Study Report

# Providing Alternative Modalities of Drug Treatment in Prison Setting

2021

# Table of Contents

**Table of Contents** 1

**List of Acronyms** 3

**Executive Summary** 4

**1. Introduction** 7

1.1 BACKGROUND 7

1.2 STUDY OBJECTIVES 9

1.3 STUDY BENEFITS 10

**2. Study Methodology** 10

2.1 STUDY DESIGN 10

2.2 STUDY LOCATION 11

2.3 DATA COLLECTION METHOD 11

2.3.1 Data Collection Instrument 11

2.3.2 Respondent/Informant's Criteria 13

2.4 DATA ANALYSIS 14

2.5 ETHICS APPROVAL 15

**3. Study Stages and Procedure** 16

3.1. PREPARATION 16

3.1.1. Development of MI Guideline 16

3.1.2. Development of MI Training Module for Prison Staffs 17

3.1.3. Adaptation of the Prison Climate Questionnaire 18

3.2. MI TRAINING 19

3.3 IMPLEMENTATION OF MI AND TC TREATMENT MODALITIES 21

3.3.1 Implementation of the MI Modality in Intervention Facilities 22

Implementation of MI counseling 22

Institutional/leadership support 23

Program's Success 24

Comprehension of the MI guideline 26

Perception about the MI program 27

Enabling Factors and Barriers 28

3.3.2. Implementation of the TC Modality in the Control Facility 31

Implementation of the TC program 31

Institutional/leadership support 33

Program's success 34

Comprehension of the TC guideline 35
Perception about the TC Program 36
3.4. EVALUATION OF MI IMPLEMENTATION 36
3.4.1 Characteristics of participants 36
3.4.2. Measurement of Prison Climate 38
3.4.3. Quality-of-Life Measurement 40
3.4.4. Correlation between Prison Climate and Post-test Quality-of-Life Score 43
3.4.5. Contextual Factors in Quality-of-life Improvement 47

**4. Discussions** **50**

**5. Conclusions** **53**

**6. Recommendations** **55**

**References** **57**

**Appendix** **60**
Appendix 1. Instrument of WHOQoL-BREF 60
Appendix 2. Instrument of Prison Climate Questionnaire (PCQ) 66
Appendix 2. Instrument of Prison Climate Questionnaire (PCQ) [Indonesian version] 78
Appendix 3a. Guide for Focus Group Discussions (FGD) for Control Prisons 91
Appendix 3b. Guide for Focus Group Discussions (FGD) on Prison Intervention 93
Appendix 4. Adaptation Permit Application 95
Appendix 5. Example of Items Revision After Expert Judgment 95
Appendix 6. Some Examples of Revised Items After Readability Test 98
Appendix 7. Characteristics of Participants 99
Appendix 8. Result of Item Analysis and Reliability Test 100
Appendix 9. Results of PCQ Validity Test with WHOQoL-BREF 105

# List of Acronyms

| | | |
|---|---|---|
| ASSIST | : | Alcohol, Smoking and Substance Involvement Screening Test |
| BNN | : | *Badan Narkotika Nasional* (National Narcotics Board) |
| Ditjenpas | : | *Direktorat Jenderal Pemasyarakatan* (Directorate General of Corrections - DGC) |
| Juklak | : | *Petunjuk Pelaksanaan* (Implementation Guideline) |
| Kemenkumham | : | *Kementerian Hukum dan Hak Asasi Manusia* (Ministry of Law and Human Rights) |
| Lapas | : | *Lembaga pemasyarakatan* (Correctional Facilities) |
| LPN | | *Lembaga Pemasyarakatan Narkotika* (Correctional Facilities for Drug Offenders/Narcotics Prison) |
| MI | : | Motivational Interviewing |
| NAPZA | : | *Narkotika, Psikotropika dan Zat adiktif* (Narcotics, Psychotropics and Addictive Substances) |
| PCQ | : | Prison Climate Questionnaires |
| QoL | : | Quality of Life |
| TC | : | Therapeutic Community |
| UPT Pas | : | *Unit Pelaksana Teknis Pemasyarakatan* (Technical Implementing Unit of Corrections) |
| WBP | : | *Warga Binaan Pemasyarakatan* (Inmates) |
| WHOQOL-BREF | : | World Health Organization Quality of Life Instruments |

# Executive Summary

The 2020 implementation research conducted by the University Centre of Excellence (PUI-PT) – Aids Research Center (PPH) Health Policy and Social Innovation (PUK2IS), Atma Jaya Catholic University of Indonesia, together with the Directorate General of Corrections (DGC), Ministry of Law and Human Rights (*Kemenkumham*) recommended that an alternative rehabilitation modality be identified to complement the therapeutic community (TC) model and support the drug rehabilitation program in correctional facilities. To that end, several studies have demonstrated that compared to other treatment modalities, the motivational interviewing (MI) approach is able to reduce the urge to use substances, and to engage in risk behaviors such as injecting drugs. Motivational Interviewing can therefore potentially be applied as an alternative treatment modality in a social rehabilitation program, and tailored to the needs and resources of each facility. Prison inmates' quality of life is used as an indicator to measure the success of the TC or MI model, taking into account the role of contextual factors, namely the climate and situation in each prison.

This study employed the method of implementation research to develop a guideline for motivational interviewing as an alternative modality for prison-based social rehabilitation program. Three narcotics prisons were the study sites. One prison has been implementing the TC program and was assigned to be the control facility, while the other two narcotics prisons were the intervention facilities that implemented the MI program. The TC program ran for six months, while the MI program was implemented for two months. Questionnaires and focus group discussions (FGDs) were utilized to facilitate data collection. Data on prison inmates' quality of life was collected using the WHOQOL-BREF questionnaire before (pre-test) and after (post-test) the social rehabilitation program, while data on inmates' perception of the prison climate was collected using an adapted Prison Climate Questionnaire (PCQ). The experience of rehabilitation officers was captured through focus group discussions (FGDs) in the two intervention facilities (I & II) and the control facility. Dependent t-test was used to analyze the difference in the quality of life of rehabilitation participants before and after a rehabilitation program in each facility, while the difference in the pre-test score, post-test score, and the score difference between pre-test and post-test were analyzed using independent t-test. Spearman's correlation test was used to look at the correlation between the prison climate and the inmates' quality of life, while thematic analysis was applied on the qualitative data obtained from focus group discussions.

One of the study outcomes is a guideline for implementing motivational interviewing, an alternative treatment modality, in social rehabilitation services in the technical implementing unit of corrections (*UPT Pas*). The guideline has been tested in two intervention facilities, and study findings show that compared with the TC model, MI's resource requirement is relatively simpler, as MI relies on highly qualified counselors. On the other hand, the TC model requires more

resources, facilities and infrastructure as well as more prison staff to plan and coordinate a variety of group activities.

As study intervention, both the TC and MI model of rehabilitation were able to improve the rehabilitation participants' quality of life but the improvement tended to be higher with the MI model than with the TC model. This was evident in the intervention group's average post-test score in three quality-of-life domains (psychological health, social relationship, and environmental health) that were significantly different ($p<0.05$) from the scores in the control group (TC). The control group had a significantly higher post-test quality-of-life score in the social relationship domain, while the intervention group had a significantly higher post-test quality-of-life score in the psychological health and environmental health domains.

Prison inmates' quality of life was also influenced by the prison climate. The study shows that there is correlation between all domains of the prison climate (relationship with prison staffs and fellow prisoners, safety, contact with the outside world, prison facility, engagement in meaningful activities, and autonomy) and two of the four quality-of-life domains (psychological health and environmental health). This was seen after rehabilitation participants completed the program with either the TC or the MI method.

This study shows that motivational interviewing is a potentially effective treatment model that can be incorporated into a drug rehabilitation program to enable program participants lead better-quality lives, taking into account the environment or climate of individual correctional facility. Participants of the MI program tend to have higher-quality of life than participants of the TC program. Compared to the TC model, MI is simpler to manage. It can be incorporated into the drug rehabilitation service with fewer resources, and is able to produce higher quality-of-life improvement within a shorter period of time. MI is a potentially effective and efficient approach to drug rehabilitation, and to successfully incorporate MI into the program, this study formulates several recommendations:

1. Ensuring the availability of counselors is key to the implementation of MI. The Directorate General of Corrections has the options to: (a) facilitate training on MI using the MI training module that has been developed; or in the event that it is not possible to assign the health workers of technical implementing units of corrections as counselors, (b) build collaboration with local chapters of the Indonesian Association of Addiction Counselors (IKAI) who will be able to provide counselors.
2. Incorporate the MI's individual approach into the TC program so as to improve the rehabilitation program outcome (higher quality of life).
3. Align optimization efforts of the rehabilitation program with a supportive prison climate, which includes relationship with prison staffs and fellow prisoners, safety, contact with the outside world, prison facility, engagement in meaningful activities, and autonomy.
4. Prepare the necessary human resources as the main requirement for implementing motivational interviewing. Additional resources such as room, equipment, group activities, funding, etc are relatively minimal.

5. In the future, measurement of program participants' perceived quality of life should be carried out together with measurement of the perceived prison climate at 3 and 6 months into the rehabilitation program.
6. Refreshment training as part of an ongoing support should be provided considering the heavy work load and the various dynamics that prison rehabilitation officers face (e.g. additional duties aside from rehabilitation service, staff transfer, burnout, or dealing with the diversity of client's issues). This study has shown that virtual training can be effectively applied to build the capacity of drug rehabilitation officers and team in correctional facilities.

# 1. Introduction

## 1.1 BACKGROUND

The Ministry of Law and Human Rights started a new era in the management of drug-related offenses through the Minister of Law and Human Rights Regulation Number 12/2017 on drug rehabilitation program for detainees and prisoners in correctional facilities. The regulation emphasizes the provision of rehabilitation services as a form of human rights protection. Through rehabilitation, incarcerated individuals receive support to recover from their dependence on drug/substances biologically, psychologically and socially such that they can enjoy a healthy, higher quality life, fulfill their social function and reintegrate into society. Subsequently an Implementation Guideline (*Juklak*) was prepared to guide implementation of rehabilitation programs, and 128 Technical Implementing Units (UPTs) were appointed to start providing rehabilitation services in prisons and detention centers.

Throughout 2017-2019 the Directorate General of Corrections (DGC/*Ditjenpas*) made significant efforts in rehabilitation, but despite the extensive efforts, the program has not been able to meet the needs of all the sentenced drug offenders who need rehabilitation, partly due to limitation in resources and overall rehabilitation capacity of correctional facilities. The National Narcotics Board (BNN) acknowledges that while there is capacity for 130,512 inmates, as many as 269,775 inmates are currently housed in various prisons across the country, 129,820 of whom are incarcerated for drug-related offenses (BNN, 2019). Up to this point, each batch of rehabilitation program lasts for six months and is only able to enroll a maximum of 30 participants of moderate and/or severe risk based on the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). Clearly, there is a gap between the capacity of prison-based rehabilitation service and the number of prisoners who need rehabilitation.

A 2019-2020 study conducted by the University Center of Excellence in Science and Technology (PUI-PT) HIV AIDS Research Center (PPH) Center of Excellence in Health Policy and Social Innovation (PUK2IS) of Atma Jaya Catholic University, in collaboration with Mainline, identified some of the obstacles that prison-based therapeutic community (TC) social rehabilitation program has to overcome such as inadequate number of personnel, insufficient competence, limited funding and lack of infrastructure. This limits the program's ability to obtain optimum results (Praptoraharjo, Negara, Langi, Gentar, Devika, Muryani et al., 2020). At the same time, the rehabilitation program implementation guideline (DGC, 2018) mandates the use of the therapeutic community method (TC) in prison-based social rehabilitation services. TC is an intensive residential treatment program that strives to rehabilitate substance/drug user through a positive and supportive social environment. It is a 6-month program, which in narcotics prison setting is divided into three stages, i.e.: 1) a physical and psychiatric evaluation/assessment; 2) a core program that consists of several activities: individual

counseling, family counseling, and group therapy sessions (such as spiritual activities, seminars that focus on soft skills or psychosocial issues); and 3) preparation for post-rehabilitation life in the form of seminars and vocational training.

The Implementation Guideline from the DGC (DGC, 2018) states the need for tailoring the therapeutic community method to the needs of participants. However, to date, there is yet to be any documentation of TC being adapted to the needs of participating inmates, creating an impression that the available therapy still relies on a one-size-fits-all approach, and has not taken into account individual client's needs (Praptoraharjo, Negara, Langi, Gentar, Devika, Muryani et al., 2020). Availability of counselors, and strong commitment on the part of rehabilitation officers as well as participants, also play a role in a successful rehabilitation program. At the heart of the TC method is the use of groups/community as agents of change. While this principle sets TC apart from other rehabilitation methods, this emphasizes the importance of rehabilitation officers-participants interaction and how it impacts the overall attitude, perception and behavior toward substance use (De Leon, 2000). Of particular attention is the need to ensure the availability of counselors since mental disorder has been shown to be more prevalent among prisoners than among the general population (Reichert, Ruzich, & Campbell, 2012; UNODC, 2018). Incorporating mental health care into a rehabilitation program also helps former convicts to successfully reintegrate into society (Chin & Dandurand, 2018).

As a result of this study, PPH of Atma Jaya Catholic University recommends that the DGC reviews and revises its Drug Rehabilitation Implementation Guideline (Praptoraharjo et al., 2020). The study shows that while the TC rehabilitation program does indirectly lead to improvement in participants' quality of life, prison staffs find some terminologies used in the guideline difficult to understand. This points to the need for simplification in order to make the guideline more operational and easier to understand, such that implementation can be based on the needs and capacity of each correctional facility and its staffs (Praptoraharjo et al., 2020).

Aside from the operational issue, the 6-month TC treatment program requires significant resources that are costly for the DGC (Praptoraharjo et al., 2020). Stohr, Hemmens, Shapiro, Chambers, and Kelley (2002) also found that participants who have spent longer time (between 3 or 4 months and up to 12 months) in the TC community actually develop a less positive perception about the program's content and intervention method compared to those who are relatively new (between 0 to 3-4 months) to the rehabilitation program. This indicates the appearance of fatigue caused by the program's long duration, resulting in a less positive perception. Further complicating the matter is the fact that some components of the TC modality such as counseling and family visitation have not been optimally implemented (Praptoraharjo et al., 2020).

PPH also recommends that the DGC develops a simpler drug rehabilitation method such as the motivational interviewing (MI) technique as an alternative treatment modality in drug rehabilitation program in correctional facilities. Several studies have demonstrated that compared to other treatment modalities, the motivational interviewing (MI) approach is able to

reduce the urge to use substances, and engage in risk behaviors such as injecting drugs (Bertrand, Roy, Vaillancourt, Vandermeerschen, Berbiche, & Bolvin, 2015; Oveisi, Stein, Babaeepour, & Araban, 2020). Motivational Interviewing can therefore potentially be applied as an alternative treatment modality in a social rehabilitation program. The hope is that this simpler treatment modality will allow prison-based drug rehabilitation program to be tailored to the needs and resources of each facility. PPH therefore planned this study in order to offer a simpler treatment model that can enhance the TC model that has been implemented.

This study will implement two rehabilitation treatment models, and assess the success of each model by measuring the quality of life of rehabilitation participants in each facility. This aligns the study with the goal of rehabilitation program, which is to help detainees and inmates lead a more productive, higher quality life as stated in Attachment 1 of the Rehabilitation Implementation Guideline (DGC, 2018). Quality of life (QoL) will be measured using the WHOQOL-BREF instrument that divides quality of life into four domains, namely physical health, psychological health, social relationship, and environment. In addition to quality-of-life measurement, the study will also measure prisoners' satisfaction about their prison climate/environment using the Prison Climate Questionnaire (PCQ). The questionnaire looks at aspects of social relationship, safety, contact with the outside world, prison facility, engagement in meaningful activities and autonomy. Studies have documented that an optimum prison climate/environment can increase one's readiness and motivation to participate in rehabilitation efforts (Day et al.,2011; Long et al.,2011), and can even result in more positive post-release outcomes (Beijersbergen et al. al., 2016; Schubert et al., 2012).

Based on those studies, evaluation and improvement of the prison climate can be one aspect that is worth considering in any rehabilitation program optimization effort. The PCQ instrument however, needs to be adapted to the Indonesian context and tested for validity and reliability first before being used to measure inmates' satisfaction with their facility and rehabilitation program. This study is therefore hoped to provide the Directorate General of Corrections, an evidence-based alternative drug rehabilitation model by testing the method in two selected correctional facilities and measuring its success based on participants' quality-of-life and satisfaction level about their prison's climate and environment.

## 1.2 STUDY OBJECTIVES

1. Measure/assess differences in the quality of life of prisoners who participate in the therapeutic community (TC) method and an alternative method, the motivational interviewing (MI), as part of a social rehabilitation program in correctional facilities.
2. Test the validity and reliability of each domain of the Prison Climate Questionnaire (PCQ); social relationship, safety, contact with the outside world, prison facility, engagement in meaningful activities, and autonomy.
3. Develop a guideline for an alternative treatment modality that can be used by technical implementing units of corrections *(UPT Pas*) in their social rehabilitation services. The

guideline describes the procedure and management of an alternative treatment modality to facilitate implementation, monitoring and evaluation of interventions in the intervention facility.

## 1.3 STUDY BENEFITS

a. Optimize the prison-based rehabilitation program that will contribute to improving the quality of life of rehabilitation program participants.

b. Provide the Directorate General of Corrections evidence-based recommendation on the effectiveness of the motivational interviewing approach as an alternative/supporting treatment modality in prison-based rehabilitation program.

# 2. Study Methodology

## 2.1 STUDY DESIGN

Development of the guideline for an alternative treatment modality utilized the method of Implementation Research based on findings and and recommendations from a previous study titled Strengthening Drug Rehabilitation Services in Detention Centers. Implementation Research is defined as a systematic approach to comprehend and overcome barriers to effective and quality implementation of health interventions, strategies and policies (WHO, 2014).

Data collection employed a mixed-method approach. Quantitative methodology was used to understand the difference between two therapeutic modalities based on the quality-of-life scores of inmates following participation in a social rehabilitation program. In addition, the study collected qualitative data from prison staffs to obtain in-depth understanding of the context and implementation process of two drug rehabilitation models, the therapeutic community (TC) and the motivational interviewing (MI) models, in a prison setting. TC has been the primary model used in a social rehabilitation program, so participants of the TC model were assigned as the control group, while participants of MI as the alternative model were considered as the intervention group.

As a benchmark, the study measured differences in the quality of life that rehabilitation participants in both intervention and control facilities reported. QoL questionnaire was administered twice, before the start of the rehabilitation program, and upon completion of the program. Monitoring was performed throughout implementation through monitoring form that prison staff completed and submitted each month.

## 2.2 STUDY LOCATION

Following recommendation from the Directorate General of Corrections, the study was conducted in three correctional facilities designated for drug offenders (narcotics prisons). One facility implemented the TC model, while the other two facilities implemented the MI model. Details are as follows:

1. **Control Facility**

   The control facility was a narcotics prison that has been implementing the TC model in their drug rehabilitation program. As a comparative facility, no intervention was carried out in this control facility and the TC therapy model was implemented per the facility's usual procedure. The criteria used in selecting the control facility included an ongoing TC program since at least early April 2021, and an appointment from the DGC. Based on the criteria, Class II A Narcotics Prison in Yogyakarta was selected as the control facility.

2. **Intervention Facilities**

   The intervention facilities implemented the motivational interviewing (MI) model in their drug rehabilitation program. As appointed by the DGC, they were Class II A Narcotics Prison in Bangli (Intervention Facility I) and Class II B Narcotics Prison in Muara Sabak (Intervention Facility II). Prior to implementation, two counselors from each prison (total of 4 counselors) received training specifically on MI. After the training, during a period of 2 months, the 4 counselors applied the motivational interviewing technique to each rehabilitation program participant in 6 individual counseling sessions.

