**Preventing recidivism: Development of group cohesion in open-ended groups**

# Abstract

This study examines participants’ recidivism rates after having participated in open-ended groups of at adult probation service. The study employed a mixed method approach. Qualitative research was conducted to identify themes shared by group facilitators, counselors, and probation management regarding expected outcomes from group intervention. A quantitative study was conducted using questionnaires measuring two variables: social contacts and group cohesiveness. Participants reported changes in their relationships with family and friends, and high levels of group cohesiveness following therapy. Importantly, six months to one year after therapy concluded, 90% of the participants do not appear to have returned to crime.

**Keywords**

adult offenders, cohesion, recidivism, open groups, group therapy

# Introduction

The primary goal of adult probation services is to minimize the potential danger to society posed by convicted criminals who have been released from prison. This can be accomplished by rehabilitating offenders on probation, monitoring their reintegration into the community, and making efforts to reduce recidivism (Andrews and Bonta, 2010; Yukhnenko et al., 2020). Recidivism, a return to the cycle of crime or delinquency within a given period of time after a first conviction, is defined as a new arrest, a new indictment, a new conviction, or a new sentence (Lyman and LoBuglio, 2006). In Israel, recidivism involves released prisoners who are again convicted and sentenced to imprisonment or community service within five years of their previous release. According to Israel’s Prison Services Research Unit, the national recidivism rate is about 43.5% (Ben Zvi and Wolk, 2011).

There are static and dynamic risk factors that may affect an offender’s chances of returning to delinquency and prison (Andrews and Bonta, 2010; Vincent et al., 2012). Static factors are permanent and unchangeable: gender, age, country of origin, and criminal history (Humphrey et al., 2012), and can be indicative of broad social trends. Identifying static factors allows policymakers and probation services to focus on specific groups of populations (socioeconomic, ethnic, etc.), in which resources should be invested to help prevent the likelihood of a return to delinquent behavior (Ben Zvi and Wolk, 2011; Hanson, 2018). Dynamic factors, however, are not constant and may change over time: self-perception and one’s perception of society, patterns of antisocial behavior, addiction to dangerous substances, employment, and education (Gendreau et al., 1996). Treatment and rehabilitation programs aim at influencing these dynamic factors (Ben Zvi and Wolk, 2011).

Rehabilitation programs typically employ group therapy, an intervention proven successful in inducing behavioral change among adult offenders (Jewell et al., 2015; Lloyd et al., 2014) by helping them develop insights into their motivational and behavioral patterns, particularly those that result in illegal behavior, while simultaneously increasing their awareness of their interpersonal behavior (Yukhnenko et al., 2019). While group therapy has generally proven beneficial (Lloyd et al., 2014), the essentials of group therapy with adult offenders remain unspecified and hence less easily replicated (Le Tran et al., 2021). However, drawing on the general psychotherapeutic literature on group therapy (Yalom, 1995), recent studies, mostly among sex offenders, have identified beneficial characteristics of group processes, such as cohesiveness and leading to behavioral change in offender treatment (Jennings and Deming, 2017; Marshall, Burton, and Marshall, 2013). Given that large numbers of adult offenders are placed on probation annually and that this population is considered a diverse population, with a wide range of offenses, it is crucial that studies explore specific program components that effectively contribute to reducing recidivism across a variety of offences. Our study will try to fill the current research gap by focusing on the group cohesion aspect of group therapy.

One component of group therapy associated with positive treatment outcome is group cohesion, considered the most significant of the relationship constructs (e.g., alliance, group climate, and group atmosphere) in the clinical and empirical literature on groups (Burlingame et al., 2018). Furthermore, there is widespread agreement in the literature regarding the positive contribution of group cohesion to group effectiveness and performance (Evans & Dion, 1991; Greer, 2012). Cohesion refers to a network of affective bonds that forms the basis for therapeutic work in the group process (Joyce et al., 2007, involving intragroup feelings of solidarity, harmony, and pride in carrying out the group’s task (Homan & van Kleef, 2022). Group cohesiveness in its most basic form refers to the attractiveness of a group for its members (Yalom, 1995). Yalom (1995) has claimed that group cohesiveness is essential for effective treatment, and it is seen as a necessary condition for meaningful work and change to occur in the context of group therapy (Jennings and Deming, 2017; Yalom, 1995).

Hardy and Carron mentioned that: "In 1985, Carron, Widmeyer, and Brawley proposed a conceptual framework of team cohesion that has subsequently been tested and generally supported over the past 19 years (see Carron et al., 1998). Within their framework, team cohesion is assumed to manifest itself in regard to task (e.g., unity around group objectives and goals) and social (e.g., unity in socializing together) aspects. Moreover, perceptions of both task and social cohesion are assumed to occur at two levels: the personal (e.g., perceptions of individual attraction to the group) and the group (e.g., perceptions about the group as a whole). (pg. 166-167).

