in the three variables will remain in treatment three months later. Therefore there are 4 hypotheses are offered; 1) There will be a positive correlational relationship between Coping skills and Quality of life for the two groups 2) There will be a positive correlational relationship between Self-efficacy and Quality of life for the two groups 3) There will be a positive correlational relationship between Perceived Social and Peer Support with Quality of life for the two groups 4) Those who scored high on all identified variables remain in treatment three months later.

Differences across all four variables are measured to ascertain if there are significant differences between both tests, between groups and also gender differences with results discussed; 5) Do significant differences exist between the test and the re-test for both Groups on all identified variables 6) Do significant differences exist between the two groups on all identified four variables and 7) Do significant differences exist between Males and Females on all identified variables.

4.1 Hypothesis 1 - Relationship between Cope with Quality of life

There was no statistically significant relationship found between higher Coping scores when compared with high Quality of life scores with either Group A or Group B.

A strong positive correlation was found between one Cope subscale with Quality of life for

Group A and a moderately strong correlation was also reported for two Cope subscales with Quality of life for Group B and with one cope subscale for Group. Significant negative associations were found between four of the Coping subscales and Quality of life with for Group A. These finding do not support the hypothesis that coping skills significantly influence Quality of life however it does suggest that there is a relationship between the two with positive coping skills more likely when one is drug-free.

4.2 Hypothesis 2 - Relationship between Self-Efficacy with Quality of life

There was no statistically significant relationship found between high scores of Self–efficacy and high scores of Quality of life for either group. A strong positive correlational relationship was found between self-efficacy and quality of life with Group A however there was no correlation found with the Group B. These findings are not supportive of the hypothesis that self-efficacy strongly influences recovery and that levels of self-efficacy decrease while in the recovery process. A possible explanation for this could be that at the outset of recovery process when one is still in the ‘maintenance’ stage, there may be a false perception of self-efficacy as this drug-abstinence has yet to be truly challenged.

4.3 Hypothesis 3 - Relationship between Perceived Social with Peer Support and Quality of life

There was no statistical positive correlational relationship found between high levels of Perceived Social and Peer Support with high scores in Quality of life with either Group A or B. There was however a strong positive correlational relationship found with Group A and a moderately strong positive correlation found with Group B. While these findings do not support the hypothesis set out it does demonstrate that social and peer support influences recovery as positive correlations are found across both groups. Previous studies suggest that having social support while in the recovery from Drug Addiction is fundamental to the

successful recovery from Addiction (Martin et al., 2008). Having a special friend or a family member or that you can turn to in times of stress or when you are feeling low can be very positively reinforcing for an individual who is struggling to stay drug-free.

4.4 Hypothesis 4 - Comparison of Scores of those who remained in Treatment with those who did not

On comparing means of scores across all identified Variables between participant's who remained in treatment with participant's who did not remain, it was found that those who remained in treatment scored higher on three of the Cope subscales, on levels of Social support and also Psychological Quality of life. Participants who did not stay in treatment scored higher on two of the cope subscale, levels of Self-Efficacy and three of the domains of Quality of life. Therefore, results have shown that individuals with higher levels of certain Coping skills, Social support and also Psychological Quality of life remained in Drug rehabilitation treatment. However it is not possible to assume that those who did not remain in treatment did not remain in recovery as of the eight that did not continue it is not known with five of them if they either reverted to using or if they progressed on to the next stage in recovery. It is known that with three participants, that one progressed on to a full-time drug-free programme, one was still 'stabilising well' one self-discharged at the time of re-test.

4.5 Discussion 1: Do significant differences exist across all Variables between the tests and re-test with Group A and Group B

Coping Skills

There was no statistical difference between levels of Coping skills between the two tests for either group however there was more of an increase on scoring with Group A (venting, use of instrumental support and emotional support) compared to Group B which suggests,

interestingly, that coping skills improve more significantly while in the initial stages of addiction recovery.

Self-Efficacy

There was no significant difference found in the comparison of scores with Self-Efficacy in either of the two groups between the two measures. In fact, contradicting the theory that self-efficacy levels increase while in recovery, levels of self-efficacy were found to decrease between the first test and the re-test with both Group A and B.

Social and Peer Support

There was a significant difference found in the levels of Social and Peer Support with both Groups with scores increasing significantly between the test and re-test of Group B and decreasing significantly for participants of Group A. These findings suggest social and peer support decreases in the first few months of recovery but then increase once the individual is drug-free. This could be due to the fact that when one is breaking free from their old lifestyle that they have broken away from old relationships and peers and that it may take time to forge new relationships who support them in their drug-free lifestyle.

Quality of life

There were no significant differences found with Quality of life Scores for either Group A or B however the measure improved for both which show that Quality of life tends to improve throughout recovery which is supportive of previous studies in this area (Martin et al., 2008). A possible cause for the findings not showing as significant may relate to the short time between both measures of three months therefore there may not have been sufficient time to allow for a significant difference improvement in levels of Quality of life.