## 2.3 DATA COLLECTION METHOD

Data was collected through questionnaires and focus group discussion (FGD). Quality of life was measured using the WHOQOL-BREF questionnaire before (pre-test) and after (post-test) implementation of the social rehabilitation program in both control and intervention facilities. Information about the prison climate was collected after participants completed the rehabilitation program using a questionnaire adopted from the Prison Climate Questionnaire (PCQ). Experience of the rehabilitation officers was gathered through a focus group discussion (FGD) in all three facilities (intervention facility I and II, and control facility).

### 2.3.1 Data Collection Instrument

Data was collected using the following instruments:

1) Questionnaire to measure quality of life (WHOQOL-BREF)

The WHOQOL-BREF questionnaire has been translated into Indonesian language and measures quality of life through 26 questions that are grouped into four domains, i.e. physical health, psychological health, social relationship, and environment. The questionnaire also had several additional questions about the demographic characteristics of rehabilitation participants (age, sex, length of prison terms, and marital status). In both control and intervention facilities, this WHOQOL_BREF questionnaire was administered twice to measure the prisoners' quality of life before (pre-test) and after (post-test) the social rehabilitation program. (see Annex 1)

2) Prison Climate Questionnaire (PCQ)

To understand how prisoners perceive their social situation and environment, and their experience in the drug rehabilitation program, this study utilized the Prison Climate Questionnaire (PCQ). While perception is relatively subjective, inmates' perception of the prison environment does correlate with their mental health and well-being. Prison climate itself is a multi-dimensional construct (van Ginneken, et al.,2018) and is measured using a Prison Climate questionnaire (PCQ). The PCQ used in this study consists of six domains which are further broken down into 14 sub-scales (Bosma, et.al., 2020). Since a PCQ that has been adapted into the correctional setting of Indonesia is not yet available, the research team had to first adapt the PCQ into Indonesian language, and involved inmates in validity and reliability testing of the questionnaire. The result was an adapted Prison Environment and Climate Questionnaire that has 64 questions and four response options: strongly disagree, disagree, agree, strongly agree, and non-applicable (for specific questions). The Prison Environment and Climate Questionnaire is available in Annex 2.

3) Guideline for focus group discussion (FGD) with rehabilitation officers

The FGD guideline consists of several questions about implementation of the social rehabilitation program and the treatment modality used. Questions revolve around the feasibility of applying the implementation guideline, barriers and supporting factors that affected program implementation, rehabilitation blocks condition and benefits of the program. The guideline also includes additional questions about the characteristics of FGD informants such as age, sex, level of education, position and length of service in the correctional facility. (see Annex 3a and 3b)

### 2.3.2 Respondent/Informant's Criteria

Tabel 1. Respondent/Informant's Criteria

| **Activity** | **Respondent / Informant** | **Inclusion and Exclusion Criteria** | **Sample Size / Number of Informants** |
|---|---|---|---|
| Evaluation of rehabilitation program (FGD) | Rehabilitation officers | Inclusion Criteria:<br><br>a. Staffs in the intervention facility who received MI counseling training;<br><br>Staffs in the control facility who were part of the Implementation Team for Drug Rehabilitation Program as appointed through a Decree or Appointment Letter issued by each correctional facility.<br><br>b. Staffs in the control facility who were in charge of program implementation such as: the program supervisor, program manager, health care provider, daily activity instructor, and counselor.<br><br>c. Staffs in control and intervention facilities who agreed to be informants.<br><br>Exclusion Criteria:<br><br>Prison staffs who were<br>a. not directly involved in the drug rehabilitation program.<br><br>b. not present in the facility at the time of data collection. | - Intervention Facility 1 = 2 staffs<br>- Intervention Facility 2 = 2 staffs<br>- Control Facility =15 staffs |

| | | | |
|---|---|---|---|
| Measurement of prisoners' quality of life and their perception about the prison's environment and climate | Prisoners who participated in the drug rehabilitation program. | Inclusion Criteria:<br><br>Prisoners who were<br>a. selected to participate in a drug rehabilitation program.<br>b. willing to be study respondents.<br><br>Exclusion Criteria:<br><br>Prisoners who<br>a. participated in the rehabilitation program but were unable to take part in activities or dropped out of the program due to some health issues that lasted for at least one week.<br>b. participated in the rehabilitation program but were about to finish serving their sentence, making them unable to complete the rehabilitation program.<br>c. received parole in the middle of the rehabilitation program. | - Intervention Facility 1 = 10 prisoners<br><br>- Intervention Facility 2 = 10 prisoners<br><br>- Control Facility = 20 prisoners |

## 2.4 DATA ANALYSIS

1. Descriptive analysis was carried out to describe the characteristics of respondents/inmates and the prison climate (consisting of six domains: social relationship, safety, contact with the outside world, prison facility, engagement in meaningful activities and autonomy). Results are presented as distribution frequency tables.
2. Bivariate analysis was carried out on prisoners' quality-of-life data collected from each correctional facility. In the control facility, QoL data was collected: 1) before the start of the TC program (baseline data), and 2) upon completion of the TC program (6 months). In intervention control 1 and 2, QoL data was collected: 1) before the start of the MI program (baseline data), and 2) 2 months into the program. Based on QoL data from control and intervention facilities, two comparative models were constructed:

a) The first model compared the average quality-of-life score of prisoners before (pre-test) and after (post-test) participating in a drug rehabilitation program with either the MI method (in intervention facilities) or the TC method (in control facility). Dependent t-test was used to determine whether the difference between the pre-test and post-test QoL score is significant in any of the four quality-of-life domains (physical health, psychological health, social relationship and environment) after either the MI or TC method.
b) The second model compared the average quality-of-life score at pre-test, post-test and the pre-test and post-test score difference in the intervention facility (MI method) and control facility (TC method). Independent t-test was used to determine whether there is significant difference in the pre-test and post-test score differences between the intervention facilities and the control facility in any of the four quality-of-life domains.

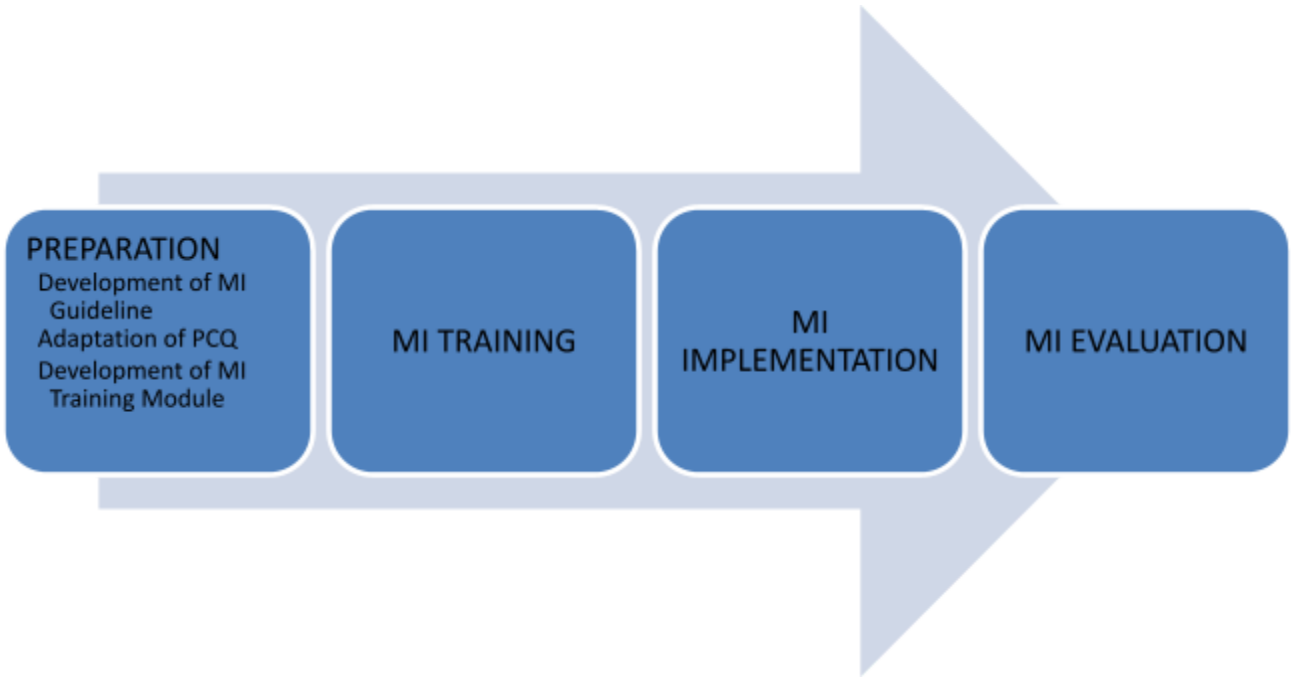
3. Bivariate analysis in the form of Spearman correlation test was performed to determine whether the six domains of the prison environment and climate questionnaire have any correlation with the quality-of-life score improvement reported by inmates in each facility.
4. Qualitative analysis was performed by generating verbatim transcripts of the focus group discussions that were held in the control and intervention facilities (I and II) and doing a thematic analysis on topics that were identified in the transcript.

## 2.5 ETHICS APPROVAL

The entire process of the study was conducted following the applicable rules and regulations, and adhered to the principles of respect for the participants, beneficence and fairness. The study paid close attention to the risks and benefits that study participants, as incarcerated individuals, may experience, and strictly upheld the principles of confidentiality, autonomy, and human rights. Therefore, before starting the study, the study protocol was reviewed by the Ethics Committee, Center for Research and Community Service of Atma Jaya Catholic University, who then granted ethical clearance to the study.

# 3. Study Stages and Procedure

The study was conducted for one year, from April to December 2021 through stages illustrated in the following diagram:




## 3.1. PREPARATION

### 3.1.1. Development of MI Guideline

Following finalization of the study protocol, the Motivational Interviewing (MI) guideline was developed from April to July 2021, involving Ms. Evi Sukmaningrum**,** M.Si., PhD, a psychologist with extensive knowledge and skills about MI, as well as experience designing and applying the MI model to promote client's adherence and retention in antiretroviral (ARV) therapy. As a first step in guideline development, the study team met with the study advisor and several experts to discuss and agree on the objectives of the guideline, which is to describe how MI principles can be applied in individual counseling sessions as a way to strengthen the psychosocial intervention component of social rehabilitation services provided in *UPT Pas*.

As directed by experts, development of the guideline started with development of a framework, followed by drafting of the guideline, and routine meetings at least once a week to discuss progress in the development all the way until finalization of the guideline. The team started by doing a literature review on MI therapy as a basis for

developing a guideline that is applicable in a prison setting. A variety of references, books, journals and MI implementation guides were utilized and the resulting guideline has five major parts: 1) Introduction, 2) Introduction to MI, 3) Preparation for Implementation of MI, 4) Holding counseling sessions, and 5) Monitoring of MI.

The introduction part of the guideline describes the importance of applying MI principles in a correctional setting. The introduction to MI talks about the history of MI, the definition and use of MI in counseling. MI is illustrated as an approach that can be used for improving client's quality of life, for strengthening harm reduction programs, and for implementation in a prison setting. The third part of the guideline which talks about the preparation for MI implementation describes the eight key principles of MI and the characteristics an MI counselor should develop. The fourth part of the guideline, which is about holding counseling sessions, describes the skills a counselor needs to apply during counseling sessions with MI principles, and gives an illustration about a counseling package that consists of six sessions. The fifth and last part of the guideline discusses the process of monitoring MI implementation through several recording and reporting forms, as well as the principle of maintaining the confidentiality of clients' data.

### 3.1.2. Development of MI Training Module for Prison Staffs

After the MI guideline was finalized, the team, together with the experts, continued with development of a module for implementing MI in counseling sessions. This module elaborates on the six MI counseling sessions, starting with the session objectives, activities that are done during the session, the step-by-step process of the session, and the activity form that is used during the session. Sessions one, two and three in the module are intended for clients in early stages of change, namely the stage of precontemplation, contemplation, and preparation, while sessions four, five and six target clients who are already in the later stages of change called action and maintenance.

Subsequently, the study team developed an MI training module for use with prison staffs. The module contains materials that will be presented, also a variety of activities that can help training participants understand and practice MI skills in counseling sessions. The module is divided into eight sections that are organized around the eight MI principles and skills. Those are building a collaborative approach with clients, developing empathy through application of ROARCS principles, stages of change, recognizing ambivalence, developing and directing conversations toward change, resistance, insights about behavior change, and strengthening client's commitment. Each section presents the learning materials, accompanied with instructions for reflective activities that participants can do to learn the needed skills. These include role plays to train participants to respond appropriately to a client's statement, also case studies.

Before applying some of the reflective activities that are described in the module, the reflective and group activities were tested on other groups namely university students

who were attending Dr. Evi Sukmaningrum's counseling class, and fellow study team members. The tryout allowed the study team to observe the extent the activities performed matched the instruction, and the extent tryout participants understood the instruction for the activity. Based on the tryout result, the team modified the activities or revised the instructions such that they would be clearer to training participants.

### 3.1.3. Adaptation of the Prison Climate Questionnaire

Before adapting the PCQ, the study team first explained the purpose of adapting the PCQ to Dr. Esther van Ginneken at Leiden University, the representative of the researchers' team who holds the copyright to the PCQ. Following approval for adaptation, the process of adapting the PCQ started in June and lasted until October 2021 (see Appendix 4).

a. Translation

The PCQ was translated by two professional English translators and two individuals who are highly experienced in conducting studies in the Indonesian prison setting. Two people translated the PCQ from English into Indonesian language, while the other two people translated the resulting Indonesian language document back into English. The back-translated document was then compared with the original english version. The process took place from 29 June to 22 July 2021.

b. Item Analysis (expert judgment)

Item analysis was performed by a panel of experts who assessed how well the items represent each domain of the PCQ. The expert panel consists of individuals who were not involved in the process of developing the PCQ. Item analysis of the Indonesian version of the instrument utilized expert judgment of four experts: Mr. J. Kasogi Surya Fattah, A.MD.I.P, and Mr. Agus Pritiatno, Bc.I.P., S.H., M.H. who as representatives of correctional facilities understand the general prison situation in Indonesia, the responsibilities of prison officers and the condition of inmates; also Arie Rahadi, PhD, a researcher familiar with studies in a correctional setting; and Dr. Angela Oktavia Suryani, M.Si, a researcher with extensive experience in psychological assessment tool development. The four experts reviewed the translated instrument and made adjustment to arrive at the final Indonesian translation of the PCQ. Examples of some of the adjustments are available in Appendix 5.

c. Face validity test

Face validity was measured to assess how well the instrument demonstrates the construct it is trying to measure. To do that, the reviewed Indonesian version of the PCQ was given to three inmates to assess how relevant the items were and how well they were understood. Feedback received from the inmates was used to further revise the instrument (see Appendix 6).

d. Tryout

Considering the specific characteristics of the target users of this instrument, a tryout was performed with 60 participants from Class II-A Narcotics Prison in Bangli, one of the study sites. Similar to the face validity measurement, face-to-face or virtual meetings were the method selected to conduct the tryout. Prior to the meeting, the PCQ and WHO-QoL BREF questionnaires, and informed consent form for each of the 60 participants were sent to the facility and tryout ran for three days or sessions, on 19, 21 and 22 October 2021 with 20 participants per day. This arrangement was made based on the capacity of the room that was used for the tryout. During each tryout session, inmates were accompanied by two prison officers while two members of the study team were present through the zoom virtual platform to give a brief description about the study, and provide instructions on how to complete the informed consent form, and each questionnaire. As compensation, prison officers distributed a towel sent previously to the facility to participants after they completed the questionnaires. Characteristics of the tryout participants are described in Appendix 7.

e. Final result

Tests showed that the questionnaires have content validity as evaluated by a panel of experts, academics, researchers and prison officers, while confirmatory factor analysis showed that 46.67% of the total measurement domains are valid. Correlation between PCQ and the quality-of-life instrument WHOQOL-BREF was also tested as part of external validity test and 80% of the total measurement domains were shown to be valid. In the aspect of reliability, only one sub-domain was found to be unreliable, that is the 'relationship with correctional officers' sub-domain (0.017). Other sub-domains were found to be reliable (0.652 – 0.952). In conclusion, the Indonesian adaptation of the prison climate questionnaire is a promising instrument for use in the Indonesian prison setting in the future. Details of the item analysis, reliability and validity tests of the PCQ are provided in Appendix 8 and 9.

## 3.2. MI TRAINING

MI training was held as a virtual training on the zoom platform from Thursday 9 September 2021 to Wednesday 15 September 2021 9 am to 3:30 pm Western Indonesia Time (WIB). Training was held daily with a break during the weekend. Facilitators were Evi Sukmaningrum**,** M.Si., PhD and dr. Astri Parawita Ayu, SP. KJ, PhD, while members of the study team served as co-facilitators. Six prison officers, two from each correctional facility (2 intervention facilities and one control facility) participated in the training, plus several participants from the DGC namely dr. Astia Murni (Chief of Drug Dependence Rehabilitation

Section), Christiani Sarira (Functional Staff of the Special Health Services and Rehabilitation Sub-Directorate), and Asep Hoilid A. (Chief of HIV/AIDS Services Section).

The training material was developed based on the MI Guideline, the implementation guideline and the MI module. The first three days of the training focused on the principles of ROARCS (Rapport, Open Question, Affirmation, Reflection, Clarification, Summary), and PCP-AM (Pre-contemplation, Contemplation, Preparation, Action, Maintenance). Participants also learned various communication techniques that can promote change such as change talk, recognizing and rolling with resistance, promoting insights about behavior change and strengthening the commitment to change. The training utilized various methods, starting with presentation of the materials, followed by reflective activities, group role plays and case discussion.

In the next part of the training, participants practiced the six MI sessions that have been developed for prison counseling. The sessions are as follows: Session 1. Information Provision and Problem Identification, Session 2. Exploration of Personal Strengths and Social Support, Session 3. Planning for Lifestyle Changes, Session 4. Reinforcing the Changed Behavior, Session 5. Enhancement of Self-Esteem, Self-Efficacy, and Self-Liberation, and Session 6. Termination/Referral. In this process, participants listened as the facilitators described the sessions and its activities, then moved into groups to engage in group role plays. Each participant took turns counseling clients as other participants observed the process, and feedback was directly provided by the facilitators after each role play session. The outreach team of Kios Atma Jaya provided support to the training by becoming the clients in the role play as they are familiar with issues that people who use substances commonly face.

Throughout the training process, participants from all three facilities showed a high level of enthusiasm. All participants were punctual, and participated actively and seriously in discussion sessions, reflective activities and role plays. Participants also freely asked questions about any matters that they did not understand. Some participants showed impressive performance during the training, were quick to understand the materials and able to practice the various skills that were taught. Facilitators recognized this significant progress and observed how participants who in the initial stage of training showed a tendency to lecture clients and dominated the counseling session switched to listening more and doing more reflection. Knowledge improvement was also seen in an almost two-fold score increase between pre-test and post-test, from an average score of 48 at pre-test to 94 at post-test. Details are provided in the table below.

Table 2. Pre-test and Post-test Scores of MI Training Participants

| Participants | Pre-Test Score | Post-Test Score |
|---|---|---|

| | | |
|---|---|---|
| Counselor 1_Muara Sabak | 24 | 80 |
| Counselor 2_Muara Sabak | 64 | 92 |
| Counselor 1_Bangli | 60 | 100 |
| Counselor 2_Bangli | 72 | 100 |
| Counselor 1_Yogyakarta | 52 | 96 |
| Counselor 2_Yogyakarta | 16 | 96 |
| Average score | 48 | 94 |

In addition to a five-day training on MI, participants were also provided with an opportunity to practice their MI knowledge and skills by holding a trial counseling session with one inmate for a period of one week. The counseling session was recorded, and the file was uploaded onto Google Drive provided by the study team. Facilitators and co-facilitators watched the video and provided feedback to the participants. The recording showed that the training participants were able to practice their MI skills, though one participant had difficulties arranging the timing of counseling session, resulting in sessions that were too brief. This participant received specific suggestions regarding counseling time management such that counseling sessions can proceed according to the guideline.