The construct of cohesion was defined by Burlingame et al. (2011) as involving *vertical* and *horizontal* cohesion. Vertical cohesion refers to a member’s perception of the group leader (competence, genuineness, and warmth) and horizontal cohesion describes a member’s relationship with other group members and with the group as a whole. Burlingame et al. (2011) conducted a meta-analysis examining the relationship between cohesion and treatment outcomes among psychotherapy groups in 40 studies published over four decades, finding a positive correlation between cohesion and group therapy outcomes for groups across different settings when outcome was defined as a reduction in symptom distress or improvement in interpersonal functioning. Clinical practice has also identified group cohesiveness as essential for achieving treatment benefits for adult offenders (Marshall and Burton, 2010). In the context of delinquent populations, the level of group cohesion is described in the literature as a strong and significant predictor of successful achievement of treatment goals and as a precondition for desired change (Lloyd et al., 2014).

In Israel, the primary model of group therapy implemented in the adult probation service is open groups. Open groups do not have a pre-set end date. They are ongoing by nature, with the group composition changing constantly (Sheriff and Pollak, 2008). This model allows for relative flexibility, which facilitates the joining of new members and the exit of participants who have completed their treatment or who did not integrate successfully into the group. The open group model offers mutual assistance and support to participants who share similar life stresses (Schopler and Galinsky, 2006). Given that the group climate, particularly the group’s cohesiveness, is significantly related to the positive benefits that result from treatment (Burlingame et al., 2011; Frost et al., 2009; Marshall and Burton, 2010), the level of cohesiveness achieved in an open group whose members’ composition change over the course of treatment must be examined. The current study focuses on the relationship between group cohesion and the reduction in recidivism among adult offenders.

# Group cohesion in open groups

In his book *The Theory and Practice of Group Psychotherapy*, Irvin Yalom (1995) identified the concept of group cohesion as one of the important therapeutic forces in groups. This critical therapeutic factor relates to the human need to belong to groups, bolstering the approach that an individual’s personal development can occur only in the context of interpersonal relationships in a group setting. Cohesive groups, according to Yalom (1995) enable group members to feel a sense of belonging, acceptance, and personal validity, much like the therapeutic relationship in individual therapy.

The group analysis approach, formulated by Foulkes in the 1940s (Foulkes, 1948), may shed light on the role of group cohesion in open group settings. The open group is a central tenet of therapy, in which processes of exit and entry are key components enabling participants to experience and express a variety of emotions and struggles with diverse content domains. For example, group members are exposed to themes contributed by veteran and familiar members as well as by the new members, whose process of entry into the group represents a therapeutic step that is both regressive and progressive for group members. A survey of 116 open-ended groups in North Carolina led by social workers, suggests that some open-ended groups do have potential for development beyond an initial stage (Schopler & Galinsky, 1990) .Moreover, group analysis suggests that “the beneficial object is the whole group” (Berman, 2015: 63), in the sense that a group provides belonging, relieves anxiety, facilitates transitions, and allows for space and time without the pressure of achieving time-defined targets or fear of “getting stuck” (Berman, 2015).

An open therapeutic group, termed a “slow open” group by Joffe-Milstein (2015: 182), has no designated end and is therefore not time-limited, thereby contributing to the development of cohesion and increasing the therapeutic value for its participants. Participants enter and exit: those who have completed the treatment period leave the group and newcomers enter and integrate. Joffe-Milstein (2015) explains the value of entrances and exits as “from disturbance to growth” (181), meaning that the group’s entrances and exits shift, over time: first posing as a threat and creating uncertainty about the unknown group life, serving as a source of concern and tension, and sometimes generating hostility from other members who may be concerned about their position and status in the group; and then offering opportunities to develop into a source of learning and growth, as the in more advanced stages of group life, where the process of change can be observed and individuals learn to cope and strengthen themselves in the face of dependency and regressive processes. Therefore, the open group, in its various forms, influences the diverse dynamics that develop, and group cohesion constitutes an important component in creating these conditions. An important study conducted by Chapman and Kivilighan (2019) found that group cohesion develops and influences the course of group therapy and treatment outcomes as a result of the dynamic relationship within the group. It was found that anxiety symptoms decreased over time as a result of the ongoing group process and the effect of group cohesion, indicating a direct relationship between open group cohesion and the participant’s therapeutic outcome. Although the optimal length of treatment is debated, there is no dispute that group cohesion is of major therapeutic value for the participant’s development in long-term groups overall.