4.6 Discussion 2: Do significant differences exist between Group A and Group B on all identified variables

On assessing if there is a difference in the scoring of all identified Variables between Group A and Group B; it was found that there were no significant differences however scoring in Instrumental Cope was found to be close to significantly different. This suggests that individuals who are drug-free utilise this type of coping mechanism more than individuals who are stabilising. Group B were also found to score greater on three of the five cope subscales, levels of self-efficacy and also on social and peer support than Group A however scored lower than Group A on three of the four domains of Quality of life. The majority of Group B were drug-free (75% in the first study). This suggests that the further on in recovery you are, the greater likelihood that you will have better coping skills, self-efficacy and social and peer support however the quality of life reduces. This could be due to the fact that the further one progresses, the less stabilising drugs are given in recovery and initially, quality of life can reduce before it can revert to a drug-free lifestyle while the individual stabilises.

4.7 Discussion 3: Do significant differences exist between Males and Females on all identified variables across both Groups

It was found that there was a significant difference between levels of Psychological Quality of life between Males and Females with Females scoring much lower than males. This suggests that Females have lower Psychological Quality of life than Males while in recovery however it must be noted that there were 22 males measured against 3 females therefore this may have impacted results. While there were no significant differences found with the remainder three variables it was found that Females scored higher than males on all of the five Coping subscales, three of the four Quality of life Domains in addition to Social and Peer support. Males were found to score higher on levels of Self-efficacy. This suggests that females have better coping skills, quality of life and social and peer support than males while in addiction recovery however males report better a Psychological quality of life and also

self-efficacy.

4.8 Strengths of the study

Strengths of this study can be attributed to the access which was granted to the specialised sample in order to measure if three specific variables (coping skill, self-efficacy and social and peer support) influences an individual's successful recovery in addiction and that it was possible to measure the same participant's longitudinally. This allows the study to ascertain a change in specific variables over time with the same participants who are currently going through the process of recovery in addiction.

4.9 Limitations

A specialised sample was required to participate in this research therefore only a small number of participants were obtained (ten that remained in treatment three months later) where ideally, a correlational study would require approximately thirty participants or more in order to be more accurate. Due to time constraints it was not possible to wait until the completion of the Drug Rehabilitation programme therefore, for the purpose of measuring recovery this study relied on the WHO Quality of life measure as a criterion variable. It was not possible to measure variables with participants who left treatment or to ascertain if all individuals that left treatment had reverted to drug use or had progressed on to further stage of recovery. It must also be recognised that the sample obtained may have been under influence of substance use at the time and this may have impacted on accuracy scoring.

4.10 Implications and Applications

Individuals suffering with Addiction issues and attempting to become drug-free and recover from addiction have many different individual factors in their lives that can influence their recovery. While this study did not demonstrate that the identified variables can have a significantly positive impact on the role of recovery it does suggest that Social and peer

support, coping skills and psychological health have a positive influence on recovery . This further supports previous research in this field and has important implications for the individuals and their treatment provider to take account of these factors which can assist an individual coming through addiction recovery as controls and measures can be put in place to support these influences.

4.11 Conclusion

This study strongly supports the hypothesis that social and peer support have a positive influence in the recovery process however are more relevant in the drug-free stage. While significant correlations were not found with Coping skills, Social and Peer support and Self-efficacy, some strong and moderately strong correlations found which can support the hypothesis that coping skills play a role. These findings also suggest that those who remained in treatment scored highly on certain coping skills and social support. Psychological quality of life can also influence whether one remains in treatment and that males report higher levels than females. In order for a similar study to be more reliable in future, it is suggested that the research take space over a longer timeframe (for xample, 1 year to 18 months) in order to allow for completion of treatment and that follow up be allowed with all participants.

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APPENDIX 1

(Questionnaire Pack distributed to participants)

APPENDIX 1

CONSENT FORM:

Title of the Research: Factors influencing recovery in Addiction

Researcher: My name is Kate Williams and I am a final year undergraduate student in Dublin Business School. I am conducting a research study in Addiction as part of a BA Honours Degree Programme in Psychology. My Research Supervisor is Dr Garry Prentice. (

Purpose of the Research: This is a Research Project that intends to measure *Self Efficacy, Coping skills and Social Support within the recovery process in Addiction*. There are Four questionnaires enclosed (in addition to Demographic questions) which measure Coping Skills, Self-Efficacy, Social Support and Quality of life/Health which will take approximately 30 minutes to complete in total. Participation in this study is completely voluntary, and you may stop the questionnaires at any time, or withdraw your participation. You will not be identified in any of the Questionnaires or Demographic sheet and all answers given will be treated in the strictest confidence.

We may follow-up with you within 1-2 months' time using similar questionnaire in order to measure progress in recovery therefore we have requested your Date of Birth for matching Questionnaire purposes while at the same time ensuring that as a participant that you remain anonymous.

Please sign this form to show you have read and understood the contents:

The purpose and process of this study has been explained to me, and I agree to participate. I understand that my participation is voluntary and I can stop or withdraw my participation at any time.