## 3.3 IMPLEMENTATION OF MI AND TC TREATMENT MODALITIES

The rehabilitation program with the MI approach in two intervention facilities, class II Narcotics Prison in Bangli and Muara Sabak started on 27 September and continued till 20 November 2021. Before the start of the program, the prison team administered the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) to prison inmates who were willing to participate in the MI program. The head of the rehabilitation program then selected several inmates to participate in the MI program. In each intervention facility, 10 inmates were selected to be the participants, but one inmate in Muara Sabak prison completed his prison terms midway through the rehabilitation program and therefore did not continue the program. The remaining 9 participants in Muara Sabak continued the program and completed the whole series of intervention. Overall, there were 19 participants to the MI program.

In implementation, each intervention facility had 2 counselors who had been trained to apply the MI method in counseling sessions. Each counselor worked with five clients and held 6 (six) individual counseling sessions per client during a period of 2 months (27 September to 20 November 2021). Unlike the therapeutic community (TC) method that separates rehabilitation participants into special prison blocks, participants of the MI method were not housed in specific prison blocks. They remained in their general blocks together with other inmates who did not participate in a rehabilitation program and the MI method.

In the control facility, Class II narcotics prison in Yogyakarta, rehabilitation program employed the therapeutic community (TC) method. The TC program started in January 2021 but was suspended in April 2021 when one of the participants was found to be infected with Covid-19. The rehabilitation program resumed in July to September 2021, or up to November 2021. Prisoners who participated in the TC program were also recruited using the ASSIST assessment as per the standard procedure and guideline from the DGC.

To obtain a picture about the rehabilitation program implementation, using either the motivational interviewing (MI) or the Therapeutic Community (TC) method, focus group discussions (FGDs) were carried out with counselors and prison rehabilitation teams to capture their perception and experience. In the intervention facilities, the FGD was held on 1 December 2021 with 4 counselors who were directly involved in the MI program, while in the control facility, the FGD was held on 2 December 2021 and was attended by 6 informants who were staffs in charge of the TC program and members of the clinical team who were directly involved with the TC program.

### 3.3.1 Implementation of the MI Modality in Intervention Facilities

#### *a. Implementation of MI counseling*

For two months, motivational interviewing principles could be applied smoothly in the rehabilitation program in narcotics prison in Bangli and Muara Sabak. Focus group discussion with staffs from the two facilities revealed that counseling sessions were held as expected and only some minor constraints were experienced due to the Covid-19 pandemic, bad weather and some difficulties to juggle other tasks that rehabilitation officers had to do in the facility.

> *"Regarding implementation, as I said last time, there was a constraint in my prison, primarily because some of my clients got Covid. I ended up replacing 1 client with another person since he had got Covid twice, and I couldn' wait any longer, he got infected again and again. Finally, we recruited another client. The way we did it here, in the prison we've prepared a counseling room, and there was a partition between the client and us, so counseling could still be done in the midst of the pandemic" (N1_FGD Intervention Facility).*

One constraint brought about by the Covid-19 pandemic was the inability of prison inmates to engage in various activities outside the counseling room, while extreme weather that Bangli prison experienced limited any sports activities for the inmates.

> *"Another problem that Bangli prison faced was the weather. We've been having really extreme weather here, it's been raining almost every day. So it was a bit hard to do any sports activities that we suggested. We monitored them, we implemented the activity and we asked them to do it in their room. They did it" (N1_FGD Intervention Facility).*

Scheduling counseling sessions was another issue that proved to be a problem in the initial part of the program as counselors were still learning to adjust their schedule in order to fulfill their other obligations in the correctional facility. As the program continued, counselors became better at scheduling counseling sessions with each of the 5 clients while juggling their other responsibilities.

> *"We may have to manage our time well, Ma'am. 6 counseling sessions and 5 clients meant we'd be doing about 30 or more meetings. It was up to us to balance our primary duties at the facility with our counseling duties so they didn't interfere with one another. That's why at the start of the program we developed a schedule, myself and Mr. N1 developed a schedule since we also have a counseling room here" (N3_FGD Intervention Facility)*

While counselors were able to overcome the initial barriers, certain contextual factors did create difficulties for clients to change as revealed during an FGD session below.

> *"In my experience, the counseling process that I did with 4 clients was good. Sessions went smoothly. But there was 1 client, the one I told you earlier, it was hard for him to change because of factors in this facility that made it difficult for him to change" (N4_FGD Intervention Facility).*

Considering that motivational interviewing is a relatively new methodology that has never been applied in a correctional setting in the past, the barriers mentioned above are perceived to be reasonable. It is also understood that clients may face a range of other issues in their prison life, in addition to their substance use problem.

### *b. Institutional/leadership support*

Support from the institution and leadership team, in the form of moral as well as material support, also played a role in smooth implementation of counseling activities. During the study, leaders provided moral support by giving

encouragement, paying attention and engaging in discussion about the process of counseling, also providing time dispensation such that counseling activities could proceed undisturbed.

> *"It's monitoring by the Head of the prison, who always asked about the process, the problems and limitations. He indeed always monitored our reports. For example, how many sessions I've facilitated, then there is this activity. We reported those, and we as implementers have a good two-way communication with our superiors" (N3_FGD Intervention Facility).*

> *"Another support was for the counseling session; sometimes we started a session in the afternoon and it lasted until late afternoon, while there would usually be a roll call midway through the session. We got dispensation from our superiors who supported us who held counseling sessions, it's a privilege given for people who serve" (N3_FGD Intervention Facility).*

> *"But when they're in the middle of a counseling session, please don't contact them, don't call them, and they truly complied with the request" (N4_FGD Intervention Facility).*

There were also some material support in the form of an adequate counseling room, assistance during client's assessment, also room and time facilitation for coordination with the PUI-PT PPH PUK2IS team of Atma Jaya.

> *"We received such a lot of support from our superiors, Ma'am. The client was assessed first by the rehab team" (N2_FGD Intervention Facility).*

> *"We were given encouragement to focus in doing this MI counseling, Ma'am. We were also given facilities and infrastructure that were quite adequate. It was really good" (N2_FGD Intervention Facility).*

Through institutional and leaderhip support, moral and material support, the time-intensive counseling activities in the two intervention facilities could be completed as scheduled. This demonstrates the critical role of officials in the leadership position in ensuring achievement of program output. Leadership support is one contextual determinant that should be considered in implementing MI program in a prison setting, aside from other factors that are directly related to a program's success indicators.

### *c. Program's Success*

Study informants believed that the MI program was able to bear fruits and each participating inmate experienced changes. Those who were reluctant to open up in the initial counseling session gradually became more open to share their problems. Throughout the six MI counseling sessions, informants noticed some

change in their clients' behavior and attitude. Clients expressed regret for their actions, and the consequences they had to bear. Clients also showed self-acceptance and a higher awareness about the support they receive from their families.

> *"Finally, he started to feel a change and accept himself. "Oh yes, this is indeed the consequence of the bad thing I did in the past, but this should not be seen as bad karma, it instead is a chance for self improvement" I think he would find such insight useful in the future" (N4_FGD Intervention Facility).*

Aside from a change in the mindset about the reason for one's existence in this world, clients also exhibited changes in their action. Informants reported seeing clients becoming more devout and religious after participating in MI counseling.

> *"He felt "what's the use of living in this world. I've done good things for my wife, but what I got in return was not comparable." Then after the counseling session, where he got a picture about life's problems, the problems in prison, he started to change, Ma'am. He thought, "Oh well, we live in this world to serve God." He's changed now. He now focuses more on religious worship, ma'am, he doesn't think about worldly matters anymore" (N2_FGD Intervention Facility).*

> *"In terms of behavior change, I witness this myself, for example in the past they were quite removed from their religious belief. That's the situation, Ma'am. Overall, I see there is indeed some behavior change, those who in the past weren't engaged in religious worship, now I watched them directly, they started to routinely practice religious worship. Then another client had some issue with his body. One of my clients is a bit overweight, Ma'am. He then changed and started to exercise. He said he got sick quite often, which was probably because he hasn't been active, Ma'am" (N2_FGD Intervention Facility).*

Changes brought about by the counseling sessions ranged from a small mindset change that gave clients a more positive perception of themselves, their problem, and their environment, to more visible changes in attitude and behavior such as becoming more devout and religious. While the time to implement the MI method was limited, the results adequately illustrated the method's potential for implementation in a correctional setting.

The study found that informants had different opinions with regards to the duration of the counseling program. Some counselors felt that the period of 2 (two) months was sufficient for the 6 counseling sessions that were required. That resulted in a fairly intensive schedule with essentially one counseling session per day. The counselor would not be able to schedule 2 counseling sessions per day due to their other duties and obligations.

> *"In my opinion 2 months is adequate. Indeed, during those 2 months, our schedule was packed. 2 months was enough but we had to do it every day, it was intensive. When we had overlapping activities, we then had to do some catching up toward the end. So that's that. Our limitation was also that we couldn't hold 2 or 3 meetings in a day, I think that will be a burden for us, because we have other duties too. The concern is that we won't be able to get optimum results when we have counseled 2 to 3 people in one day" (N3_FGD Intervention Facility).*

Similar input was given by other informants who felt that two months were more than adequate, they could do counseling and attend to other tasks. However, one informant stated that two months were not long enough to describe any changes in a client. He believed that the duration should be increased to 4 months in order to produce real, genuine, non-premature change.

> "*But if possible, the 2 months should be extended, maybe to 4 months, Ma'am, since we we want counseling to be truly real and actual, and that they experience true, real change. Not premature change, but true change. Yes, counseling truly is very beneficial" (N4_FGD Intervention Facility*).

Aside from the program's time duration, whether or not the time allocated was sufficient to obtain real change in the client, one matter that was equally important was ensuring that the counseling guideline was easy to understand and applicable.

### *d. Comprehension of the MI guideline*

A fundamental difference that sets MI apart is its client-centered principle where the initiative to change comes from the client, based on their own awareness. This is different from the TC method and its perspective that change has to come from outside the individual. The MI guideline also includes other important basic principles of MI that should be applied in counseling as a whole approach. In this study, overall, informants' comprehension of the MI guideline helped facilitate the counseling process. Informants performed counseling based on the guideline and found the guideline to be quite good, though there was also a need to study the guideline further in more detail.

> *"I think the module combined with the training that we received was very helpful to us in counseling sessions" (N3_FGD Intervention Facility)*.

> *"The guideline that is in the module, I read it and when I applied it, it was really amazing. Everything that we read and all the instructions were so useful and the language was good. We had to study it and this was such a great guideline that we can use even in our daily consultation. This is so amazing. If there are other guidelines, we have to study them, Ma'am, so that we understand how to be a good counselor" (N4_FGD Intervention Facility).*

> *"To my recollection I have followed the instruction given in the module, Ma'am. So whatever was written in the module, what instructions were given, I followed them based on the module. I don't yet get what needs to be developed" (N3_FGD Intervention Facility*).

Some aspects in the guideline also needed clarification, particularly with the recording forms that have to be completed in each counseling session. Informants considered this as a challenge since form completion procedure was not covered in the training.

> *"It's just that there were some things that weren't covered during training and when we read the module, we couldn't understand some of the explanation. The other day, Mr. N1 also asked how to complete this form. Some words or parts of the module were slightly confusing for us. It's not that we didn't understand, but we were just concerned that we may have misinterpreted some things" (N3_FGD Intervention Facility*).

> *"The guideline that was given was actually quite good and I can use it, Ma'am. But we were confused in the recording, when we had to fill in those worksheets, and then the form for the counseling session. Since the training didn't discuss the procedure to fill in these" (N2_FGD Intervention Facility*).

Informants stated that in general, the MI guideline could be applied in a correctional setting without any essential modifications. It would be useful to incorporate more case examples into the module, also sample questions regarding issues that clients commonly face.

### *e. Perception about the MI program*

As part of the study, the study team explored the level of understanding of the MI guideline, the benefits individuals gain from MI counseling and the informants' experience in implementing MI interventions as well as their perception about the MI program in their prison setting. In the informants' perception, the MI program's suitability for implementation in a correctional facility would depend on whether the program would like to focus on quantity or quality. MI would be a suitable method when the focus is to produce real, long-lasting change, but would be constrained to cover a large number of individuals.

> "*…I think it depends, Ma'am, it depends on what we want to achieve, such as quality or quantity. Those two have an inverse correlation. For example, in TC we can get, or we can cover more clients than in MI. But in terms of quality as a group, not as an individual, there are 1, 2 people who according to our observation were not successful. With MI, we focus on each individual but there is limited quota" (N3_FGD Intervention Facility*).

Similarly, another informant stated that MI would be a good program to implement in a prison setting since the method focuses on individuals and the method allows an exploration of individual client's problem in relatively more depth compared to what can be done in a group approach.

> " ..... *the change that we observe is better accomplished through MI, Ma'am. Maybe in a group setting people cannot concentrate, they're not focused, but when things are done the way we do it now, with MI, people are able to focus. They focus on the counseling, they understand the goal that is expected, which is change. When we have a large group, I have to be honest that's what we do in the rehab for 6 months, and it was a crowd, and honestly it was pushing it" (N4_FGD Intervention Facility*).

Implementation of a rehabilitation program with the MI approach also had its own challenges. These include time limitation, as well as the values and beliefs of the informant that sometimes conflict with those of the client. Another challenge was also regarding the informants' skills to explore and identify the client's problem, in addition to prison's condition that can cause clients to lose focus over their change process.

Overall, throughout the rehabilitation program and the MI application, informants completed counseling sessions with each of their 5 clients minus 1 client in Muara Sabak prison who withdrew from the program. The program received good moral and material support from the leadership in both facilities and aside from the issue with forms completion that was not covered in the training, overall, the MI guideline was quite well understood. Informants also considered the guideline as highly beneficial to guide counseling sessions and suggested to incorporate more examples into the module.

### *f. Enabling Factors and Barriers*

No significant constraints were experienced during implementation of MI and individual counseling sessions. Most of the constraints were related to administrative procedures such as the officer forgetting to get the client's signature on the attendance sheet, or provision of snacks during counseling that had to be provided simultaneously in one session due to limited access outside the prison. All these constraints were able to be addressed quite well by prison officers/staffs. The study team was also constantly available for chats or phone calls to respond to questions from prison officers.

To discuss constraints and complete the administrative procedure, the study team held a meeting with prison officers. At the meeting it was identified that one inmate from Muara Sabak prison was not able to continue his participation as he has completed his prison terms. That decreased the total number of participants

from 20 to 19 people for the 6 individual counseling sessions in the two intervention facilities.

To ensure that individual counseling was given according to MI principles and skills, each counselor was equipped with an MI guideline and module, also recording documents such as informed consent form, counseling activity form, attendance form and worksheets for each session. Forms were sent to each counselor who were then responsible to upload completed forms to the study team's Google Drive after each session. All documents were also sent back to PPH Atma Jaya for storage by the study team.

The completed documents, both the electronic and physical forms, were reviewed for completeness by the study team. Counseling activity forms for all 6 sessions were complete except for the one inmate in Muara Sabak prison who did not attend the last session as he had completed his prison terms and decided to withdraw from the program. The counselor had confirmed this decision with the related individual. Another document that was not complete was the referral sheet that was intended for session six. None of the participants had the referral completely filled in since the counselor believed they did not require further referral.

The primary issue that all counselors faced was time management and a relatively heavy workload. The counselors who were involved in MI were prison officers or staffs who had received training on basic counseling and MI. They had to manage their own schedule to fulfill their primary duties as prison staffs, as well as serve as rehabilitation program counselors. This resulted in a relatively high workload and counselors felt that counseling 10 individual clients through six meetings in 2 months as quite difficult.

> *"We may have to manage our time better, Ma'am. 6 counseling sessions with 5 clients meant about 30 or more meetings, and it was up to us to balance our primary tasks in the prison with our counseling duties such that they didn't interfere with one another" (N3_FGD Intervention Facility).*

> *"It was overwhelming with 10 targets in 2 months" (N3_FGD Intervention Facility).*

The 2-month duration of MI was a topic of debate among counselors. One counselor believed 2 months was insufficient for individual counseling since clients had not shown or felt any change, while other counselors stated that 2 months was ideal for 6 individual counseling sessions. Still, another counselor said that MI could be applied to counsel individuals in as short as 1.5 months.

> *"In my personal opinion, 2 months is more than enough Ma'am, if it's shortened by a week, two weeks, I think it'll still be doable" (N1_FGD Intervention Facility).*

*“I think 2 months is enough, Ma’am. Though indeed the schedule was intensive in those 2 months. 2 months was enough but we had to do it every day and the schedule was packed” (N3_FGD Intervention Facility).*

*“This was 2 months and I think 2 months is not enough. To be honest, in each of our counseling session and our rehab program, we expect to see a change since it’ll be of no use without change. The change that we expect is change that is really ingrained in them” (N4_FGD Intervention Facility).*

All counselors agreed that the use of MI in counseling was a new experience. Personally, some counselors still felt uncertain, and had not developed enough confidence to respond appropriately to clients. As a result, conversations did not flow smoothly and counselors found it hard to build an open comfortable relationship with the client. In this respect, counselors felt they still need to refine their MI skills in order to be more proficient in holding MI counseling sessions in the future.

*“I think it’s to do with skills, Ma’am. There were conditions when the client’s response caused us to think that way. In other words, we tried to build rapport, but the client’s response was not what we expected. Sometimes there were those moments like for example when I asked the client “how’re things going these days” their response was “yes, just so so, Sir, nothing special”. Such a response sometimes made us wonder whether we didn’t ask a good probing question or maybe it was just my limited skill that made them feel uncomfortable” (N3_FGD Intervention Facility).*

*“I’m still learning about this, so during counseling I was also still a bit unsure, Ma’am. Is this right, is this wrong, something like that, Ma’am. My fear was that the client didn’t understand what I was trying to say. There might also be some hesitation during counseling session such that we had to pause during the session, what do we have to do, what should we explore, what should we say to the client so that he feels comfortable in the counseling session” (N2_FGD Intervention Facility).*

Another constraint was regarding completion of the counseling worksheets. Counselors were confused about how to fill in the worksheet per session since the forms were not tried or thoroughly explained during training. One of the counselors also suggested that the MI guideline incorporates some sample questions that can be used with clients.

*“That was all, I mean in completing the forms, there were some terminologies that we didn’t get to learn during training. That was all.” (N3_FGD Intervention Facility).*

*“Maybe if you were to add to it, include more sample questions, so we get a picture that for this session, what we have to explore is this, we have to assess and ask the appropriate questions” (N1_FGD Intervention Facility).*

Counselors agreed that MI is useful to know each client better and understand their dynamics. It is a personal approach that can be applied to understand a client’s issues, promote change in the client and strengthen their commitment to maintain the change. Through MI, counselors learned not to quickly evaluate inmates, but to instead

understand the personality of each inmate, the challenges they face with regards to their substance use, and the process they go through to move toward a more positive direction. Prison staffs felt that MI is an appropriate treatment modality when the target is high quality, deep, lasting change in clients.

> *"But when they are involved in what we are currently doing with MI, they have a focus. When they focus on counseling, they understand the goal, which is change" (N4_FGD Intervention Facility).*

> *"For personal change, this MI is more suitable" (N2_FGD Intervention Facility).*

Prison counselors felt that training and the various guidelines were adequate to guide implementation of MI. The module provides a complete description on the skills that are required, while the implementation guideline concretely illustrates each step that should be done during counseling sessions. However, several officers did have difficulties completing the session worksheets since they did not have sufficient time to practice completing each worksheet during training. These counselors usually would discuss their questions in a WhatsApp group or contact the training co-facilitators to obtain clarification.