At the same time, the open group has limitations and has been criticized for its level of effectiveness, given the difficulties this kind of group may create. Group cohesion may build slowly due to participants’ periodic exits and entrances. Consequential regressive processes are difficult and harsh for some participants, representing a sense of lack of boundaries, resulting from situations of uncertainty brought about by participation in open-ended groups for those who have difficulty with these situations. According to Barr and Hurst (2010), the central criticism of open groups is primarily of the regressions that participants undergo, as well as the concerns and anxieties that emerge from the group as they undergo the process; nonetheless Barr and Hurst find that open groups’ therapeutic value outweighs any disadvantages. Moreover, Berman (2015) contends that an open therapeutic group is not necessarily effective for everyone, such as those individuals whose self-structure has not yet crystallized, or for those with narcissistic deprivation, who will have difficulty coping with the gap between their own needs and group interactions and the needs of others, as is required in open groups. Another limitation of an open group may reflect the reality of the modern age, where people, especially the young, need immediate and speedy responses, and have difficulty with extended processes. Facilitators may find it difficult to maintain a firm hold on the group, considering the demand for short and immediate therapy (Lorentzen et al., 2018). The main drawback of open groups may therefore be that they are long-term processes demanding the ability to cope with such extended processes involving participants’ entrances and exits.

# Context

The Adult Probation Service in Israel is enshrined in the criminal law and is an integral part of the law enforcement system. The service provides diagnosis, supervision, treatment, and rehabilitation services to those involved in a criminal incident (suspects, defendants, and victims) who were adults (over 18 years) at the time.

The official purpose of the Adult Probation Service is to reduce the potential risk to society (among them a reduction in recidivism rates) by recommending alternatives to punishment in the service of the justice system. The probation officers for adults are social workers who specialize in the diagnosis, supervision, treatment, and rehabilitation of offenders (Pollak et al., 2012). In recent years, there have been changes in the emphases of adult probation service work from an almost complete reduction of individual therapies to an expansion of group therapy in the model of open groups as an alternative to incarceration (Yanai, 2010).

The groups are led by probation officers (the facilitators) who specialize in group work in the form of co-therapy and are supervised by counselors in the probation service. Each group includes 10–15 participants, depending on the diagnosis process, and the participants are referred to a group that matches their type of offense. The entry and exits in the groups are determined by the group facilitators at fixed time stations. Different groups reflecting the wide range of types of offenses operate at the same time.

The central challenge in evaluating the effect of the group therapy process in this study stemmed from the tremendous heterogeneity of the therapy groups in terms of the participants’ backgrounds, type of crime committed, length of participation in the group, differences between the group facilitators, and more. To the best of our knowledge, no research studies were found in the literature evaluating the effect of group cohesion among adult offenders being treated in open-ended groups. Hence, there are studies that focus on group therapy cohesion on the desired outcomes.

With these issues in mind, the present study examines the effect of open group therapy on adult offenders in probation by examining participants’ recidivism rates after having participated in such groups. More specifically, the current study will focus on group cohesion in the context of open groups of offenders.

# Methods

## The current study

The current study examines group cohesion in open groups of adult offenders in probation services and the rate of recidivism after the end of group therapy. The central challenge in evaluating the group process stemmed from the great heterogeneity of the participants’ backgrounds (see below: ‘Participants’, e.g. type of offense), differences between the probation officers who serve as the group facilitators (formal education, training in group supervision, seniority in group facilitation, facilitating with co- facilitator or not and more).

We used qualitative research to be able to evaluate the effect of the group therapy through understanding the expected results of the group intervention. The information received gave expression to the voices of the different professionals involved in the group intervention (group facilitators, counselors, and probation service management) in relation to the expected results and contributed to the choice of appropriate quantitative tools for examining the effect of group therapy for achieving their stated goals. Consequently, we used a mixed qualitative and quantitative research method.

Studies have demonstrated that integrating qualitative and quantitative methodologies facilitates both the construction of measurement tools to accurately express the nature and significance of the phenomenon studied, and the ability to receive as broad and diverse a picture as possible of the nature and significance of the study’s quantitative findings (Onwuegbuzie et al., 2010). This study meets two main objectives of the mixed method study (Creswell and Plano-Clark, 2007; Greene, 2007): (1) triangulation—using different methods to investigate the same phenomenon and to strengthen confidence in the conclusions drawn on that phenomenon; (2) development—where findings obtained in one method are used to develop the other method (e.g., research tool development). In this study, the qualitative method was used to extract variables that were tested in the quantitative study.

Study 1: The qualitative research served as a key to understand the expected results of the group intervention, drawing on the voices of the different professionals involved in the group intervention. The information received related to the expected results, and contributed to the choice of appropriate quantitative tools for examining if the expected results in achieving their stated goal (i.e. reducing the rates of recidivism) were reflected in the real outcomes.

## Participants

The same researchers conducted all the focus groups. The first focus group was a pilot to plan the rest of the focus groups. For the full study, a description of the setting (the manner of the discourse as well as the order of the questions), and questions (e.g. “what are the excepted outcomes from the group intervention,” “what are the factors that contribute and prevent the outcomes’ achievement”) was prepared. The meetings lasted about two and a half hours. The focus groups were structured with up to 10 participants, reflecting the facilitators’ heterogeneity and the different types of groups (offenses in different areas) in each of the districts. There were nine focus groups of probation officers (group facilitators/therapists) from different regions across the country (N=40), one focus group of counselors (N=15), and one focus group of probation service management members (N=6).