_____ (Please print name)

_____ (Signature)

___/___/_____ Date

If you have any further questions regarding this Research Study please contact me at _____ or e-mail at _____.

Thank you very much for your participation and for your time.

DEMOGRAPHIC QUESTIONS

Q1. Gender

- Male
- Female

Q2. Age

Date of Birth: ____/____/____

Q3. Marital Status

- Single
- Cohabiting
- Married
- Divorced/Separated
- Widowed

Q4. Education

What is the highest degree or level of school you have completed

- No schooling completed
- Primary School completed
- Junior Certificate
- Leaving Certificate
- Certificate
- Diploma
- Bachelor's Degree
- Postgraduate or higher

Q5. Employment Status

Are you currently...

- Employed
- Unemployed
- Unable to work
- Student

Please read the sentences below and select an answer for each statement which indicates how much the statement applies to yourself.

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

1. I can always manage to solve difficult problems if I try hard enough. _____
2. If someone opposes me, I can find the means and ways to get what I want. _____
3. It is easy for me to stick to my aims and accomplish my goals. _____
4. I am confident that I could deal efficiently with unexpected events. _____
5. Thanks to my resourcefulness, I know how to handle unforeseen situations. _____
6. I can solve most problems if I invest the necessary effort. _____
7. I can remain calm when facing difficulties because I can rely on my coping abilities _____
8. When I am confronted with a problem, I can usually find several solutions _____
9. If I am in trouble, I can usually think of a solution. _____

10. I can usually handle whatever comes my way. _____

These questions below deal with ways you've been coping with the stress in your life. I want to know to what HOW MUCH you have been doing what the statement says. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Make your answers as true FOR YOU as you can.

1 = I haven't been doing this at all

2 = I've been doing this a little bit

3 = I've been doing this a medium amount

4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things. _____

2. I've been concentrating my efforts on doing something about the situation I'm in. _____

3. I've been saying to myself "this isn't real." _____

4. I've been getting emotional support from others. _____

5. I've been giving up trying to deal with it. _____

6. I've been taking action to try to make the situation better. _____

7. I've been refusing to believe that it has happened. _____

8. I've been saying things to let my unpleasant feelings escape. _____

9. I've been getting help and advice from other people. _____

10. I've been trying to see it in a different light, to make it seem more positive. _____

11. I've been criticising myself. _____

1 = I haven't been doing this at all

2 = I've been doing this a little bit

3 = I've been doing this a medium amount

4 = I've been doing this a lot

12. I've been trying to come up with a strategy about what to do. _____
13. I've been getting comfort and understanding from someone. _____
14. I've been giving up the attempt to cope. _____
15. I've been looking for something good in what is happening. _____
16. I've been making jokes about it. _____
17. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping. _____
18. I've been accepting the reality of the fact that it has happened. _____
19. I've been expressing my negative feelings. _____
20. I've been trying to find comfort in my religion or spiritual beliefs. _____
21. I've been trying to get advice or help from other people about what to do. _____
22. I've been learning to live with it. _____
23. I've been thinking hard about what steps to take. _____
24. I've been blaming myself for things that happened. _____
25. I've been praying or meditating. _____
26. I've been making fun of the situation. _____

We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the “1” if you Very Strongly Disagree

Circle the “2” if you Strongly Disagree

Circle the “3” if you Mildly Disagree

Circle the “4” if you are Neutral

Circle the “5” if you Mildly Agree

Circle the “6” if you Strongly Agree

Circle the “7” if you Very Strongly Agree

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 There is a special person who is around when I am in need | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 There is a special person with whom I can share my joys and sorrows | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3 My Family really tries to help me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4 I get the emotional help and support I need from my family | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 I have a special person who is a real source of comfort to me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6 My friends really try to help me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 I can count on my friends when things go wrong | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. I can talk about my problems with my family | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. I have friends with whom I can share my joys and sorrows | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. There is a special person in my life who cares about my feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. My family is willing to help me make decisions | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. I can talk about my problems with my friends | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

The following questions ask how you feel about your quality of life, health, or other areas of your life. I will read out each question to you, along with the response options. Please choose the

16. How satisfied are you with your sleep? **1 2 3 4 5**

17. How satisfied are you with your ability to perform your daily living activities?

1 2 3 4 5

18. How satisfied are you with your capacity for work? **1 2 3 4 5**

19. How satisfied are you with yourself? **1 2 3 4 5**

20. How satisfied are you with your personal relationships? **1 2 3 4 5**

21. How satisfied are you with your sex life? **1 2 3 4 5**

22. How satisfied are you with the support you get from your friends? **1 2 3 4 5**

23. How satisfied are you with the conditions of your living place? **1 2 3 4 5**

24. How satisfied are you with your access to health services? **1 2 3 4 5**

25. How satisfied are you with your transport? **1 2 3 4 5**

The following question refers to how often you have felt or experienced certain things in the last four weeks.

5 = Never	4 = Seldom	3 = Quite often	2 = Very often	1 = Always
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26. How often do you have negative feelings such as blue mood, despair, anxiety, depression?

5 4 3 2 1