> *"The guideline that was given was actually quite good and I was able to use it, Ma'am. But we were confused when we had to fill in those worksheets" (N2_Intervention Facility).*

### 3.3.2. Implementation of the TC Modality in the Control Facility

The Yogyakarta narcotics prison was the control facility that implemented the therapeutic community (TC) approach in their rehabilitation program. This approach was used as a comparison to see how effective the motivational interviewing approach was as an alternative treatment modality.

To understand the situation in the control facility, a focus group discussion was held on 2 December 2021 with 6 rehabilitation program staffs including the person-in-charge of the program, the implementation team and the medical team, minus the Program Manager. Topics discussed during the FGD revolved around the process of rehabilitation, the understanding of the module, institutional/leadership support, the outcome of the rehabilitation program in the form of tangible impact on the inmates, the perception about the TC program and the challenges that had to be overcome.

#### *a. Implementation of the TC program*

In the control facility, the TC program was implemented according to the standard guideline that has been established, starting from the use of the ASSIST form for recruitment, followed with urine testing, and informed consent before enrollment into the program.

> *"I'd like to only add a bit of information, it's more related to the early stage, in recruitment of inmates who will be rehab participants. Just additional info, after the assessment, then there was urine testing" (N2_Control Facility).*

> *"It's from the beginning. When we started recruitment, we received from the Community Guidance and Care Section (Bimaswat) names of inmates who need to be screened. We use the ASSIST tool for screening, then we administer informed consent, urine test, then there's a mini-depression test too" (N6_Control Facility).*

After this initial stage, inmates who fulfilled the criteria to participate in the program would receive a schedule of rehabilitation activities which consists of group counseling and group dynamic exercises. In the light of the pandemic and the requirement to limit external visitors, family support groups, family counseling and individual counseling sessions were not implemented since those activities were facilitated by an external counselor who is part of the Indonesian Association of Addiction Counselors (IKAI).

> *"….group dynamic exercise for counseling is already ongoing, Ma'am. There's only one activity that we haven't been able to do: family counseling and family support group, Ma'am. It's because of this pandemic, and the circular letter from the Director General of the Ministry also prohibits direct meeting between our inmates and their family members" (N1_Control Facility).*

> *"For the group dynamic exercise, God is willing, we do have space, it's quite spacious, but the other aspect, individual counseling cannot yet be provided" (N1_Control Facility).*

All the activities were developed based on the DGC's 2018 implementation Guideline for Drug Rehabilitation Services that are provided to detainees and inmates in the technical implementing units of corrections (*UPT Pas*). As specified in the guideline, the rehabilitation program ran for six months, which in the informants' perception was insufficient to develop changes in the participants' character. Participants who had completed the rehab program continued with a post-rehab program held in Correctional Centers (*Bapas*), outside the authority of the correctional facility. This limits prison officers' ability to follow up on any inmate's progress toward changing, and officers witness a high rate of recidivism among inmates, and consider the 6-month program as not having optimum effectiveness.

*"I think six months are not optimum, the ..umm.. commitment is not fully developed yet. They probably are able to apply the change, but to be truly committed, to supress that urge, to really evoke that suppression, no, not yet, it's really obvious. Maybe in terms of duration … the rehab should be extended" (N3_Control Facility).*

*"Several people repeated their action, I saw them go back to prison for the same crime, and it's concerning for us. Six months is not optimum, in our opinion. I personally also still need… umm… further mentoring" (N1_Control Facility).*

### b. *Institutional/leadership support*

The TC social rehabilitation program in the control facility received significant support from the facility's leadership and the Chief of Prisoner Mentorship Section (*Binadik*) was actually the official in charge of the TC program in the control facility. Funding support was also made available to build collaboration with external parties such as with the Indonesian Association of Addiction Counselors (IKAI) to create a referral system and network that can support rehabilitation activities. This was necessary to meet the needs of hundreds of rehab participants in the TC program.

*"In terms of support from the Head of the Prison, thank God, we receive good support. From the Chief of Prisoner Mentorship Section, I'm the Chief, and I automatically am constantly in the field. Thank God, we clearly get good support, and also good funding support"…… "But to mentor these many people, that's what caused us to finally develop collaboration with IKAI, the Indonesian Association of Addiction Counselors" (N1_Control Facility).*

While support in terms of funding is assured, prison staffs acknowledged the limitation of personnel to facilitate key activities such as counseling and support group meetings. This requires the involvement of an external counselor from IKAI, which was not possible to do during the prison visitation restriction policy. The prison internal team then took turns filling in for these activities such that the program could continue to run as scheduled.

> *"Indeed, in social rehab activities, IKAI plays a significant role in group therapy sessions. Sometimes on occasions when IKAI isn't able to facilitate the activity or has something else going on, we are asked to fill in. There are also some recreational activities, and if the facilitators cannot be present, then we will jump in. A lot of our activities are indeed covered by a third party" (N6_Control Facility).*

> *"Our human resources, internally in our facility, are very limited. When you work in the field of medical and social rehabilitation, you do need people who have skills, have capacities that are more specialistic" (N1_Control Facility).*

Informants also acknowledged the limited facility and infrastructure that they had, such as the lack of a proper counseling room.

> *"Regarding facility and infrastructure, we do have some constraint, Ma'am, since our space is limited, so we utilize rooms that are actually not suitable for a rehabilitation program" (N1_Control Facility).*

These barriers do play a role in successfullly facilitating changes in inmates after completing a rehabilitation program.

### c. *Program's success*

The success of the TC program was assessed based on any change in the rehabilitation participants as observed by the informants. One observed change was how rehabilitation participants gradually opened up to sharing stories and problems.

> *"They indeed become more open with us since they feel, … with umm… the counseling prompts them to be more open with us" (N2_Control Facility).*

Prison staffs also noticed participants becoming more disciplined, and organized, while program participants expressed their enjoyment of the series of activities. One informant observed how other prisoners becoming more spiritual and devout in their daily religious worship.

> *"Before the scheduled time, they are all ready, orderly, neat. Sometimes we ask them, how do you feel after receiving rehabilitation service? These youngsters responded, it's fun, Ma'am, we're glad to participate in rehab" (N2_Control Facility).*

> *"Yes, thank God, in the past they attend religious service because they had to, since it is one of prison's activities. Now they willingly do it, they know the prayer timing, and make preparations beforehand" (N2_Control Facility).*

Prison staffs also noticed a change in the physical appearance of rehab participants, primarily in a more cheerful facial expression. Participants also developed a closer relationship with the rehabilitation officers whom they regard as their family or parents.

> *"We observe that those young people who participate in rehab are indeed very different. Just take a look at their facial expression, … it was like they were in fear, and all kinds of things. But after … this rehab, those young people become cheerful, and with us, the rehab staffs, the male and female staffs, they feel as if we are their parents, so it was like there is no separation between us and them" (N3_Control Facility).*

### d. Comprehension of the TC guideline

Informants admitted that not all prison staffs understand the 2018 drug rehabilitation guideline from the DGC. Only the Official in charge of the Program and the Program Manager had a complete understanding of the guideline. The medical team merely implemented a schedule that they received from the Program Manager.

> *"Ma'am, it's because our role here is as an implementing team. So we receive the program schedule from the Program Manager, and that's what we implement. So as I said earlier, we follow the schedule, yes, that's it, follow the schedule, whatever we have to do in line with our tasks. So we're not tuned with the Implementation Guideline, we don't have the guideline" (N2_Control Facility).*

The official in charge of the program specifically and thoroughly understood the program's implementation guideline and was responsible to adapt the program to suit the condition of the facility.

> *"We tend to have a better understanding, and the specifications actually match. Prison facilities vary, that's the situation. On the other hand, from our side, we have made adjustment to the rehab program in our facility" (N1_Control Facility).*

The obligation of the TC program implementers, the medical team and counselors, was to implement the program based on the schedule that was given to them.

### *e. Perception about the TC Program*

In the informants' view, up to this point, the TC program has not addressed the underlying issue that incarcerated drug offenders face, particularly the issue of drug traffickers. Prison staffs acknowledged that they do not have the skills and the extensive knowledge that would be needed to change the mindset of incarcerated drug traffickers so that they would not be repeating their activities once they are released from prison.

> *"So far what is explored or discussed in a rehab program, either with the TC or MI method, is just about the users. But it should be about changing the mindset, the behavior of those who are relevant, like the drug trafficker or dealer so that they don't repeat their actions" (N1_Control Facility).*

Counselors of Yogyakarta narcotics prison who participated in the PUI-PT PPH PUK2IS Atma Jaya's MI training expressed interest to implement the motivational interviewing program in the control facility in the future, though they also recognized that having only 2 counselors trained on MI would make program implementation a challenge.

> *"In my opinion, clearly it's good to be one of the method. I mean, the method is not just TC, but it can simultaneously be complemented with MI counseling" (N6_Control Facility).*

> *"The challenge is because this is still new and we're just starting. Plus we didn't participate in the same way as the intervention facility. We are the control facility, so if we do want to implement this in 2022, it may be quite a challenge for us, Ma'am. Ms. N6 and myself with two hundred people as the target, while the MI counselors are just the two of us" (N2_Control Facility).*

# 3.4. EVALUATION OF MI IMPLEMENTATION

## 3.4.1 Characteristics of participants

A total of 39 prison inmates were respondents in this study, 19 of them were in the intervention group who received social rehabilitation service using the motivational interviewing (MI) model for 2 months, while the remaining 20 respondents were in the control group who followed the therapeutic community (TC) model of rehabilitation. Respondents' characteristics are described in the following table.

Table 3. Characteristics of study respondents

| Characteristics | Total n=39 n (%) | Intervention Group - MI (n=19) n (%) | Control Group - TC (n=20) n (%) |
|---|---|---|---|
| **Sex** (male) | 39 (100) | 19 (48.72) | 20 (51.28) |
| **Age** (mean, SD) | 32.56 (8.33) | 35.63 (8.86) | 29 (6.78) |
| **Age group** | | | |
| 21-30 years | 17 (43.56) | 4 (21.05) | 13 (65.00) |
| 31-40 years | 18 (46.15) | 12 (63.16) | 6 (30.00) |
| 41-50 years | 2 (5.13) | 1 (5.26) | 1 (5.00) |
| > 50 years | 2 (5.13) | 2 (10.53) | 0 (0.00) |
| **Highest level of education** (n=38) | | | |
| Elementary | 6 (15.79) | 3 (16.67) | 3 (15.00) |
| Junior High | 13 (34.21) | 7 (38.89) | 6 (30.00) |
| High School | 16 (42.11) | 8 (44.44) | 8 (40.00) |
| D3 (High School + 3 yrs) | 2 (5.26) | 0 (0.00) | 2 (10.00) |
| Bachelor's Degree | 1 (2.63) | 0 (0.00) | 1 (5.00) |
| **Marital status** (n=37) | | | |
| Single | 15 (40.54) | 3 (17.65) | 12 (60.00) |
| Married | 12 (32.43) | 8 (47.06) | 4 (20.00) |
| Divorced | 10 (27.03) | 6 (35.29) | 4 (20.00) |
| **Year of admission to prison** | | | |
| Year 2016 | 3 (7.69) | 2 (10.53) | 1 (5.00) |
| Year 2017 | 1 (2.56) | 1 (5.26) | 0 (0.00) |
| Year 2018 | 6 (15.38) | 3 (15.79) | 3 (15.00) |
| Year 2019 | 6 (15.38) | 1 (5.26) | 5 (25.00) |
| Year 2020 | 12 (30.77) | 11 (57.89) | 11 (55.00) |
| Year 2021 | 11 (28.21) | 11 (57.89) | 0 (0.00) |
| **Length of prison terms** | | | |
| <5 years | 12 (30.77) | 3 (15.79) | 9 (45.00) |
| 5-10 years | 21 (53.85) | 14 (73.68) | 7 (35.00) |
| 11-15 years | 5 (12.82) | 2 (10.53) | 3 (15.00) |
| > 15 years | 1 (2.56) | 0 (0.00) | 1 (5.00) |
| **Previous participation in any mentorship program in the prison** (n=38) | | | |
| Yes | 30 (78.95) | 11 (61.11) | 19 (95.00) |
| No | 8 (21.05) | 7 (38.89) | 1 (5.00) |

Table 3 shows that all the respondents were male with an average age of 32 years. Most had a high school diploma (42.11%), were single (40.54%), and were admitted to prison in either year 2020 (30.77%) or 2021 (28.21%) to serve a 5- to 10-year sentence (53.85%). The majority of respondents (78.95%) had also participated in some kind of prison-based mentorship program. Comparison between the intervention and control groups shows that respondents in the control group were mostly between 21 to 30 years of age with an average age of 29 years. Most of them were single (60%) and were sentenced to less than 5 years. In contrast, respondents in the intervention group were older. Most were married (47.06%) and were serving a longer sentence between 5-10 years.

### 3.4.2. Measurement of Prison Climate

The 39 respondents completed a quality-of-life questionnaire and a prison climate questionnaire. A total of 20 respondents participated in the TC model, which was implemented in only one prison (control facility) while 19 respondents participated in the MI model of rehabilitation implemented in two prisons (intervention facilities). Intervention facility 1 had 10 respondents, and the remaining 9 respondents came from intervention facility 2. The prison climate questionnaire consists of six domains with different ranges of score for each domain. Descriptive analysis of the prison climate overall score and the score categorized by facility is detailed in Table 4.

Table 4. Descriptive Analysis of the Prison Climate Score

| Domain | Range of Score | Total (n=39) Mean (SD) | Control Facility-TC (n=20) Mean (SD) | Intervention Facility I-MI (n=10) Mean (SD) | Intervention Facility II-MI (n=9) Mean (SD) | p-value* |
|---|---|---|---|---|---|---|
| **1. Relationship with prison staffs and fellow prisoners** | 13-52 | 41.94 (7.71) | 35.70 (4.00) | 51.60 (1.26) | 45.11 (4.13) | **<0.001** |
| 1.1 Relationship with fellow prisoners | 5-20 | 17.35 (2.46) | 16.20 (2.21) | 20.00 (0.00) | 17.00 (2.23) | **<0.001** |
| 1.2 Relationship with prison staffs | 4-16 | 12.89 (3.01) | 10.6 (2.30) | 16.00 (0.00) | 14.55 (1.42) | **<0.001** |
| 1.3 Prison staffs treatment | 4-16 | 10.77 (4.67) | 7.10 (3.41) | 15.60 (1.26) | 13.55 (1.67) | **<0.001** |
| **2. Safety** | 5-20 | 9.69 (3.28) | 12.4 (1.68) | 7.40 (1.26) | 6.22 (2.04) | **<0.001** |
| **3. Contact with the outside world** | 11-44 | 24.85 (11.36) | 20.15 (7.05) | 33.00 (15.79) | 26.22 (8.64) | **0.009** |
| 3.1 Satisfaction with visitations while inside the facility | 8-32 | 20.64 (9.14) | 15.60 (5.19) | 32.00 (0.00) | 19.22 (10.26) | **<0.001** |
| 3.2 Satisfaction with the frequency of contact with the outside world (n=37) | 3-11 | 6.13 (2.96) | 4.32 (2.03) | 9.11 (2.89) | 7.00 (1.80) | **<0.001** |
| **4. Prison facility** | 16-64 | 45.69 (7.97) | 39.15 (3.93) | 56.00 (0.00) | 48.78 (3.86) | **<0.001** |
| 4.1 Rest at night | 3-12 | 6.00 (3.76) | 7.95 (3.91) | 3.00 (0.00) | 5.00 (3.04) | **0.001** |
| 4.2 Health service | 6-24 | 18.87 (5.77) | 16.55 (3.72) | 24.00 (0.00) | 18.33 (8.87) | **0.002** |
| 4.3 Cooperatives/Cafeteria | 3-12 | 8.35 (2.56) | 6.40 (1.35) | 12.00 (0.00) | 8.67 (0.71) | **<0.001** |
| 4.4 Complaint management (n=29) | 4-16 | 12.58 (3.77) | 8.10 (1.91) | 16.00 (0.00) | 13.77 (2.11) | **<0.001** |
| **5. Engagement in meaningful activities** | 14-56 | 39.64 (14.83) | 27.40 (9.34) | 56.00 (0.00) | 48.67 (6.02) | **<0.001** |
| 5.1 Satisfaction over the activities | 6-24 | 15.17 (8.07) | 8.60 (5.18) | 24.00 (0.00) | 29.00 (3.81) | **<0.001** |
| 5.2 Availability of meaningful activities | 4-16 | 11.02 (4.77) | 7.05 (3.03) | 16.00 (0.00) | 14.33 (1.87) | **<0.001** |
| 5.3 Reintegration into society | 4-16 | 12.74 (4.11) | 10.85 (3.84) | 16.00 (0.00) | 13.33 (4.77) | **0.003** |
| **6. Autonomy** | 4-16 | 10.61 (5.07) | 6.45 (3.39) | 16.00 (0.00) | 13.89 (1.83) | **<0.001** |

* One-way ANOVA test; significant with p<0.05

Table 4 illustrates the evaluation of the prison climate in the form of six domains, namely relationship with prison staffs and fellow prisoners, safety, contact with the outside world, prison facility, engagement in meaningful activities and autonomy. Overall (n=39), five of the domains received a relatively good average score, while one domain was evaluated as less good. The domain of relationship with prison staffs and fellow prisoners was found to be quite good with an average score of 41.94 (score range: 13-52), and so were the domain of contact with the outside world that had an average score of 24.85 (score range: 11-44), domain of prison facility (average score 45.69 and score range: 16-64), domain of engagement in meaningful activities that had an average score of 39.64 (score range: 14-56) and the domain of autonomy with an average score of 10.61 (score range: 4-16). The domain of safety was evaluated as less good with an average score of 9.69 and a score range of 5-20.

Comparison the prison climate score in the three prisons (control facility, intervention facility I and II) revealed that the intervention facilities scored higher on five domains: relationship with prison staffs and fellow prisoners, contact with the outside world, prison facility, engagement in meaningful activities and autonomy. Safety was the only domain where the control facility had a higher score than the two intervention facilities. Intervention facility I had the highest score in five domains (relationship with prison staffs and fellow prisoners, contact with the outside world, prison facility, engagement in meaningful activities and autonomy), and the control facility had the highest score in the safety domain.

One-way ANOVA test shows that there is a true difference in the average prison climate scores in all domains and sub-domains between the control facility, the intervention facility I and II, as evident in the p-value of $<0.05$. At the very least, there is a difference in the prison climate between 2 groups, the control facility and intervention facility I, or between the control facility and intervention facility II, or between the two intervention facilities. This means that the prison climate, as measured in the form of relationship with prison staffs and fellow prisoners, safety, contact with the outside world, prison facility, engagement in meaningful activities and autonomy, did vary between the control facility, the intervention facility I and II.

### 3.4.3. Quality-of-Life Measurement

Respondents' quality of life was measured before (pre-test) and after (post-test) the rehabilitation program with either the TC or the MI model. Quality-of-life scores range between 0 to 100 in four domains which are physical health, psychological health, social relationship, and environmental health. The pre-test and post-test QoL scores of respondents in the control (TC) and intervention (MI) groups and the comparison between scores are presented in the following table.