## Qualitative analysis

Phase 1: As part of the qualitative analysis, the focus group discussions were audiotaped, fully transcribed verbatim, and anonymized. The texts were read and reread several times by the researchers. They were then coded according to recurring themes and mapped according to methodically identified interconnections and emerging patterns (Patton, 2015). This method places the main focus on participants’ perceptions and experiences as the main source of the data and is considered appropriate when examining a broad research question (Riessman, 2008).

To promote the study’s rigor, the authors conducted the data analysis of all the material separately and then reviewed the themes and patterns together (Creswell and Plano-Clark, 2007). In cases of disagreement in the analysis, they discussed the data until they reached consensus (Guion et al., 2011).

Phase 2: A quantitative study was conducted using questionnaires based on the themes identified (detailed in the qualitative results section) in the first phase. The focus groups’ text analysis isolated the central theme of group cohesiveness on which this article focuses.

## Participant recruitment

The research population included all adult offenders served by the Probation Service who, having met the statutory criteria, were ordered by the court to participate in group therapy in lieu of a jail sentence. The group facilitators (probation officers) addressed each participant individually, explaining the purpose of the study and the opportunity to participate voluntarily. In addition, each participant signed an informed consent form which again offered the opportunity to choose to participate in the study and/or opt out at any stage (to the best of our knowledge, everyone agreed). The group facilitators distributed the questionnaires to the participants in their groups at two time points: before joining the group (these participants were new or had joined a therapy group less than one month prior to the study period) and upon conclusion of participation. The group meetings were held once a week, for an average of six months (i.e. a minimum of 24 sessions). However, it should be noted that these were open groups, so that over the study period, the composition of the groups changed.

## Research ethic

Participation in the research was voluntary and participants were accepted upon signing an informed consent form. Each consent form and each questionnaire was coded in a way that ensured the anonymity of the participant. Between the first and second phases of the research, the questionnaires were kept in a safe. The study was approved by the internal ethics committee of the researchers’ academic institution. Both researchers have GCP (Good Clinical Practice) certifications.

## Participants

The adult offenders(N=209) completed the questioners in the two times (before joining the group and upon conclusion of participation) participated in several types of groups (e.g. violence in the family, general assault, and female offenders). The data shows that most participants were male (88.5%) and had children (60%). The average age of participants was 35 (*M* = 34.93, *SD* = 10.43) and 41% were married and 38% single. The majority had a high school education (57%), described their economic status as middle-income (~70%), and were employed (83%).

## Research tools

### Sociodemographic characteristics. The questionnaire requested data on gender, birth date, date of immigration (if relevant), personal status, children (number), military service, religion, nationality, education, therapy background, economic status, perception of personal health, occupation, employment (seniority and job percentage), experience in therapy in general and probation service, and previous imprisonment.

### Social interactions. The frequency of different types of social interactions was evaluated with The Quantification of Social Contacts and Resources of Donald and Ware (1982) that assessed how often the respondent got together: (a) with relatives during the past month; (b) with friends during the past month; (c) with friends or relatives during the past year; or (d) on the phone with relatives or close friends during the past month. The responses ranged from 1 (not at all) to 6 (every day) for the past month questions, and from 1 (fewer than five times a year) to 7 (every day or almost every day) for the past year. Cronbach’s α ranged from 0.66 to 0.86.

### Group Cohesiveness Scale (GCS). Group cohesion was measured using the seven-item Group Cohesiveness Scale (GCS) (Wongpakaran et al., 2013). This questionnaire examines group atmosphere, the individual member’s feeling of inclusion, the feeling of trust and empathy between group members, and the perception of level of involvement and ability to reveal personal information and feelings. The GCS includes seven statements, measured on a scale from 1 (strongly disagree) to 5 (strongly agree). A higher score indicates higher perceived group cohesion. In the original study, the GCS yielded an average score of 4.73 out of 5 (SD = 0.62), with an internal consistency of the whole scale valued at α = 0.87, and the item–total correlations ranging from 0.497 to 0.752. In the current study, Cronbach’s α ranged from 0.68 to 0.91.

### Measuring recidivism. Participant recidivism was verified by the probation officers based upon the criminal registry at a specified time for each participant, at least six months after the participant completed therapy. Recidivism was monitored for participants who completed the questionnaire upon beginning and upon ending group therapy and who participated in the group for at least six months. The following data were recorded: beginning and ending dates of group therapy, type of group, whether the participant was convicted (1 = yes; 0 = no), type of crime, date of earlier crime, number of new crimes, and date of registry examination.

# Results

## Qualitative findings

Focus group main themes related to the expected result of participation in open groups and the conditions required in the group to achieve these results. The probation officers, their counselors, and management believed that participation in open groups should influence the behavior of participants who will not return to commit offenses. The other main theme was related to the group atmosphere as influencing this result. Subthemes that arose with regard to group atmosphere, related to the development of expected behaviors among group members in order to create group cohesiveness, which, in turn, enables processes of change with the goal of preventing recidivism.