Table 5. Average Quality-of-Life Scores Before (pre-test) and After (post-test) a Drug Rehabilitation Program with the TC (control group) or MI (intervention group) Model

| Quality-of-life Score 0-100 | Pre-test mean (SD) | Post-test mean (SD) | p-value* |
|---|---|---|---|
| **Control Group (TC)** n= 20 | | | |
| Domain 1 (physical health) | 57.65 (12.87) | 63.20 (13.94) | 0.088 |
| Domain 2 (psychological health) | 54.15 (14.19) | 59.95 (16.49) | 0.088 |
| Domain 3 (social relationship) | 46.20 (14.40) | 52.15 (17.84) | 0.121 |
| Domain 4 (environmental health) | 31.10 (9.65) | 41.95 (16.28) | **0.003** |
| **Intervention Group (MI)** n=19 | | | |
| Domain 1 (physical health) | 50.89 (11.44) | 60.31 (12.74) | **0.006** |
| Domain 2 (psychological health) | 71.79 (13.67) | 76.05 (13.00) | 0.287 |
| Domain 3 (social relationship) | 34.47 (12.01) | 42.00 (12.60) | 0.073 |
| Domain 4 (environmental health) | 47.57 (7.52) | 63.26 (11.62) | **<0.001** |

*Dependent t-test; significant when p<0.05

As shown in Table 5, after participating in a rehabilitation program, the average QoL scores in four domains increased. This applied to both the TC method (control group) and MI method (intervention group), though only some domains showed a significant increase ($p<0.05$). In the control group, bivariate analysis with dependent t-test showed that the increase in the average QoL score for the environmental health domain from 31.10 to 41.95 was significant, which means that after the rehabilitation program with the TC method, respondents had significant improvement in their quality of life in the environmental health domain. In the intervention group, analysis shows that after the rehabilitation program with the MI method, respondents reported significant improvement in their quality of life in the domain of physical health (significant increase in average QoL score from 50.89 to 60.31) and environmental health (significant increase in average QoL score from 47.57 to 63.26).

Further analysis was done to compare the average pre-test, post test quality-of-life scores, and the post-test – pre-test score differences between the intervention group (respondents who participated in the MI method) and the control group (respondents who participated in the TC method). Results of the comparison are presented in the following table.

Table 6. Comparison of the Average Pre-test, Post-test QoL Scores and the post-test – pre-test Score Differences between the Intervention Group (MI) and the Control Group (TC)

| Quality-of-life Score 0-100 | Intervention Group-MI (n=19) *mean* (SD) | Control Group-TC (n=20) *mean* (SD) | p-value* |
|---|---|---|---|
| **Pre-test score** | | | |
| Domain 1 (physical health) | 50.89 (11.44) | 57.65 (12.87) | 0.092 |
| Domain 2 (psychological health) | 71.79 (13.67) | 54.15 (14.19) | **<0.001** |
| Domain 3 (social relationship) | 34.47 (12.01) | 46.20 (14.41) | **0.009** |
| Domain 4 (environmental health) | 47.57 (7.52) | 31.10 (9.65) | **<0.001** |
| **Post-test score** | | | |
| Domain 1 (physical health) | 60.33 (12.74) | 63.20 (13.94) | 0.505 |

| | | | |
|---|---|---|---|
| Domain 2 (psychological health) | 76.05 (13.00) | 59.95 (16.47) | **0.001** |
| Domain 3 (social relationship) | 42.00 (12.60) | 52.15 (17.84) | **0.048** |
| Domain 4 (environmental health) | 63.26 (11.62) | 41.95 (16.28) | **<0.001** |
| **Post-test & pre-test score difference** | | | |
| Domain 1 (physical health) | 9.42 (13.25) | 5.55 (13.45) | 0.371 |
| Domain 2 (psychological health) | 4.26 (16.95) | 5.80 (14.45) | 0.762 |
| Domain 3 (social relationship) | 7.52 (17.25) | 5.95 (17.24) | 0.771 |
| Domain 4 (environmental health) | 15.68 (12.89) | 10.85 (14.21) | 0.274 |

*Independent t-test; significant when $p<0.05$

Table 6 shows that the intervention group and the control group had significantly different average pre-test scores in the psychological health, social relationship and environmental health domains ($p<0.05$). Before starting the rehabilitation program, the control group (TC) had a higher quality of life in the physical health and social relationship domains, while the intervention group (MI) had a higher quality of life in the psychological health and environmental health domains.

After the rehabilitation program, significant difference ($p<0.05$) in the average post-test scores between the intervention group and the control group was seen in three domains (psychological health, social relationship and environmental health). The intervention group (MI) had a significantly higher quality of life in the psychological health and environmental health domains, while relative to the intervention group, the control group (TC) had a significantly higher quality of life in the social relationship domain.

Subsequently, the average post-test and pre-test score difference of the intervention group (MI) was compared with that of the control group (TC). The result was that the two groups did not have significant score difference in any domain ($p>0.05$). However, in three domains (physical health, social relationship and environmental health), the average score difference between pre-test and post-test was higher in the intervention group (MI) when compared with the control group (TC).

### 3.4.4. Correlation between Prison Climate and Post-test Quality-of-Life Score

To determine whether there is any correlation between the prison climate and prisoners' quality of life, Spearman's Correlation Test was used to test the association between the average score of each domain in the prison climate questionnaire and the average quality-of-life score of all rehabilitation participants in control and intervention facilities post-rehabilitation. The result is presented in Table 7.

Table 7. Correlation between the Prison Climate and Prisoners' Post-test Quality-of-Life Score

| Prison Climate Questionnaire (PCQ) | Post-test Quality-of-Life Score | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Domain 1 | | Domain 2 | | Domain 3 | | Domain 4 | |
| | Physical Health | | Psychological Health | | Social Relationship | | Environmental Health | |
| | p-value | r | p-value | r | p-value | r | p-value | r |
| Domain 1. Relationship with prison staffs and fellow prisoners | 0.571 | 0.093 | **<0.001** | **0.531** | 0.659 | -0.073 | **<0.001** | **0.657** |
| Domain 2. Safety | 0.621 | 0.082 | **0.003** | **-0.464** | 0.469 | 0.119 | **<0.001** | **-0.581** |
| Domain 3. Contact with the outside world | 0.587 | 0.089 | **0.008** | **0.420** | 0.909 | 0.019 | **0.001** | **0.507** |
| Domain 4. Prison facility | 0.974 | 0.005 | **0.002** | **0.470** | 0.418 | -0.133 | **<0.001** | **0.659** |
| Domain 5. Engagement in meaningful activities | 0.763 | 0.049 | **0.002** | **0.479** | 0.421 | -0.133 | **<0.001** | **0.653** |
| Domain 6. Autonomy | 0.937 | 0.013 | **0.001** | **0.489** | 0.436 | -0.128 | **<0.001** | **0.650** |

*Spearman's Correlation Test; significant when p<0.05

As shown in Table 7, Spearman's correlation test found that there was correlation between all domains of the prison's climate and the psychological health and environmental health domains of the post-rehabilitation quality of life (p<0.05). On the other hand, all domains of the prison's climate had no correlation with the physical health or social relationship domains of prisoners' quality of life post rehabilitation (p>0.05).

The five domains of prison's climate, namely the relationship with prison staffs and fellow prisoners, contact with the outside world, prison facility, engagement in meaningful activities, and autonomy had moderately positive correlation (r = 0.4-0.6) with the psychological health and environmental health domains of participants' post-rehabilitation quality of life. This means, the higher the

score in the five domains of the prison climate, the higher the psychological health and environmental health post-test QoL score will be. In contrast, the safety domain has a negative correlation with the psychological health and environmental health domains, so as the prison climate's safety score gets higher, the psychological health and environmental health post-test QoL score will get lower.

Subsequent correlation analysis was performed between the prison's climate and the post-test QoL score in the different prisons. The analysis is presented in Table 8.

Table 8. Correlation between Prison Climate and Prisoner's Quality of Life categorized by Prisons

| Prison Climate Questionnaire (PCQ) | Post-test Quality-of-Life Score | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Domain 1 Physical Health | | Domain 2 Psychological Health | | Domain 3 Social Relationship | | Domain 4 Environmental Health | |
| | p-value* | r | p-value* | r | p-value* | r | p-value* | r |
| **Control Facility** (n=20) | | | | | | | | |
| Domain 1. Relationship with prison staffs and fellow prisoners | 0.294 | 0.247 | 0.163 | 0.322 | 0.322 | 0.233 | 0.318 | 0.235 |
| Domain 2. Safety | 0.519 | -0.153 | 0.406 | -0.196 | 0.166 | -0.322 | 0.803 | -0.059 |
| Domain 3. Contact with the outside world | 0.727 | 0.083 | 0.488 | 0.165 | 0.144 | 0.338 | 0.119 | 0.359 |
| Domain 4. Prison facility | 0.241 | 0.275 | **0.036** | **0.470** | 0.184 | 0.309 | 0.313 | 0.237 |
| Domain 5. Engagement in meaningful activities | 0.099 | 0.379 | 0.368 | 0.212 | 0.207 | 0.294 | 0.330 | 0.229 |
| Domain 6. Autonomy | 0.556 | 0.139 | 0.538 | 0.146 | 0.384 | 0.206 | 0.409 | 0.195 |
| **Intervention Facility I (**n=10) | | | | | | | | |
| Domain 1. Relationship with prison staffs and fellow prisoners | 0.234 | 0.414 | 0.745 | -0.118 | 1.000 | 0.000 | 0.408 | 0.295 |
| Domain 2. Safety | 0.714 | 0.133 | 0.253 | -0.399 | 0.368 | -0.319 | 0.316 | -0.353 |
| Domain 3. Contact with the outside world | **0.030** | **0.680** | **0.006** | **0.793** | **0.003** | **0.833** | **0.037** | **0.662** |
| Domain 4. Prison facility | - | - | - | - | - | - | - | - |
| Domain 5. Engagement in meaningful activities | - | - | - | - | - | - | - | - |
| Domain 6. Autonomy | - | - | - | - | - | - | - | - |
| **Intervention Facility II** (n=9) | | | | | | | | |
| Domain 1. Relationship with prison staffs and fellow prisoners | 0.064 | 0.638 | 0.151 | 0.52 | 0.178 | 0.491 | 0.271 | 0.412 |
| Domain 2. Safety | 0.962 | -0.018 | 0.321 | 0.374 | 0.344 | -0.358 | 0.232 | -0.443 |
| Domain 3. Contact with the outside world | 0.749 | -0.124 | 0.295 | 0.393 | 0.491 | 0.265 | 0.743 | -0.128 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Domain 4. Prison facility | 0.817 | 0.090 | 0.247 | -0.43 | 0.721 | 0.139 | 0.426 | 0.304 |
| Domain 5. Engagement in meaningful activities | 0.800 | 0.098 | 0.424 | 0.565 | 0.585 | 0.211 | 0.830 | 0.084 |
| Domain 6. Autonomy | 0.062 | 0.641 | 0.255 | 0.424 | 0.258 | 0.421 | 0.129 | 0.545 |

*Spearman's Correlation Test; significant when $p<0.05$

Table 8 shows that the average score of almost all domains of the prison climate questionnaire had no correlation with the average post-test quality-of-life score in the control facility that implemented the TC modality ($p>0.05$). Only the domain of prison facility showed a positive correlation with the psychological health domain in the control facility ($p=0.036$; $r=0.470$).

Similarly, almost all domains of the prison climate had no correlation with the participants' quality-of-life after rehabilitation with the MI modality in intervention facility I, while in intervention facility II, none of the prison climate domains had any correlation with the post-rehabilitation quality-of-life of participants ($p>0.05$).

However, one domain in the prison climate, i.e. contact with the outside world, had a positive correlation with all domains of participants' quality of life in intervention facility I after rehabilitation. These include the domains of physical health, psychological health, social relationship and environmental health ($p<0.05$). An r value of 0.6-0.8 indicates a strong positive correlation, meaning that as prisoners have more contact with the outside world, all aspects of their quality of life, their physical health, psychological health, social relationship and environmental health, after rehabilitation also improve.

### 3.4.5. Contextual Factors in Quality-of-life Improvement

Quality-of-life measurement shows that in general, rehabilitation caused participants in the intervention facility as well as in the control facility to report a higher quality of life. Which of quality-of-life domain experienced improvement varied between facility. In the control facility that implemented the TC model, significant increase in quality-of-life score was seen only in the environmental health domain, while in the intervention facilities and MI treatment model, significant QoL score increase was seen in the environmental health, as well as in the physical health domains. Participants of the MI method also had significantly higher quality-of-life scores in the psychological health and environmental health domains after rehabilitation, compared to participants of the TC method. The study team therefore tried to explore and identify any contextual factors that may have played a role in improving inmates' quality of life, primarily in the physical health and environmental health domains.

Contextual factors include the prison climate and the treatment modality applied in each prison. Prison climate measurement shows that the 2 intervention facilities had a higher score in five domains, namely relationship with prison staffs and fellow prisoners, contact with the outside world, prison facility, engagement in meaningful activities and autonomy, while the control facility only showed a higher score in the safety domain. A higher prison climate score means a higher level of satisfaction about the prison environment, and prison climate measurement aligns with the quality-of-life measurement, which is higher in the intervention facilities. This gives an impression that a good perception about the prison environment is related to a positive perception about one's quality of life.

In addition to the prison environment, the treatment modality that was applied also influenced the QoL score increase seen in the control and intervention facilities. Significant increase in the physical health domain of QoL was only seen in the intervention facilities, which indicates that it is related to the MI modality that was applied. With an emphasis on individual therapy, MI enables counseling to explore the health issues of each client in more depth. The client-centered principle of MI also encourages clients to make a change (thought, feeling, behavior) based on a plan that they develop on their own. Client's actions that cause a problem to their health are explored and become the basis for change, as well as a benchmark of successful change. Several clients who participated in MI individual counseling sessions focused on their physical health, and developed a desire to lose weight and reduce smoking. Building on their recognition of their physical issues, clients are invited to explore the positive and negative aspects of their daily activities, develop a change plan and analyze their needs for change. MI's superiority lies in its emphasis on individual approach, which allows clients to experience improvement in their physical health domain.

> *"We did counseling to find a solution, help him think of the positive and negative sides, he then gradually tried to exercise, Ma'am, to lose weight. He tried to decrease his appetite too" (N2_FGD Intervention Facility*).

> *"One of my clients is a bit overweight, Ma'am. The change in him was that he now wants to exercise. He said he was often sick, maybe it was because he hasn't been active, Ma'am" (N1_FGD Intervention Facility*).

> *"He participates in activities so he can decrease his craving to smoke, yes I watch him to see whether he takes part in an activity. For example, I noticed there was this cooking activity in the facility," (N4_FGD Intervention Facility*).

The client-centered principle that was applied in MI indirectly resulted in significant improvement in the environmental health domain. Individual counseling sessions were seen as an additional health service that correctional facilities provide for inmates. Individual counseling is actually part of the TC treatment model, and is categorized as a health service, but the scope of counseling topic is limited to drug and substance dependence, which indirectly restricts the scope of health issues that inmates may desire to discuss. The TC model also has a variety of mandatory activities and participants have to divide their focus among those activities.

The MI model is different in a way that the program only has one activity, which is individual counseling. During counseling sessions, participants have the freedom to determine what information they would like to share with the counselor. As mentioned earlier, issues that prison inmates face are not limited to drug/substance dependence, but cover a range of issues. The definition of health is actually broader and is not limited to physical health, but includes psychological health as well. This was evident from the topics that rehab participants in the two intervention facilities raised during counseling sessions, for example: a desire to lose weight, to let go of the anger toward a figure who is closest to the individual, to come to terms with the prison sentence.

> *"Initially he was told that with regards to drug dependence, there is no such thing here anymore. So their concern is no longer there, no longer on that issue, but more on family problems" (N3_FGD Intervention Facility)"*

> *"Here's the thing, Ma'am, during our training we identified their problem as substance use, smoking, but the problem that they brought up was different, Ma'am, so I was quite surprised" (N4_FGD Intervention Facility).*

Motivational Interviewing counseling can be viewed as an additional health service that correctional facilities provide for their inmates. The client-centered principle of MI provides inmates with increased autonomy, which is a change from the various restrictions that incarcerated individuals have to comply with. This can help heighten inmates' feeling of comfort about their prison environment. MI counseling with individual participant in the intervention facility also had positive psychological impact on the

participant, which was obvious from the significantly higher average post-test QoL score for the psychological health domain in the intervention facility (76.05) relative to the score in the control facility (59.9) ($p$<0.05).

# 4. Discussions

The research findings indicated that social rehabilitation with an alternative modality, namely motivational interviewing (MI) gave better results than therapeutic community (TC) modality when viewed from the increase in quality of life scores before and after participating in the rehabilitation program; as well as from the inmates' quality of life scores differences after rehabilitation completion. Although there were no significant differences, the quality of life scores before and after the rehabilitation program tends to be higher for inmates who took part in the MI program compared to TC. On the other hand, the difference in life quality was clearly seen in the psychological and environmental domains where inmates who participated in the MI program had significantly higher quality of life scores in both domains than inmates who participated in the TC program after the two programs were implemented. MI approach that focuses on the individual (client-centered) has a positive impact on the inmates' psychological aspects seen from self-image, self-esteem, positive feelings, self-confidence and the process of thought. In addition, the MI approach also has a good influence on environmental aspects, namely how inmates perceive the correctional facility's surrounding which they occupied.

Compared to TC, the MI approach has the potential to be implemented well because it is considered simpler in implementation. MI counseling which was carried out intensively for six sessions was considered sufficient to be held in a period of two months (8 weeks) which was certainly shorter than TC which lasted for six months. The MI modality also involves fewer human resources than TC because it only requires counselors who have been trained in MI. Although it does not require a long time and large resources, the results of the MI implementation show that there are changes in the thoughts, feelings and behavior of the inmates after attending six counseling sessions with the MI approach. The changes shown varies from one inmates to another, including being more open regarding the problems they are experiencing, showing self-acceptance with their current condition, experiencing a change in a more positive mindset and aspiration to be better and healthier; such as being more diligent in praying/worshiping, exercising, and reducing smoking habits. These results were in line with the findings on systematic review by McMurran (2009) which showed that MI not only increases retention to undergo narcotic rehabilitation for drug users, but also increases their motivation that leads to behavioral changes. The changes shown by the inmates may lead to increase of quality of life score in term of physical health, psychology, social relation and surrounding environment.

There are not many studies that have documented the benefits of the MI approach in narcotics rehabilitation programs to improve inmates' life quality. However, based on previous studies the MI approach has been shown to not only improve the patient's quality of life, but also reduce the psychological, social and even physical effects to a more severe level (Hosseini, 2016). Several studies have shown that the Motivational Interviewing (MI) approach is able to reduce the desire to return to using narcotics, as well as risky behaviors such as using injected narcotics

compared to other types of therapy (Bertrand, Roy, Vaillancourt, Vandermeerschen, Berbiche & Bolvin, 2015; Oveisi, Stein, Babaeepour & Araban, 2020). Another study targeting adolescents who abuse alcohol or marijuana showed that *change talk* in the MI approach was able to reduce the desire to consume alcohol while *sustain talk* in MI approach was able to reduce the use of alcohol and marijuana (D'Amico et al., 2013, 2015).

Another finding from this study showed that the quality of life of inmates can be determined by variations in prison environment climate. Measurement of the prison environment's climate utilized PCQ instrument which has been successfully adapted in prison settings in Indonesia. Apart from being considered valid and reliable based on the results of psychometric tests, the PCQ which has been adapted into the "Kuesioner Iklim Lingkungan Lapas" (Prison Climate Questionnaires) was used in this study because it is considered the right instrument to measure and monitor the perception of inmates on the quality of life in prison, seen from the six domains, namely: relations with prison officers and fellow inmates, security, contact with the outside world, facilities, meaningful activities and autonomy (Bosma et al., 2020). The relationship between the prison environment climate and the quality of life of the inmates can be seen from the significant correlation between the prison environment climate scores in the six domains with quality of life scores after the inmates has completed the TC and MI program in the psychological and environmental domains. This indicates that the inmates' perception of the prison environment they live in when they participate in the rehabilitation program also determines how the inmates perceive their quality of life, in addition to the influence of the narcotics rehabilitation program that they receive both with TC and MI. Previous studies also showed a significant relationship between all domains in the Prison Climate Questionnaire (PCQ) with psychological well-being, subjective (emotional) well-being and bad behavior of inmates (van Ginneken & Nieuwbeerta, 2020).

The prison environment also differed significantly between control prisons, intervention prisons I and intervention prisons II. The higher prison environment climate scores in intervention I and II prisons compared to control prisons could have influenced the inmates' higher quality of life scores. This is slightly seen in the results of the analysis which shows that although there is no correlation between the prison environment climate score and the quality of life score in the intervention II prison, there is one domain of the prison environment climate that is correlated with one of the quality of life domains in the control and intervention I prisons. These findings strengthen the results of previous studies that the prison setting has an effect on the life quality of inmates who are assessed from aspects of physical health, psychological, social relations, and the prison environment and climate are related to the welfare and behavior of inmates during their stay in prison and when they are later released (Praptoraharjo et al., 2020; Bosma et al., 2020). Other studies shared the view that a positive prison climate is expected to contribute to better outcomes in terms of well-being, inmate behavior, treatment motivation and therapeutic change (Gonçalves et al., 2016; Goomany & Dickinson, 2015).

Governance aspects in the implementation of MI and TC are suspected to have contributed to the difference in quality of life scores between prison's control and intervention. In this case, governance relates to the availability of implementation guidelines, the officers' understanding regarding implementation guidelines on tools and infrastructures, institutional or leadership supports, as well as financing. In terms of the availability of implementation guidelines, both therapeutic modalities already have reference guidelines for implementing the rehabilitation program. In terms of understanding implementation guidelines, the implementing officers or counselors in intervention prisons have understood them easier and have applied the guidelines, in comparison to implementing officers in control prisons. Better understanding in intervention prisons is inseparable from intensive training activities related to the MI approach for the counselors. Trainings helped the counselors in understanding the MI implementation guidelines which was prepared by the PUI-PT PPH PUK2IS Unika Atma Jaya team. Meanwhile, not all implementing officers in control prisons understood the instructions for implementing narcotics rehabilitation issued by the Directorate General of Corrections in 2018. The implementation instructions were only understood by the program manager/ person in charge. This has implications in term of authority that was centered on the program manager, especially regarding the preparation of schedules or plans for TC activities which were then carried out by other implementing officers.

In intervention prisons, there were no obstacles related to the infrastructure needed for the implementation of MI. Both intervention prisons have adequate counseling rooms and provide privacy when consulting with clients. Meanwhile, the control prison said there were obstacles in providing infrastructure for several activities in the TC program. In implementing the TC program, prisons need to prepare special blocks and facilities in the form of administrative rooms, clinics, multipurpose rooms, vocational rooms, recreational facilities, places of worship, kitchens, counseling rooms, and meeting rooms. Fulfilling adequate infrastructure is indeed a challenge for control prisons because of the variety of activities included in the TC program, from individual counseling activities, group activities, religious activities, vocational activities to family support therapy. The availability of a special area was also a prerequisite for the TC program where prisons need to regulate the traffic of activities of TC rehabilitation participants so that they do not come into contact with inmates who do not participate in the TC program. In terms of infrastructure, the MI approach is more likely to be accommodated because it only focuses on providing counseling rooms for individual counseling.

In terms of the support provided by the institution and the leadership, the intervention prison felt that it has been fully supported, both material and moral support. Material support provided in the form of adequate counseling room facilities and moral support in the form of readiness to provide time and energy to support the success of MI intervention activities. In control prisons, the support from the leadership, especially the Head of the Convict Mentoring Section (Kasibinadik / *Kepala Seksi Pembinaan Narapidana*) was very large, especially regarding the initiative to collaborate with the Indonesian Association of Addiction Counselors (IKAI */ Ikatan Konselor Adiksi Indonesia*). The collaboration with IKAI was established as a strategy to fill the void of human resources in conducting counseling activities in the TC program. In contrast to

the MI approach which relies on the competence of counselors, TC requires the involvement of many officers for the implementation of TC. On the other hand, the organizational structure of TC rehabilitation is tiered, consist of coaches (*Kalapas*), supervisors (*Kabid pembinaan/kasi binadik/kasi perawatan*), program managers, special service officers, instructors of daily activities programs, support service officers, and addiction counselors. Because it was hierarchical, the success of the TC program is highly dependent on the support and initiative of the leadership.

In general, the MI approach required less resources than TC. The implementation of MI depended on the quality of the available counselors, while implementing TC required extra resources in terms of prison staff, facilities and infrastructure, and the preparation of activities capable of providing diverse group activities. The counseling sessions contained in the MI guidelines allow the inmates to focus on the problem because it is arranged in a sequential way, starting from exploring the client's problems, directing the client to make changes in stages, strengthening the clients' personal aspects, up to the follow-up needed to sustain client's improvements.

# 5. Conclusions

The interventions carried out have resulted in guidelines for implementing MI alternative therapy modalities for social rehabilitation services at the Technical Implementing Unit of Corrections (*UPT Pemasyarakatan*), which have been piloted in two intervention prisons. In practice, the MI approach requires simpler resources than TC. The implementation of MI depends on the quality of the available counselors, while implementing TC requires extra resources in terms of prison staff, facilities and infrastructure, and the preparation of activities capable of providing diverse group activities. The counseling sessions contained in the MI guidelines allow the inmates to focus on the problem because it is arranged in a sequential way, starting from exploring the client's problems, directing the client to develop steps for change, strengthening the client's personal aspects, up to the follow up needed to sustain client's improvements.

Through the interventions carried out, both MI and TC approaches can improve inmates' life quality, in which the increase in Quality of Life scores tends to be higher in inmates who follow MI compared to TC. This can be seen from the significant difference in the average post-test scores of three domains (psychological, social and surrounding environment relationships) between the intervention group (MI) and the control group (TC). The control group (TC) had a significantly higher post-test quality of life mean ($p<0.05$) in the social relationship domain compared to the intervention group (MI). Meanwhile, respondents in the intervention group (MI) had a significantly higher post-test quality of life mean ($p<0.05$) in the psychological and environmental domains compared to the control group (TC). The TC approach does emphasize the community as a source of strength to obtain assistance, so that TC has more group activities that allow inmates to interact with each other, both indoors and outdoors. Meanwhile, MI as a client-centered approach to counseling is able to provide space for inmates to explore

the difficulties they face, as well as develop and implement solutions to their problems. Prison officers can also recognize and monitor inmates' changes because they have established a therapeutic relationship between clients and counselors. The MI approach is appropriate if we wish to target higher quality changes in the inmates.

This study also examined the relationship between quality of life and inmates' satisfaction with their prison climate. For this reason, an instrument that measures prison climate, namely the PCQ (Prison Climate Questionnaires) was adapted to the context of prisons in Indonesia and has passed psychometric property testing. The test results showed that the Prison Climate Questionnaires is valid, in terms of content validity, assess by expert judges from academics, researchers, and prison officials. In addition, 46.67% of the total measurement domains were valid according to the confirmatory factor analysis method. Meanwhile, for external validity, the Prison Climate Questionnaires was correlated with the WHOQOL-BREF instrument which measures a person's quality of life. The results of external validation showed that 80% of the total measurement domains from the Prison Climate Questionnaires were valid. In terms of reliability, only one the subdomain was an unreliable domain, namely the relation subdomain with guardians at (0.017). Other subdomains were reliable (0.652 - 0.952). Therefore, adaptation of PCQ (Prison Climate Questionnaires) into the Indonesian context provide promising result for future use in Indonesian prisons.

Based on the results of the analysis, it can be concluded that the quality of life of inmates can be determined by variations in the climate of the prison environment. This is indicated by the correlation between prison environment climate scores in all domains (relationships with officers and fellow inmates, security, contact with the outside world, facilities, meaningful activities and autonomy) with scores of inmates' quality of life in two of the four domains (i.e. psychological and surrounding environment) after the inmates had participated in a rehabilitation program with either TC or MI ($p<0.05$; $r= 0.4$-$0.6$). There were also differences in the prison environment climate between control prisons, intervention prisons I, and intervention prisons II ($p<0.05$). In control prisons, one of the climate domains of the prison environment, namely the facility domain, showed a correlation with the psychological domain of the inmates' quality of life, as well as another domain of prison environment climate in intervention prison I, which was in contact with the outside world that shows a correlation with the average post-test score on the quality of life of the inmates in all domains.

# 6. Recommendations

The conclusion of this implementation study has shown that drug rehabilitation using the Motivational Interviewing therapy modality has shown potential effectiveness from its governance aspect to improve the life quality of participant inmates by taking into account the environment or climate of the prison where the rehabilitation is carried out. The improvement in the quality of life of MI participants at the start and end of therapy tend to be higher than in the rehabilitation participants using the TC approach. In terms of governance, the application of MI into drug rehabilitation also tends to be simpler in terms of providing resources and shorter time required to complete therapy with higher quality of life improvement outcomes than the TC approach. Therefore, it is recommended as follow:

1. Considering that not all Technical Implementing Unit of Corrections *(UPT Pemasyarakatan)* are able to carry out drug rehabilitation using the TC approach, given the limited resources available, the Technical Implementing Unit of Corrections can carry out drug rehabilitation using the MI approach. To meet the needs of counselors, the Directorate General of Corrections can conduct two things: (a) provide MI training based on the modules that have been prepared; (b) cooperate with IKAI in the region to provide counselor support if it is not possible to assign Technical Implementing Unit (UPT)'s health workers as counselors.
2. Considering that the current implementation of the TC approach tends to focus more on group activities, MI can be inserted into the drug rehabilitation process at the ending/last part especially in order to pay attention to the individual aspects of the rehabilitation participants. The inclusion of MI into the implementation of TC is expected to lead to higher rehabilitation outcomes (quality of life).
3. This research has also shown that the prison climate has a significant influence on the perception of the inmates' life quality, so in preparing a supporting environment that includes relations with prison officers and fellow inmates, security, contact with the outside world, facilities, meaningful activities and autonomy during the rehabilitation process.
4. From the aspect of governance, to support the implementation of MI both in Technical Implementing Unit (UPTs) that have not implemented TC or to insert MI into TC, the most important need is the preparation of human resources, while for other aspects relatively will not require large resources (for instance the rooms, activity equipment, group activities, etc. or financing).
5. So far, the perception of quality of life has been used as an indicator to measure the success of drug rehabilitation at the Technical Implementing Unit of Corrections and this study has shown that the prison climate also varies in term of life quality perception of the rehabilitation participants. For this reason, the measurement of these perceived quality of life indicators in the future needs to

also measures the perception of the prison climate when measuring the quality of life at 3 and 6 months of the rehabilitation periods.

6. Considering that dynamics of prison rehabilitation officers are quite high in carrying out drug rehabilitation (additional workload outside of health duties, transfers, burn-outs or facing various challenges when dealing with clients), refreshment training needs to be carried out on an ongoing basis. This research has shown that online training is an effective strategy to carry out capacity building for staff wherever assigned in the context of limited resources or situations that limits face-to-face interaction.

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# Appendix

## Appendix 1. Instrument of WHOQoL-BREF

**Quality of Life Questionnaire: WHOQoL-BREF**

| **I. DEMOGRAPHIC DATA** | |
|---|---|
| Research site (name of the prison) | |
| Name | |
| Age | |
| Sex | M / F |
| Marital Status | Married/ Divorced / Unmarried |
| Length of prison terms | |
| Highest level of education | |
| Date | …… (dd) / …… (mm) / ……. (yyyy) |

**WHOQOL-BREF (Quality of Life)**

Instructions:

This assessment asks how you feel about your quality of life, health, or other areas of your life. **Please answer all the questions**. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the last two weeks**. For example, thinking about the last two weeks, a question might ask:

**Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you.**

| | | **Very poor** | **Poor** | **Neither poor nor good** | **Good** | **Very good** |
|---|---|---|---|---|---|---|
| 1. | How would you rate your quality of life? | 1 | 2 | 3 | 4 | 5 |
| | | **Very dissatisfied** | **Dissatisfied** | **Neither satisfied nor dissatisfied** | **Satisfied** | **Very satisfied** |
| 2 | How satisfied are you with your health? | 1 | 2 | 3 | 4 | 5 |
| | | | | | | |
| | The following questions ask about **how much you have experienced certain things in the last two weeks**. | | | | | |

| | | Not at all | A little | A moderate amount | Very much | An extreme amount |
|---|---|---|---|---|---|---|
| 3 | To what extent do you feel that physical pain prevents you from doing what you need to do? | 1 | 2 | 3 | 4 | 5 |
| 4 | How much do you need any medical treatment to function in your daily life? | 1 | 2 | 3 | 4 | 5 |
| 5 | How much do you enjoy life? | 1 | 2 | 3 | 4 | 5 |
| 6 | To what extent do you feel your life to be meaningful? | 1 | 2 | 3 | 4 | 5 |
| | | **Not at all** | **A little** | **A moderate amount** | **Very much** | **Extremely** |
| 7 | How well are you able to concentrate? | 1 | 2 | 3 | 4 | 5 |
| 8 | How safe do you feel in your daily life? | 1 | 2 | 3 | 4 | 5 |
| 9 | How healthy is your physical environment? | 1 | 2 | 3 | 4 | 5 |
| | **The following questions ask about how completely you experience or were able to do certain things in the last two weeks.** | | | | | |

| | | Not at all | A little | Moderately | Mostly | Completely |
|---|---|---|---|---|---|---|
| 10 | Do you have enough energy for everyday life? | 1 | 2 | 3 | 4 | 5 |
| 11 | Are you able to accept your bodily appearance? | 1 | 2 | 3 | 4 | 5 |
| 12 | Have you enough money to meet your needs? | 1 | 2 | 3 | 4 | 5 |
| 13 | How available to you is the information that you need in your day-to-day life? | 1 | 2 | 3 | 4 | 5 |
| 14 | To what extent do you have the opportunity for leisure activities? | 1 | 2 | 3 | 4 | 5 |
| | | Very poor | Poor | Neither poor nor good | Good | Very good |
| 15 | How well are you able to get around? | 1 | 2 | 3 | 4 | 5 |
| | The following questions ask you to say **how good or satisfied** you have felt about various aspects of your life over the last two weeks. | | | | | |
| | | Very dissatisfied | Dissatisfied | Neither satisfied nor dissatisfied | Satisfied | Very satisfied |

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

**-Thank you-**

# Appendix 2. Instrument of Prison Climate Questionnaire (PCQ)

## “Prison Climate Questionnaire”

### I. DEMOGRAPHIC DATA

| | | |
|---|---|---|
| Full name | : | |
| Name of prison | : | |
| Year of admission to prison | : | |
| Length of prison terms | : | |
| Age | : | …… years old |
| Last formal education | : | |
| Have or are you currently participating in any specific program in prison?<br><br>(eg. Narcotic rehabilitation) | : | ☐Yes<br><br>☐No |
| Marital Status | : | ☐ Unmarried ☐Married ☐Divorced |
| Date | : | …… (date) / …… (month) / ……. (year) |

## II. INSTRUCTION

Your opinion is important!
Why do you need to participate?

- You can give your opinion about the living conditions in this institution.
- The results of the research will be used to improve this institution.
- Your answers will be kept confidential and will only be used for research purposes and input for the improvement in this institution.

.

Thank you for your participation!
How do you fill out this questionnaire?

- There are no right or wrong answers, what matters is your opinion!
- It is important to us that you completely fill in all the questions.
- For each question, you can only choose one answer.
- Please indicate which answer best reflects your opinion by create a **CROSS (X)** in the appropriate box. See the example below:

Example:

| No | Statement | Answer options | | | | |
|---|---|---|---|---|---|---|
| | | Strongly disagree | Disagree | Agree | Strongly Agree | Not Applicable |
| 1 | In general, I am satisfied with the conditions in this prison. | | X | | | |

**Notes:**
There are also several questions that could be answered with the **"Not Applicable"** option. This option could be selected to indicate that the contents of the statement could not be answered due to certain conditions or circumstances that you might have.
For example: Have no children; Not have a partner; Not have a lawyer; There are noo facilities/services are mentioned; …. etc.

Example

| No | Statement | Answer options | | | | |
|---|---|---|---|---|---|---|
| | | Strongly disagree | Disagree | Agree | Strongly Agree | Not Applicable |
| 40 | I am satisfied with the activities of playing music in this prison. | | | | | X |

If there are no musical instruments available in the prison, then statement No. 40 could not be answered and you could put a **CROSS (X)** mark in the column **"Not Applicable".**

## III. PRISON CLIMATE QUESTIONNAIRE

| No. | Statements | Answer Options | | | | |
|---|---|---|---|---|---|---|
| | | Strongly disagree | Disagree | Agree | Strongly agree | Not applicable |
| **1. Relations with Staff members and fellow Inmates** | | | | | | |
| **1.1.Relations with fellow Prisoners** | | | | | | |
| 1 | The prisoners treat each other respectfully here. | | | | | |
| 2 | New prisoners here are quickly accepted into the group. | | | | | |
| 3 | Prisoners here are considerate of each other. | | | | | |
| 4 | I get along well with most of my fellow prisoners. | | | | | |
| 5 | Prisoners here help and support each other. | | | | | |
| **1.2. Relations with Staff member** | | | | | | |
| 6 | If I have problems, the staff members in this unit help me. | | | | | |
| 7 | The staff members in this unit are kind to me. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 8 | I can talk to the staff members in this unit if I feel worried or sad. | | | | | |
| 9 | The staff members in this unit motivate and encourage me to participate in activities. | | | | | |
| **1.3. Treatment by Staff Members** | | | | | | |
| 10 | Staff members in this unit treat me fairly. | | | | | |
| 11 | Staff members in this unit explain their decisions to me. | | | | | |
| 12 | Staff members in this unit treat me with respect. | | | | | |
| 13 | Staff members in this unit give me a chance to express my views before they make decisions. | | | | | |
| | | | | | | |
| **2. Safety** | | | | | | |
| 14 | I feel unsafe in this institution. | | | | | |
| 15 | I sometimes feel threatened by fellow prisoners. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | There are places in this institution where I feel unsafe. | | | | | |
| 17 | I am afraid of some fellow prisoners. | | | | | |
| 18 | I am afraid of some staff members in this unit. | | | | | |
| | | | | | | |
| **3. VISITS AND CONTACT WITH THE OUTSIDE WORLD** | | | | | | |
| **3.1. VISITS <u>DURING IMPRISONMENT</u>** | | | | | | |
| 19 | The visiting room in this institution is pleasant (either face-to-face or online meetings). | | | | | |
| 20 | My visitor and I can have enough physical contact (e.g., give each other a hug) during the visiting hours in this institution. | | | | | |
| 21 | The visiting hours in this institution are long enough (either face-to-face or online meetings). | | | | | |
| 22 | I have sufficient privacy during visiting hours (either face-to-face or online meetings). | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **privacy means that you can easily talk without others overhearing your conversation.* | | | | | |
| 23 | The staff members in this institution treat my visitors nicely . | | | | | |
| 24 | The visiting hours in this institution are frequent enough (either face-to-face or online meetings). | | | | | |
| 25 | I enjoy receiving visits (either face-to-face or online meetings). | | | | | |
| 26 | After receiving a visitor, I feel good (either face-to-face or online meetings). | | | | | |
| **3.2. Satisfaction with the frequency of contact with the outside world** | | | | | | |
| 27 | I am satisfied with how often I can see my family, friends or partner here (either face-to-face or online meetings). | | | | | |
| 28 | I am satisfied with how often I can see my child(ren) here (either face-to-face or online meetings). | | | | | |
| 29 | I am satisfied with how often I can see my lawyer here (either face-to-face or online meetings). | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **4. Facility** | | | | | | |
| **4.1. Night's rest** | | | | | | |
| 30 | I can't sleep well in this institution (for example, because you wake up often). | | | | | |
| 31 | My sleep is often disturbed in this institution (for example, you are often awake at night because of too much noise). | | | | | |
| 32 | Due to poor conditions in this institution and/or my cell, I can't sleep well (think, for example, of: a bad mattress and the temperature). | | | | | |
| **4.2. Health care** | | | | | | |
| 33 | I can get medical care here if I want to. | | | | | |
| 34 | Health problems are being taken care of adequately here. | | | | | |
| 35 | I am satisfied with the work of the nurse. | | | | | |
| 36 | I am satisfied with the work of the general practitioner. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 37 | I am satisfied with the work of the dentist. | | | | | |
| 38 | I am satisfied with the counseling service. | | | | | |
| **4.3. Canteen** | | | | | | |
| 39 | I am satisfied with the range of products in the canteen. | | | | | |
| 40 | The products in the canteen are affordable (not too expensive). | | | | | |
| 41 | I am satisfied with the quality of the products in the canteen. | | | | | |
| **4.4. Settlement of Complaint** | | | | | | |
| 42 | In this institution I have submitted a complaint to the complaints to staff members:<br><br>☐ **Yes**<br><br>☐ **No → <u>Continue with question No. 47</u>** | | | | | |
| 43 | Staff members are accessible to handle my complaint. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 44 | Staff members took my complaint seriously. | | | | | |
| 45 | The handling of my complaint was fast enough. | | | | | |
| 46 | I am satisfied with the way my complaint was handled. | | | | | |
| | | | | | | |
| **5. Meaningful Activities** | | | | | | |
| **5.1. Satisfaction with activities** | | | | | | |
| 47 | I am satisfied with the recreation (example: watching TV/movies). | | | | | |
| 48 | I am satisfied with the sports. | | | | | |
| 49 | I am satisfied with the library. | | | | | |
| 50 | I am satisfied with the work(vocational activites). | | | | | |
| 51 | I enjoy the free time that is outside the cell. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 52 | I am satisfied with the pastoral care.<br><br>(for example: the imam, pastor or priest) | | | | | |
| **5.2. Availability of meaningful activities** | | | | | | |
| 53 | This institution delivers an interesting and varied daily program. | | | | | |
| 54 | During the daily program I learn useful skills. | | | | | |
| 55 | I have enough to do in this institution. | | | | | |
| 56 | The activities in the daily program help me to develop myself. | | | | | |
| **5.3. Reintegration in the Community** | | | | | | |
| 57 | In this institution, I can prepare well for my return into society. | | | | | |
| 58 | Staff members here encourage me to make plans for after release. | | | | | |
| 59 | I can get extra support here to prepare for my return into society. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 60 | In this institution I learn things that help me to stay away from crime after release. | | | | | |
| | | | | | | |
| **6. Autonomy** | | | | | | |
| **6.1. Level of autonomy** | | | | | | |
| 61 | There is much I can decide for myself here. | | | | | |
| 62 | I can decide for myself on matters that are important to me here. | | | | | |
| 63 | I am encouraged to arrange matters here myself. | | | | | |
| 64 | I have sufficient freedom of movement here. | | | | | |