One central subtheme dealt with the need to reduce resistance to joining the group, given that participation was not voluntary. One facilitator noted: “It is necessary to get them to understand that this is a gift and that connecting to the group and finding one’s place within it is an achievement.” Another explained the need to help them understand the importance of participating in a group that will affect their lives outside of it: “This is a process that is very difficult in the beginning, and slowly they understand the significance of what happens to them in the group for what they experience outside the group.”The majority of participants had no prior experience with this type of therapy; hence the tremendous importance of building their trust in the potential of the group process. One facilitator stated that she saw it as part of her role “to get the participants to believe in group therapy.” Another facilitator described his own achievement as: “when a participant describes the group as having given him a new way of thinking during an event that happens outside of the group.”

An additional subtheme identified was the need for participants to develop a sense of commitment and belonging to the group, considered necessary for reaping the benefits of the group’s development. One facilitator said: *“*To commit to coming to complete a task, continuous participation.” Similarly, another facilitator described that commitment and a sense of belonging, opens one to the possibility of being helped by others in the group: “It is ok that they will touch me [emotionally] and that I will touch others [emotionally], that is part of being in a group,” and to project this onto the world outside: “To see others as significant for them, that says that they learned that there is something good in people” (facilitator). Another facilitator said: “If the group is significant enough, then when a person is tested in real life, something of the group process will succeed in preventing him from being seduced [to commit a crime].”

Another subtheme that emerged to facilitate the group cohesion related to the ability to be open and honest about oneself. One facilitator described it: *“*To use the group space to bring up one’s defects.” Another stated: “There is trust, openness, the ability to be vulnerable, to disrobe and reveal painful stories, ugly things, feelings.” On the ability to look inward: “They begin to release, to relax, to speak about themselves and to look upon themselves.” On the issue of listening to others: “Someone who never let anyone else speak [in the past], today is better able to listen to others. When others raise problems, he relates to them with respect and is open to other opinions.” Other facilitators connected the capacity to be open to others and honest about oneself to the ability to use the group as a tool for change: “a participant brings something from the outside and uses the group members to examine his conduct.”

These subthemes that compose the theme of a positive group atmosphere expressed in group cohesion (Phase 1) were described by the participants in the focus groups as enabling the change required among the group participants in order to prevent their recidivism. Therefore, a tool examining group cohesion was chosen for the quantitative study (Phase 2).

## Quantitativeresearch findings

The quantitative data for social contacts and interactions were analyzed statistically, using a t-test sample test and Chi square to examine the differences between two time points: upon joining the therapy group and upon conclusion of participation.

 <Table 1 here>

The findings demonstrate a significant difference between the number of family members with whom the participants were in contact before joining the group and at the conclusion of their participation t(216)=2.69, *p* < 0.05 (M=3.62, SD=4.28 to M=2.74, SD=2.89). The number of close friends also decreased in the same time period (M=5.57, SD=5.86 to M=4.72, SD=4.25); although this difference was not significant, it did show an important downward trend. These findings demonstrate a change in the constellation of social connections maintained by the participants with family acquaintances and close friends.

 <Table 2 here>

Furthermore, when participants were asked how they get along with people these days, the findings yielded that at both time points, most respondents reported that they now get along better than usual with other people. However, a higher percentage of participants reported this pattern on the second rather than the first date. The findings yielded that the number of respondents who reported that they got along “better than usual” with other people increased by over 18% (from 52.8% to 70.3%) by the end of the group therapy and that this change stemmed from those who had previously reported that they got along “more or less the same” or “less well than usual” (Chi=14.08, p<.01).

## Group cohesiveness

The level of group cohesiveness was examined at the conclusion of group therapy by comparing the averages from four categories of criminal offenses. The findings (Table 3) demonstrate that there were no statistically significant differences between the categories for level of group cohesiveness. Participants reported a high level of cohesiveness, 4.0, on a scale of 0–5. All groups scored relatively high on group cohesion, with the lowest score being 3.78 (out of 5.0), and a mean score of 4.0 (SD = 0.2).

<Table 3 here>

## Recidivism rates

In the study’s third phase, recidivism rates were calculated for all participants who responded to the questionnaires at both time points, before beginning group therapy and at the end of group therapy (N= 216). It was found that up to one year, that is, between six months to one year, after completing group therapy, ~9% committed new crimes and over 90% of the participants in the groups operated by the probation service had not returned to delinquency after about a year from the end of the treatment.

# Discussion

This research examined cohesion in open groups for adult offenders on probation. In the first phase, qualitative research was conducted among focus groups of probation officers (facilitators), counselors, and management from the probation service. A key theme that emerged was the importance facilitators placed on the group process (especially group cohesion) as the foundation for achieving the optimal therapy result. In the second phase, a quantitative research analysis shows that in all types of groups (as described earlier in the method section), the level of group cohesion is relatively high. No significant differences were found between the groups, possibly due to the consensus among the facilitators concerning the atmosphere required to achieve the treatment result (preventing recidivism) and their strong commitment to creating this atmosphere.

Among the elements of group atmosphere considered, group cohesiveness stood out as an important therapeutic strategy for achieving the primary desired therapeutic result, namely, the prevention of recidivism (Willemsen et al., 2016). The importance of group cohesiveness expressed here is consistent with prior findings (e.g. Burlingame et al., 2011). In addition, both probation officers (facilitators), counselors, and management identified two common expectations for group therapy participants: (1) that they develop the ability to identify others in the group as significant to their process of change; (2) that they develop the ability to transfer the group experience to the outside world.

The findings shows that all categories of groups reached a relatively high level of perceived cohesion. An explanation for this finding, is group facilitators’ similar perceptions regarding the group atmosphere required to achieve the desired therapeutic result and their deep commitment to creating that atmosphere, as demonstrated by the qualitative findings.

The facilitators' first expectation was that group members would develop the ability to identify others in the group as significant to their process of change. The current findings indicate that at the end of group therapy, a greater number of participants perceived themselves as getting along better with others. This finding supports the group facilitators’ expectations (indicated in the qualitative study) that the participants would learn to see their fellow group members as agents in their personal change (perhaps other group members are part of the ‘others’). This change may be attributable to the offenders’ opportunity to experience a different type (more open, honest, acceptable, and respectful) of human encounter in the group therapy setting. Group cohesion facilitated the building of relations based on a sense of support, acceptance, identification by the group(Bloch and Crouch, 1985), a sense of belonging, and engagement(Frost et al., 2009). The greater the significance the offenders attributed to the group, the more they would feel a sense of belonging, and thus the more inclined they would be to accept group values and norms that contribute to the effectiveness of group therapy (Frost et al., 2009).

An additional finding showed that the number of family acquaintances in the participants’ social circle at the beginning of therapy decreased by the end of therapy, as did the number of close friends. We assume that possible explanation for this decrease is that a change in their worldview led participants to develop critical thinking regarding whom they chose to include in their inner circle. Another possible explanation is that the opportunity to share in the group and acquiring new members led to decreased ties with prior relations outside the group. Open groups are, in essence, a family model, a therapeutic framework of family relations in which history and continuity play a meaningful role (Pollak et al., 2012; Schopler and Galinsky, 2006). Participation in the group possibly enabled the members to experience belonging to a normative group, leading them to reexamine their prior relationships and change the character of their social relationships (Frost et al., 2009). It appears that the therapeutic group process imitates family relationships, since the family system of relations is experienced anew in the group: relations with group members represent “siblings”—and the group facilitators represented “parents.” This could make them rethink their family relations and to exert some influence over these relationships. This complex therapeutic process is the foundation of open groups, given that the source of impairment in offenders often lies in their system of family relations (Pollak et al., 2012).

The second facilitators’ expectation was that group members would develop the ability to transfer the group experience to the outside world. In our study, we found that the number of respondents who reported that they got along “better than usual” with other people increased by over 18% (from 52.8% to 70.3%). We thus assume that one effect of group cohesion was related to the change in participants’ social network components in numbers and quality of social connections. This study indicates that these changes seem to have led to a reduction of prior social connections. Possibly the group therapy participants understood that such connections were not positive, and that these could lead them to return to patterns of antisocial behavior. Further support for this conclusion may come from the proven correlation in the literature between cohesion and group therapy outcomes. The level of group cohesiveness is described in the literature as a strong and significant predictor of success in achieving treatment goals and as a prior condition for desired change (Lloyd et al., 2014).

Evaluation of the involvement in group therapy was also examined according to the post-therapy rate of recidivism. The variable of recidivism is exceedingly important, since its prevention is the primary task of therapists of adult offenders. The current study found that for all of the participants who answered questionnaires “before” and “after” (216), the rate of recidivism was ~9%. Hence, over 90% of participants in groups run by the probation service did not return to crime within about one year after completing group therapy. Because the available data for recidivism rates does not differentiate between types of offender groups, our research population was compared to all adult offenders who served prison sentences. Hence, the recidivism rate in our study is significantly lower than recidivism rates for adult offenders who served a prison sentence, which in Israel ranges from 43.5% to 62% (Ben Zvi and Wolk, 2011; Knesset Center for Research and Information, 2011). The rates quoted here are from the same duration as our study—one year after release. According to the Israel Prisoner Rehabilitation Authority (PRA), as of 2015, the population of the PRA included 7139 prisoners, and the general recidivism rate, measured five years after release, was 41.3%.

The combination of the high level of cohesiveness, the change in participants’ social network, and law rate of recidivism lead to questions about the potential connections among these elements that represent inter and intra psychologies. These issues arise from the findings and from the literature that indicates that dynamic factors influence changes in the tendency to revert to criminality, where, in the literature, the dynamic variables relate to perceptions of society and delinquent behaviors in society (Ben Zvi and Wolk, 2011; Vincent et al., 2012).