**-Thank you-**

# Appendix 2. Instrument of Prison Climate Questionnaire (PCQ) [Indonesian version]

## "Kuesioner Iklim Lingkungan Lembaga Pemasyarakatan"

### I. DATA DEMOGRAFI

| | | |
|---|---|---|
| Nama lengkap | : | |
| Nama lapas yang saat ini ditempati | : | |
| Tahun masuk lapas | : | |
| Masa tahanan yang harus dijalani | : | |
| Usia | : | …… tahun |
| Pendidikan formal terakhir | : | |
| Pernah/Sedang mengikuti program pembinaan<br><br>(contoh: rehabilitasi narkotika) | : | ☐Ya<br>☐Tidak |
| Status pernikahan | : | ☐ Lajang ☐Menikah ☐Cerai |
| Tanggal pengisian kuesioner | : | …… (tgl) / …… (bulan) / ……. (tahun) |

## II. INSTRUKSI PENGERJAAN

**Pendapat Anda sangat berharga!**

**Mengapa Anda perlu berpartisipasi?**

- Anda bisa memberikan pendapat Anda tentang bagaimana kondisi keseharian di lapas ini.
- Hasil penelitian akan digunakan untuk meningkatkan kualitas pelayanan di lapas ini.
- Jawaban Anda akan dijaga kerahasiaannya dan hanya akan digunakan untuk tujuan penelitian dan masukkan untuk pengembangan iklim lingkungan di lapas.

**Terima kasih atas partisipasi Anda!**

**Bagaimana cara Anda untuk mengisi kuesioner ini?**

- Tidak ada jawaban benar dan salah, yang penting adalah pendapat Anda!
- Penting bagi kami bila Anda menjawab semua pernyataan sepenuhnya.
- Untuk setiap pertanyaan, Anda hanya dapat memilih satu jawaban.
- Harap memberikan tanda **SILANG (X)** pada salah satu kolom pilihan jawaban.

Contoh:

| No. | Pernyataan | Pilihan Jawaban | | | | |
|---|---|---|---|---|---|---|
| | | Sangat Tidak Setuju | Tidak Setuju | Setuju | Sangat Setuju | Tidak Berlaku |
| 1 | Secara umum saya puas dengan kondisi di lapas ini. | | X | | | |

- Catatan:

terdapat pula beberapa pernyataan yang dapat dijawab dengan opsi pilihan **"Tidak Berlaku"**. Opsi tersebut dapat dipilih untuk menandakan bahwa isi dari pernyataan tersebut memang tidak dapat dijawab dikarenakan kondisi atau keadaan tertentu yang Anda miliki.
Misal: Tidak memiliki anak; Tidak memiliki pasangan; Tidak memiliki pengacara; Tidak terdapat fasilitas/layanan yang disebutkan; …. dsb.

Contoh:

| No. | Pernyataan | Pilihan Jawaban | | | | |
|---|---|---|---|---|---|---|
| | | Sangat Tidak Setuju | Tidak Setuju | Setuju | Sangat Setuju | Tidak Berlaku |
| 40 | Saya puas dengan kegiatan bermain musik di lapas ini. | | | | | X |

Jika di lapas tidak tersedia alat-alat musik, maka pernyataan No.40 ini tidak dapat dijawab dan Anda dapat memberikan tanda **SILANG (X)** pada kolom pilihan **"Tidak Berlaku"**.

## III. IKLIM LINGKUNGAN LEMBAGA PEMASYARAKATAN

| No. | Pernyataan | Pilihan Jawaban | | | | |
|---|---|---|---|---|---|---|
| | | Sangat Tidak Setuju | Tidak Setuju | Setuju | Sangat Setuju | Tidak Berlaku |
| **1. Relasi dengan Petugas Lapas dan Sesama WBP** | | | | | | |
| **1.1. Relasi dengan sesama WBP** | | | | | | |
| 1 | Para WBP di lapas ini saling menghormati satu sama lain. | | | | | |
| 2 | WBP baru dapat dengan cepat diterima oleh WBP lain. | | | | | |
| 3 | Para WBP di sini saling peduli satu sama lain. | | | | | |
| 4 | Saya hidup rukun dengan sebagian besar rekan WBP saya. | | | | | |
| 5 | Para WBP di sini saling membantu dan mendukung satu sama lain. | | | | | |
| **1.2. Relasi dengan petugas lapas** | | | | | | |
| 6 | Jika saya mempunyai masalah petugas lapas akan membantu saya. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7 | Petugas di lapas ini baik kepada saya. | | | | | |
| 8 | Saya dapat berbicara kepada petugas lapas jika saya merasa khawatir atau sedih. | | | | | |
| 9 | Para petugas memotivasi dan mendorong saya untuk berpartisipasi pada berbagai kegiatan di lapas. | | | | | |
| **1.3. Perlakuan petugas lapas** | | | | | | |
| 10 | Petugas lapas memperlakukan saya secara adil. | | | | | |
| 11 | Petugas lapas di unit ini menjelaskan pertimbangan pengambilan keputusan mereka kepada saya. | | | | | |
| 12 | Petugas lapas memperlakukan saya dengan hormat. | | | | | |
| 13 | Petugas lapas memberi saya kesempatan untuk mengutarakan pendapat sebelum mereka mengambil keputusan. | | | | | |
| | | | | | | |
| **2. Keamanan** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 14 | Saya merasa tidak aman berada di lapas ini. | | | | | |
| 15 | Saya merasa terancam oleh sesama WBP. | | | | | |
| 16 | Ada tempat-tempat di lapas ini di mana saya merasa tidak aman. | | | | | |
| 17 | Saya merasa takut kepada beberapa WBP. | | | | | |
| 18 | Saya merasa takut kepada beberapa petugas lapas. | | | | | |
| | | | | | | |
| **3. Kontak dengan Dunia Luar** | | | | | | |
| **3.1. Kepuasan terhadap kunjungan selama di dalam lapas** | | | | | | |
| 19 | Fasilitas kunjungan di lapas ini cukup nyaman (secara tatap muka maupun online). | | | | | |
| 20 | Pengunjung saya dan saya dapat melakukan kontak fisik yang cukup (misalnya, saling berpelukan) selama jam berkunjung di lapas ini. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21 | Jam berkunjung di lapas ini cukup lama (secara tatap muka maupun online). | | | | | |
| 22 | Saya mempunyai *privasi selama waktu untuk berkomunikasi (secara tatap muka maupun online) dengan kerabat atau kenalan saya yang ada di luar lapas.<br><br>**privasi artinya Anda bisa leluasa berbicara tanpa takut ada yang menguping* | | | | | |
| 23 | Penjaga lapas memperlakukan pengunjung saya dengan baik. | | | | | |
| 24 | Jumlah waktu berkomunikasi dengan orang dari luar lapas saya rasakan cukup (secara tatap muka maupun online). | | | | | |
| 25 | Saya senang menerima kunjungan dengan orang dari luar lapas (secara tatap muka maupun online). | | | | | |
| 26 | Saya merasa baik setelah menerima kunjungan dengan orang dari luar lapas (secara tatap muka maupun online). | | | | | |
| **3.2. Kepuasan terhadap frekuensi kontak dengan dunia luar** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 27 | Saya puas dengan seberapa sering saya bisa bertemu dengan keluarga, teman, atau pasangan saya di lapas ini (secara tatap muka maupun online). | | | | | |
| 28 | Saya puas dengan seberapa sering saya bisa bertemu dengan anak saya di lapas ini (secara tatap muka maupun online). | | | | | |
| 29 | Saya puas dengan seberapa sering saya bisa bertemu dengan pengacara saya di lapas ini (secara tatap muka maupun online). | | | | | |
| | | | | | | |
| **4. Fasilitas** | | | | | | |
| **4.1. Istirahat di malam hari** | | | | | | |
| 30 | Saya tidak bisa tidur nyenyak (misal: terlalu sering terbangun) | | | | | |
| 31 | Tidur saya sering terganggu di lapas ini (misal: Anda sering terbangun tengah malam karena terlalu berisik). | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 32 | Karena kondisi lapas dan/atau sel yang buruk, saya tidak bisa tidur dengan nyenyak. (misal: karena kasur yang tidak nyaman dan ruangan yang gerah) | | | | | |
| **4.2. Layanan Kesehatan** | | | | | | |
| 33 | Saya bisa mendapatkan layanan kesehatan yang saya butuhkan di lapas ini jika saya mau. | | | | | |
| 34 | Masalah kesehatan ditangani dengan cukup baik di lapas ini. | | | | | |
| 35 | Saya puas dengan kinerja perawat di lapas ini. | | | | | |
| 36 | Saya puas dengan kinerja dokter umum di lapas ini | | | | | |
| 37 | Saya puas dengan kinerja dokter gigi di lapas ini. | | | | | |
| 38 | Saya puas dengan layanan konseling di lapas ini. | | | | | |
| **4.3. Koperasi atau Kantin** | | | | | | |
| 39 | Saya puas dengan aneka barang yang dijual di koperasi/kantin. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 40 | Koperasi/kantin menyediakan barang dengan harga terjangkau (tidak terlalu mahal). | | | | | |
| 41 | Saya puas dengan kualitas barang yang dijual di koperasi/kantin. | | | | | |
| 4.4. Penanganan keluhan | | | | | | |
| 42 | Di lapas ini, saya sudah pernah menyampaikan keluhan ke petugas lapas:<br><br>☐ **Ya**<br><br>☐ **Tidak → <u>Jika "Tidak", lanjut ke No. 47</u>** | | | | | |
| 43 | Petugas penanganan pengaduan cukup mudah ditemui. | | | | | |
| 44 | Petugas di lapas menanggapi keluhan saya dengan serius. | | | | | |
| 45 | Keluhan saya ditangani dengan cepat. | | | | | |
| 46 | Saya puas dengan penanganan keluhan saya. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **5. Kegiatan Bermakna** | | | | | | |
| **5.1. Kepuasan terhadap kegiatan** | | | | | | |
| 47 | Saya puas dengan kegiatan rekreasi yang tersedia (contoh: menonton TV/film). | | | | | |
| 48 | Saya puas dengan kegiatan olahraga yang tersedia. | | | | | |
| 49 | Saya puas dengan perpustakaan yang tersedia. | | | | | |
| 50 | Saya puas dengan kegiatan keterampilan (vokasional) yang tersedia. | | | | | |
| 51 | Saya menikmati waktu bebas yang ada di luar sel<br><br>(misal: waktu buka keong, berangin-angin). | | | | | |
| 52 | Saya puas dengan pendampingan rohani di lapas<br><br>(contoh: ustad, pastor, atau pendeta). | | | | | |
| **5.2. Ketersediaan kegiatan bermakna** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 53 | Lapas ini memberikan program harian yang menarik dan beragam. | | | | | |
| 54 | Selama mengikuti program harian, saya belajar keterampilan yang berguna. | | | | | |
| 55 | Saya memiliki cukup kegiatan di lapas ini. | | | | | |
| 56 | Kegiatan dalam program harian membantu saya mengembangkan diri. | | | | | |
| **5.3. Reintegrasi Masyarakat** | | | | | | |
| 57 | Di lapas ini, saya bisa mempersiapkan diri dengan baik untuk bisa kembali ke masyarakat. | | | | | |
| 58 | Petugas lapas mendorong saya membuat rencana setelah saya dibebaskan. | | | | | |
| 59 | Saya bisa mendapatkan dukungan ekstra untuk mempersiapkan diri kembali ke masyarakat. | | | | | |
| 60 | Di lapas ini, saya belajar berbagai hal yang dapat membantu saya untuk menjauhkan diri dari | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | berbagai tindakan kriminal setelah saya bebas. | | | | | |
| | | | | | | |
| **6. Otonomi** | | | | | | |
| **6.1. Tingkat otonomi** | | | | | | |
| 61 | Banyak hal yang bisa saya putuskan untuk diri saya sendiri di lapas ini. | | | | | |
| 62 | Saya dapat memutuskan hal-hal yang penting bagi diri saya sendiri di lapas ini. | | | | | |
| 63 | Saya didorong untuk menangani berbagai hal secara mandiri. | | | | | |
| 64 | Saya memiliki ruang gerak yang cukup bebas di lapas ini. | | | | | |

**-Terima kasih-**

# Appendix 3a. Guide for Focus Group Discussions (FGD) for Control Prisons

**GUIDANCE FOR FOCUS GROUP DISCUSSIONS**

Participants: Program manager and rehabilitation staff at the Control Prison

| | |
|---|---|
| Date | |
| Facilitators | |
| Location | |
| Name of participants | |

We intend to gain your experience in conducting social rehabilitation programs with Therapeutic Community (TC). But first let's introduce ourselves first. Please state your name, age, last education, position and length of service, how long you have been involved in the TC program and role in the implementation of TC.

I would invite all of you to discuss:

1. What are the results of the TC implementation that has been carried out in this prison?
    a. Are there any changes shown by the rehab participants (in terms of thoughts, feelings, behavior)?
    b. What kind of changes did the participants show?
2. How is the process of implementing the rehabilitation program using the TC approach in your prison?

    Is there a variety of activities in implementing TC, and adequate infrastructure (such as special blocks, and other facilities)?

3. Is there any support from the leaders (head of prison, head of the coaching and education section, etc.) in the implementation of TC? What kind of support is provided in the implementation of the TC program in prisons?

4. In your opinion, what is the duration of the implementation (6 months) of the rehabilitation program using the TC approach?

   Is it enough or need to be reduced/added?

5. At this time, what documents do you use as a reference in implementing the TC program? (is it implementing guidelines or Rehabilitation Standards?)

6. What are your views when using the reference document?

    1. Is it easy to understand and help you in carrying out the rehabilitation program?
    2. Are there any modifications/variations or adjustments that have been developed in implementing it?
    3. What makes these modifications/variations or adjustments necessary?
    4. Is there any part of the referenced document that is inappropriate or difficult to understand? What difficulties did you encounter in applying the reference document?

7. What is your perception/view regarding the narcotics rehabilitation program with TC carried out in prisons?

    1. Were there any personal challenges/barriers faced during the implementation of the rehabilitation program? (in terms of knowledge, skills, time, values/beliefs)

8. What benefits did you feel when you were involved as a rehabilitation officer, both personally and as an institution?

9. (Especially for counselors) After attending the MI training series, can the MI modality be used as an alternative to TC modalities?

10. What are your hopes for the rehabilitation program in prisons in the future? (eg: what form of support is needed, what needs to be improved).

# Appendix 3b. Guide for Focus Group Discussions (FGD) on Prison Intervention

**GUIDE FOR FOCUS GROUP DISCUSSION**

Participant: Rehabilitation program staff at Intervention Prison

| | |
|---|---|
| Date | |
| Facilitators | |
| Location | |

We intend to gain your experience in conducting social rehabilitation programs with Therapeutic Community (TC) or Motivational Interviewing (MI) modalities. But first let's introduce ourselves first. Please state your name, age, last education, position and length of service, how long you have been involved in the rehabilitation program and role in the implementation of MI.

I would invite all of you here to discuss:

1. What are the results of the MI implementation that has been carried out in this prison?
   a. Are there any changes shown by the rehab participants (in terms of thoughts, feelings, behavior)?
   b. What kind of changes did the participants show?

2. How is the process of implementing the rehabilitation program with the MI approach in your prison? Is there adequate infrastructure (counseling room) in implementing MI individual counseling?

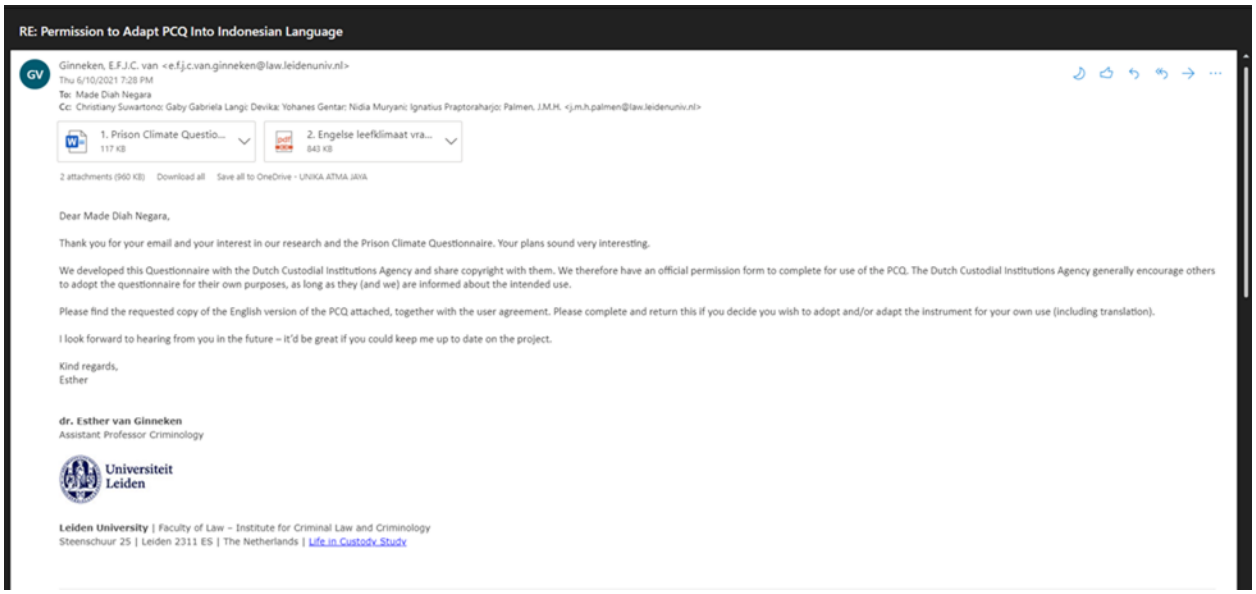
3. Is there any support from the leaders (head of prison, head of the coaching and education section, etc.) in the implementation of MI? What kind of support is provided in the implementation of the MI program in prisons?