# Research limitations

One of the limitations of the study is that the former inmates participating in group therapy population were under a probation order; therefore, it is possible that, despite theoretically having a free choice of whether or not to participate in the study, the choice to participate was a result of their situation. At the same time, the number of entry and exit questionnaires are different, which shows that some participants opted out of the study, therefore exercising their free choice.

A control group was not included in the study, limiting the results with regard to the kind of therapeutic intervention (such as psychotherapy). In future studies, it would be useful to record data that enables comparing recidivism rates based on different variables (e.g. type of crime, length of incarceration, number of convictions). Recidivism rates for the current participants should be examined in another two years to determine the continued impact of the group therapy. We suggest carrying out qualitative interviews with a subset of the adult offenders to hear more about the group program in their own words.

Finally, we received fewer completed questionnaires at the end of therapy than at the start, and the reason for this gap is unclear (we analyzed information just for those that completed the questionnaires both times).

# Conclusions

Our finding that 90% of adult offenders did not return to crime one year after completing therapy has important policy and practice implications. It validates the assumption upon which the group therapy program was based: involuntary therapy influences adult offenders, even though the offenders do not choose to participate of their own free will.

The finding of a high level of group cohesiveness in this study disputes the prevailing perception in the literature that open groups are an obstacle to building cohesiveness. To cope with the challenge posed for participants in open groups, social workers (and other group facilitators) could adopt the policy used by our probation services of setting entry and exit at fixed time stations that are known to facilitators and participants alike.

Referring adult offenders to group therapy as an alternative to incarceration may significantly reduce recidivism, as may the integration of adult offenders into open therapy groups during incarceration or upon release from prison. Both the PRA and social workers staffing prisons can adopt this model.

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The authors declare no conflict of interest, financial or otherwise. All participants in this study signed informed consent forms.

# References

Andrews DA and Bonta J (2010) Rehabilitating criminal justice policy and practice. Psychology, Public Policy, and Law 16(1): 39–55. DOI: 10.1037/a0018362.

Barr H and Hurst L (2010) *Analytic Group Therapy: A Brainstorming Session*. Tel Aviv: Ach Publishers [Hebrew].

Ben Zvi K and Wolk D (2011) Return to imprisonment—Recidivism of criminal prisoners released in 2004 in Israel. *A Window to Prison* 14: 10–28.

Berman A (2015) What is the “group” in group therapy? In: Friedman R and Doron Y (eds) *Analytic Group Therapy in the Land of Milk and Honey*. Kfar Bialik Israel: Ach Publishers, pp. 61–76 [Hebrew]

Bloch S and Crouch E (1985) *Therapeutic Factors in Group Psychotherapy*. Oxford: Oxford University Press.

Burlingame, G. M., McClendon, D. T., & Alonso, J. (2011). Cohesion in group therapy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Evidence-based responsiveness* (pp. 110–131). Oxford University Press. [https://doi.org/10.1093/acprof:oso/9780199737208.003.0005](https://psycnet.apa.org/doi/10.1093/acprof%3Aoso/9780199737208.003.0005)

Burlingame GM, McClendon DT and Yang C (2018) Cohesion in group therapy: A meta-analysis. *Psychotherapy* 55(4): 384–398.

Carron, A.V., Brawley, L. R.,& Widmeyer,W.N. (1998). The measurement of cohesiveness

in sport groups. In J. L. Duda (Ed.), *Advances in sport and exercise psychology measurement*

(pp. 213-226). Morgantown, WV: Fitness Information Technology

Chapman N and Kivilighan MD (2019) Does the cohesion–outcome relationship change over time? A dynamic model of change in group psychotherapy. *Group Dynamics: Theory, Research, and Practice* 23(2): 91–103.

Creswell JW and Plano-Clark VL (2007) *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage.

Donald CA, Ware JE.  The quantification of social contacts and resources. Rand Corporation; 1982.Evans, C. R., & Dion, K. L. (1991). Group cohesion and performance: A

meta-analysis. Small Group Research, 22, 175-186

Foulkes SH (1948) *The Study of the Group: An Introduction to Group Analytic Psychotherapy*. London: Karnac Books.

Frost A, Ware J and Boer DP (2009) An integrated groupwork methodology for working with sex offenders. *Journal of Sexual Aggression* 15: 21–38.

Gendreau P, Little T and Goggin C (1996) A meta‐analysis of the predictors of adult offender recidivism: What works! *Criminology* 34(4): 575–608.

Greene JC (2007) *Mixed Methods in Social Inquiry*. San Francisco, CA: Jossey-Bass.

Greer, L. L. (2012). Group cohesion: Then and now. *Small Group Research*, *43*(6), 655-661.

Guion, L. A., Diehl, D. C., & McDonald, D. (2011). Triangulation: Establishing the validity of qualitative studies. Gainesville, FL: University of Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, EDIS.