4. In your opinion, what is the duration and session of the rehabilitation program using the MI approach? Is it enough or need to be reduced/added?

5. What are your views on using the MI Session Guide and Module?

    1. Are the guidelines and modules easy to understand and help you in carrying out the rehabilitation program?
    2. Are there any modifications/variations or adjustments that have been developed in implementing the MI Session Modules and Guidelines?
    3. What makes these modifications/variations or adjustments necessary?
    4. Are there parts of the MI Session Guidelines and Modules that are inappropriate or difficult for you to understand? What difficulties did you encounter in implementing the existing MI Session Guidelines and Modules?
    5. Does the MI Guide help you apply MI skills?
6. What are your perceptions and views regarding the narcotics rehabilitation program (both TC and MI modalities) carried out in prisons? Were there any personal challenges/barriers faced during the implementation of the rehabilitation program? (in terms of knowledge, skills, time, values/beliefs)?
7. What are the benefits that you feel when you are involved as a rehabilitation officer, both personally and as an institution?
8. How interested (motivated) are you to implement MI in the future? [asked of each counselor]
9. Which modality do you think is the most convenient to implement? (is it MI or TC?) Why do you think this modality is more comfortable?
10. What are your hopes for the rehabilitation program in prisons in the future? (eg: what form of support is needed, what needs to be improved)

# Appendix 4. Adaptation Permit Application



RE: Permission to Adapt PCQ Into Indonesian Language

GV Ginneken, E.F.J.C. van <e.f.j.c.van.ginneken@law.leidenuniv.nl>
Thu 6/10/2021 7:28 PM
To: Made Diah Negara
Cc: Christiany Suwartono; Gaby Gabriela Langi; Devika; Yohanes Gentar; Nidia Muryani; Ignatius Praptoraharjo; Palmen, J.M.H. <j.m.h.palmen@law.leidenuniv.nl>

1. Prison Climate Questio... 117 KB
2. Engelse leefklimaat vra... 843 KB

2 attachments (960 KB) Download all Save all to OneDrive - UNIKA ATMA JAYA

Dear Made Diah Negara,

Thank you for your email and your interest in our research and the Prison Climate Questionnaire. Your plans sound very interesting.

We developed this Questionnaire with the Dutch Custodial Institutions Agency and share copyright with them. We therefore have an official permission form to complete for use of the PCQ. The Dutch Custodial Institutions Agency generally encourage others to adopt the questionnaire for their own purposes, as long as they (and we) are informed about the intended use.

Please find the requested copy of the English version of the PCQ attached, together with the user agreement. Please complete and return this if you decide you wish to adopt and/or adapt the instrument for your own use (including translation).

I look forward to hearing from you in the future – it'd be great if you could keep me up to date on the project.

Kind regards,
Esther

**dr. Esther van Ginneken**
Assistant Professor Criminology

Universiteit Leiden

**Leiden University** | Faculty of Law – Institute for Criminal Law and Criminology
Steenschuur 25 | Leiden 2311 ES | The Netherlands | Life in Custody Study

# Appendix 5. Example of Items Revision After Expert Judgment

| Domain | Sub-domain | Before Revision | Expert Judgment Comment | After Revision |
|---|---|---|---|---|
| Relations with Staff members Correctional Guardians, and Fellow Inmates | Relations with fellow inmates | 2. New prisoners here are quickly accepted into the group. | The new inmates were quickly accepted by the other inmates. 'Groups' are often perceived as some ethnic or regional groups. | 2. New prisoners can be quickly accepted by other inmates. |

| | | | | |
|---|---|---|---|---|
| | Relationship with Companion Prisoners (Tamping)<br><br>**new sub-domain* | - | Several domains & items addition based on Experts' input, considering many activities are the correctional guardians' *(wali pemasyarakatan )* responsibilities. | ● If I have a problem, the correctional officer will help me.<br><br>● I can talk to the correctional officer if I feel worried or sad. |
| | Staff members treatments | 11. Staff members in this unit explain their decisions to me | Adjusted according to the results of discussions with the Experts. | 11. Staff members in this unit explained their decision-making considerations to me. |
| Safety | - | 15.I sometimes feel threatened by fellow prisoners | *"Sometimes"* usually included in likert scale like: *'never -sometimes-always'.* | 15. I feel threatened by fellow inmates |
| Contact with the Outside World | Satisfaction with visits while in prison | 19. The visiting room in this institution is pleasant<br><br>20. There are sufficient opportunities to communicate with my relatives or acquaintances who are outside the prison. | Items adapted to the COVID-19 pandemic situation (cannot be face to face). | 19. Visiting facilities at this prison are quite comfortable (face to face or online).<br><br>20.(item removed) |

| | | | | |
|---|---|---|---|---|
| Facility | Cooperative and canteen | 39. I am satisfied with the various items sold at the cooperative. | The sound of the item is corrected according to expert input to add a "canteen" to the items contained in the sub-domain. | 39. I am satisfied with the various items sold in the cooperative/canteen. |
| | Settlement of Complaint | 42.The month commissioner / visiting officer is easily accessible. | Adjusted according to the results of discussions with the Experts. | 42. Complaint handling officers are quite easy to find. |
| Meaningful Activities | Satisfaction with activities | I am satisfied with the available recreational activities. | Several items were added so that the answer choices "Not Applicable" and "Neutral" could be removed, according to Experts input. | As far as you know, are the following activities/facilities available in this prison?<br><br>Recreation activity<br>☐ Yes<br>☐ No |
| | Community Reintegration | I can get special assistance in preparing myself to return to social life. | The sound of the item is corrected according to the discussion with the Experts. | I can get extra support here to prepare for my return into society |

# Appendix 6. Some Examples of Revised Items After Readability Test

| Domain | Sub-domain | Before Revision | Reason for Adjustment | After Revision |
|---|---|---|---|---|
| Facility | Health care | As far as you know, is there any health service in this prison?<br><br>☐ Yes<br><br>☐ No → continue to No. 42 | Participants seem to have difficulty with items in the form of questions like this. | To simplify matters, it was decided that question items like this were deleted. However, the answer option "Not Applicable" is added to accommodate participants who may be in conditions or circumstances that are not relevant to what is described in the item. |
| Contact with the Outside World | Satisfaction with visits while in prison | I am satisfied with how often I can meet with my lawyer in this prison (face-to-face or online meetings). | There are participants who already have a lawyer, but have never met face-to-face or online meetings. There are also participants who do not have a lawyer. Likewise with several other statements that have the potential to have similar conditions | There are additional instructions and answer options ***"Not Applicable"*** to statement items that are potentially irrelevant to the conditions or circumstances of certain participants. |

# Appendix 7. Characteristics of Participants

The description of participant characteristics shows that all participants are male and the average age is 33 years. In addition, it is known that most of the participants are in the age group of 21-30 years (45%), the last education is high school (55%), and single status (46.67%). When viewed from the history of participants being in prison, most of the participants were in prison in 2021 (66.67%), while serving a period of detention for a period of 5-10 years (61.67%) and had never participated in a coaching program in prison (96.67%).

| Variable | n | % |
|---|---|---|
| Sex (Male) | 60 | 100 |
| Age (*mean,* SD) | 32,9 | 7,8 |
| Age groups | | |
| 21-30 y.o | 27 | 45,00 |
| 31-40 y.o | 23 | 38,33 |
| 41-50 y.o | 8 | 12,33 |
| > 50 y.o | 2 | 3,33 |
| Highest level of education | | |
| not completed in elementary school | 1 | 1,67 |
| Elementary school | 8 | 13,33 |
| Junior High school | 14 | 23,33 |
| Senior High School | 33 | 55,00 |
| Diploma 3 | 2 | 3,33 |
| Undergraduate | 2 | 3,33 |
| Marital Status | | |
| Single | 28 | 46,67 |
| married | 21 | 35,00 |
| Divorce | 11 | 18,33 |

| | | |
|---|---|---|
| Year of admission to prison | | |
| 2018 | 2 | 3,33 |
| 2019 | 4 | 6,67 |
| 2020 | 14 | 23,33 |
| 2021 | 40 | 66,67 |
| Length of prison terms | | |
| < 5 years | 11 | 18,33 |
| 5-10 years | 37 | 61,67 |
| 11-15 years | 11 | 18,33 |
| > 15 years | 1 | 1,67 |
| Previous participation in any specific program in the prison | | |
| Yes | 2 | 3,33 |
| No | 58 | 96,67 |

# Appendix 8. Result of Item Analysis and Reliability Test

Table. Result of item analysis and reliability test

| Domain | Koef alpha | Code | Statements | *Item-rest correlation* |
|---|---|---|---|---|
| 1.1. Relation with fellow Inmates | 0.814 | PCQ_1 | The prisoners treat each other respectfully here. | 0,515 |
| | | PCQ_2 | New prisoners here are quickly accepted into the group | 0,52 |
| | | PCQ_3 | Prisoners here are considerate of each other | 0,727 |
| | | PCQ_4 | I get along well with most of my fellow prisoners | 0,53 |

| | | | | |
|---|---|---|---|---|
| | | PCQ_5 | Prisoners here help and support each other | 0,741 |
| 1.2. Relation with Staff members | 0.787 | PCQ_6 | If I have problems, the staff members in this unit help me | 0,505 |
| | | PCQ_7 | The staff members in this unit are kind to me | 0,724 |
| | | PCQ_8 | I can talk to the staff members in this unit if I feel worried or sad | 0,637 |
| | | PCQ_9 | The staff members in this unit motivate and encourage me to participate in activities | 0,554 |
| 1.3. Relation with Correctional Guardian | 0.017 | PCQ_10 | If I have a problem then the correctional guardian will help me. | 0,095 |
| | | PCQ_11 | I can talk to the correctional guardian if I feel worried or sad. | 0,058 |
| | | PCQ_12 | The correctional guardian motivated and encouraged me to participate in various activities at the prison. | 0,095 |
| | | PCQ_13 | The correctional guardian treated me fairly | 0,066 |
| | | PCQ_14 | The correctional guardian treated me with respect. | 0,027 |
| 1.4. Treatment by Staff Members | 0.718 | PCQ_15 | Staff members treated me fairly | 0,339 |
| | | PCQ_16 | Staff members in this unit explain their decisions to me | 0,646 |
| | | PCQ_17 | Staff members in this unit treat me with respect | 0,437 |
| | | PCQ_18 | Staff members in this unit give me a chance to express my views before they make decisions | 0,628 |
| 2. Safety | 0.952 | PCQ_19 | I feel unsafe in this institution | 0,934 |

| | | | | |
|---|---|---|---|---|
| | | PCQ_20 | I sometimes feel threatened by fellow prisoners | 0,896 |
| | | PCQ_21 | There are places in this institution where I feel unsafe | 0,835 |
| | | PCQ_22 | I am afraid of some fellow prisoners. | 0,909 |
| | | PCQ_23 | I am afraid of some staff members in this unit | 0,773 |
| 3.1. Satisfaction with visits while in prison | 0.844 | PCQ_24 | The visiting facilities at this prison are quite comfortable(face to face or online). | 0,52 |
| | | PCQ_25 | My visitor and I can have enough physical contact (e.g., give each other a hug) during the visiting hours in this institution. | 0,356 |
| | | PCQ_26 | The visiting hours in this institution are long enough (face to face or online) | 0,669 |
| | | PCQ_27 | I have sufficient privacy during visiting hours by face to face or online. *(privacy means that you can easily talk without others overhearing your conversation*). | 0,684 |
| | | PCQ_28 | The staff members in this institution treat my visitors nicely | 0,687 |
| | | PCQ_29 | The visiting hours in this institution are frequent enough (face to face or online). | 0,63 |
| | | PCQ_30 | I enjoy receiving visits (face to face or online). | 0,687 |
| | | PCQ_31 | After receiving a visitor, I feel good (face to face or online). | 0,63 |
| 3.2. Satisfaction with external contact | 0.656 | PCQ_32 | I am satisfied with how often I can see my family, friends or partner here (face to face or online). | 0,47 |

| | | | | |
|---|---|---|---|---|
| | | PCQ_33 | I am satisfied with how often I can see my child(ren) here (face to face or online). | 0,511 |
| | | PCQ_34 | I am satisfied with how often I can see my lawyer here (face to face or online) | 0,473 |
| 4.1.Night's Rest | 0.652 | PCQ_35 | I can't sleep well in this institution (for example, because you wake up often) | 0,461 |
| | | PCQ_36 | My sleep is often disturbed in this institution (for example, you are often awake at night because of too much noise) | 0,5 |
| | | PCQ_37 | Due to poor conditions in this institution and/or my cell, I can't sleep well (think, for example, of: a bad mattress and the temperature). | 0,482 |
| 4.2. Health Care | 0.912 | PCQ_38 | I can get medical care here if I want to | 0,779 |
| | | PCQ_39 | Health problems are being taken care of adequately here. | 0.819 |
| | | PCQ_40 | I am satisfied with the work of the nurse | 0.758 |
| | | PCQ_41 | I am satisfied with the work of the general practitioner | 0.874 |
| | | PCQ_42 | I am satisfied with the work of the dentist | 0,617 |
| | | PCQ_43 | I am satisfied with the counseling services in this prison. | 0,707 |
| 4.3.Canteen | 0.926 | PCQ_44 | I am satisfied with the range of products in the canteen. | 0,867 |
| | | PCQ_45 | The products in the canteen are affordable (not too expensive) | 0,812 |
| | | PCQ_46 | I am satisfied with the quality of the products in the canteen | 0,866 |

| | | | | |
|---|---|---|---|---|
| 4.4. Settlement of Complaint | 0.897 | PCQ_48 | Complaint handling officers are quite easy to find. | 0.754 |
| | | PCQ_49 | Staff members took my complaint seriously. | 0,754 |
| | | PCQ_50 | The handling of my complaint was fast enough | 0,805 |
| | | PCQ_51 | I am satisfied with the way my complaint was handled. | 0,774 |
| 5.1. Activity Satisfaction | 0.865 | PCQ_53 | I am satisfied with the recreation (example: watching TV/movies). | 0,759 |
| | | PCQ_54 | I am satisfied with the sports. | 0,664 |
| | | PCQ_55 | I am satisfied with the library | 0,541 |
| | | PCQ_56 | I am satisfied with the available skills (vocational) activities. | 0,762 |
| | | PCQ_57 | I enjoy the free time that is outside the cell | 0,577 |
| | | PCQ_58 | I am satisfied with the pastoral care<br><br>(for example: the imam, pastor or priest). | 0,694 |
| 5.2. Availability of meaningful activities | 0.913 | PCQ_59 | This institution delivers an interesting and varied daily program | 0,767 |
| | | PCQ_60 | During the daily program I learn useful skills. | 0,873 |
| | | PCQ_61 | I have enough to do in this institution | 0,812 |
| | | PCQ_62 | The activities in the daily program help me to develop myself . | 0,764 |
| 5.3. Reintegration in the Community | 0.827 | PCQ_63 | In this institution, I can prepare well for my return into society | 0,604 |
| | | PCQ_64 | Staff members here encourage me to make plans for after release | 0,618 |

| | | | | |
|---|---|---|---|---|
| | | PCQ_65 | I can get extra support here to prepare for my return into society | 0,709 |
| | | PCQ_66 | In this institution I learn things that help me to stay away from crime after release | 0,704 |
| 6.1. Autonomy level | 0.723 | PCQ_67 | There are many things I can decide for myself in this prison | 0,627 |
| | | PCQ_68 | I can decide for myself on matters that are important to me here | 0,495 |
| | | PCQ_69 | I am encouraged to arrange matters here myself | 0,763 |
| | | PCQ_70 | I have sufficient freedom of movement here | 0,29 |

# Appendix 9. Results of PCQ Validity Test with WHOQoL-BREF

Table. Result of Validity test

| | physical health | Psychological Health | Social Relations | Environment |
|---|---|---|---|---|
| 1.1. Relation with fellow Inmates | ,338** | ,329* | 0,224 | ,387** |
| 1.2. Relation with Staff members | 0,245 | 0,254 | 0,248 | ,257* |
| 1.3. Relation with Prison guardian | -0,061 | -0,037 | -0,012 | -0,057 |
| 1.4. Treatment by Staff members | ,285* | 0,224 | ,267* | ,277* |
| 2. Safety | -0,077 | -0,044 | -0,038 | -0,106 |
| 3.1.Satisfaction with visits while in prison | ,325* | 0,252 | ,262* | ,301* |
| 3.2. Satisfaction with external contact | 0,197 | ,271* | ,270* | ,300* |
| 4.1. Night's rest | -,346** | -0,169 | -,453** | -,395** |
| 4.2. Health care | ,342** | ,298* | 0,181 | ,415** |
| 4.3. Canteen | ,305* | ,278* | 0,145 | ,393** |

| | | | | |
|---|---|---|---|---|
| 4.4. Settlement of complaint | ,589** | 0,351 | ,470** | ,599** |
| 5.1. Activity satisfaction | ,384** | ,326* | 0,200 | ,497** |
| 5.2. Availability of meaningful activities | ,390** | ,280* | ,266* | ,366** |
| 5.3. Reintegration in the Community | ,531** | ,508** | 0,253 | ,588** |
| 6.1. Autonomy level | ,545** | ,475** | ,329* | ,654** |

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

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

**WHOQoL-BREF**

| Subdomain | Chi Square (value *p*) | df | ratio | RMSEA | SRMR | TLI | CFI | GFI | Decision |
|---|---|---|---|---|---|---|---|---|---|
| 1.1. Relation with fellow Inmates | <0,001 | 5 | 4,645 | 0,249 | 0,077 | 0,698 | 0,849 | 0,898 | invalid |
| 1.2. Relation with Staff members | 0,103 | 2 | 2,274 | 0,147 | 0,051 | 0,892 | 0,964 | 0,961 | valid |
| 1.3. Relation with Prison guardian | Note: The following pair(s) of variables is/are perfectly correlated: PCQ_10 and PCQ_12. | | | | | | | | invalid |
| 1.4. Treatment by Staff members | 0,67 | 2 | | 0 | 0,019 | 1,072 | 1 | 0,993 | valid |
| 2. Safety | 0,001 | 5 | 4,071 | 0,23 | 0,029 | 0,908 | 0,954 | 0,884 | valid |
| 3.1.Satisfaction with visits while in prison | <0,001 | 20 | | 0,187 | 0,087 | 0,737 | 0,812 | 0,818 | invalid |
| 3.2. Satisfaction with external contact | 0 | 0 | | 0 | < 0,001 | 1 | 1 | 1 | invalid |
| 4.1. Night's rest | - | 0 | | 0 | < 0,001 | 1 | 1 | 1 | invalid |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 4.2. Health care | - | 9 | 5 | 0,256 | 0,088 | 0,795 | 0,877 | 0,821 | invalid |
| 4.3. Cooperative or canteen | - | 0 | | 0 | < 0,001 | 1 | 1 | 1 | invalid |
| 4.4. Settlement of complaint | 0,107 | 2 | 2 | 0,203 | | | | | |
| 5.1. Activity satisfaction | 0,002 | 9 | 3 | 0,179 | 0,036 | 0,893 | 0,964 | 0,941 | valid |
| 5.2. Availability of meaningful activities | 0,147 | 2 | 1,919 | 0,128 | 0,071 | 0,829 | 0,897 | 0,858 | invalid |
| 5.3. Reintegration in the Community | 0,223 | 2 | 1,499 | 0,092 | 0,026 | 0,965 | 0,988 | 0,965 | valid |
| 6.1. Autonomy level | 0,284 | 2 | 1,259 | 0,066 | 0,032 | 0,964 | 0,988 | 0,976 | valid |