Hanson RK (2018) Long-term recidivism studies show that desistance is the norm. *Criminal Justice and Behavior* 45(9): 1340–1346.

Hardy, Eys, M. A., & Carron, A. V. (2005). Exploring the Potential Disadvantages of High Cohesion in Sports Teams. *Small Group Research, 36(2), 166–187.* <https://doi.org/10.1177/1046496404266715>

Homan, A. C., & van Kleef, G. A. (2022). Managing team conscientiousness diversity: The role of leader emotion-regulation knowledge. *Small Group Research, 53*(4), 532-562.

Humphrey JA, Burford G and Dye MH (2012) A longitudinal analysis of reparative probation and recidivism. *Criminal Justice Studies* 25(2): 117–130.

Jennings JL and Deming A (2017) Review of the empirical and clinical support for group therapy specific to sexual abusers. *Sexual Abuse* 29(8): 731–764. https://doi.org/10.1177/1079063215618376

Jewell JD, Malone MD, Rose P, et al. (2015) A multiyear follow-up study examining the effectiveness of a cognitive behavioral group therapy program on the recidivism of juveniles on probation. *International Journal of Offender Therapy and Comparative Criminology* 59: 259–272.

Joffe-Milstein M (2015) From the couch to the circle. In: Friedman R and Doron Y (eds.) *Analytic Group Therapy in the Land of Milk and Honey*. Kfar Bialik, Israel: Ach Publishers, pp. 181–194. [Hebrew]

*Qualitative Research in Organizations and Management: An International Journal* 4(2): 123–150.

Joyce AS, Piper WE and Ogrodniczuk JS (2007) Therapeutic alliance and cohesion variables as predictors of outcome in short-term group psychotherapy. *International Journal of Group Psychotherapy* 57(3): 269–296.

Knesset Center for Research and Information (2011) Data on rehabilitation of prisoners. Accessed January 31, 2015 from <http://www.moital.gov.il/NR/rdonlyres/E07F949E-3DC4-4B3F-9135-C006DF15F359/0/shikum_asirim2011.pdf>.

Le Tran, N., Wei, Z., & Howard, M. (2021). Impact Evaluation of the Gurnang Life Challenge Specialised Program for Young Adult Male Offenders in NSW. Research Publication No. 63. file:///rb63-impact-evaluation-of-the-gurnang-life-challenge-program.pdf

Lloyd CD, Hanby LJ and Serin RC (2014) Rehabilitation group coparticipants’ risk levels are associated with offenders’ treatment performance, treatment change, and recidivism. *Journal of Consulting and Clinical Psychology* 82(2): 298–311.

Lorentzen S, Strauss B and Altmann U (2018) Process–outcome relationships in short-and long-term psychodynamic group psychotherapy: Results from a randomized clinical trial. *Group Dynamics: Theory, Research, and Practice* 22(2): 93–107.

Lyman M and LoBuglio S (2006) ‘Whys’ and ‘hows’ of measuring jail recidivism. Paper submitted for Jail Reentry Roundtable. Washington, DC: Urban Institute. Available at: <https://www.urban.org/sites/default/files/publication/43001/411368-Jail-Reentry-Roundtable-Meeting-Summary.PDF>

Marshall WL and Burton DL (2010) The importance of group processes in offender treatment. *Aggression and Violent Behavior* 15(2): 141–149.

Marshall, W., Burton, D., & Marshall, L. (2013). Features of Treatment Delivery and Group Processes That Maximize the Effects of Offender Programs. In J. Wood, & T. Gannon (Eds.), Crime and Crime Reduction: The Importance of Group Processes (pp. 159-174). New York: Routledge.

Onwuegbuzie AJ, Bustamante RM and Nelson JA (2010) Mixed research as a tool for developing quantitative instruments. *Journal of Mixed Methods Research* 4(1): 56–78.

Patton, M. Q. (2015). Qualitative Evaluation and Research Methods. Thousand Oaks, CA: Sage.

Pollak Y, Gershon A, Dekel A, et al. (2012) *Therapy Circles in Light of the Law: Group Therapy in Adult Probation Services*. Jerusalem: Ministry of Welfare and Social Services, Adult Probation Services. [Hebrew]

Riessman, C. K. (2008). Narrative methods for the human sciences. Sage Publications, Inc.

 Schopler, JH and Galinsky, M. J. (1990). Can Open-Ended Groups Move Beyond Beginnings? *Small Group Research, 21(4),* 435–449. https://doi.org/10.1177/1046496490214001

Schopler JH and Galinsky MJ (2006) Meeting practice needs: Conceptualizing the open-ended group. *Social Work with Groups* 28(3–4): 49–68.

Sheriff A and Pollak Y (2008) Stories from the train: Group therapy for violent men. In: Mahal H, Hovav M and Golan M (eds.) *Addictions, Violence, and Criminal Acts*. Jerusalem: Carmel, pp. 278–293. [Hebrew]

Correctional Service Canada. Available at: <https://www.csc-scc.gc.ca/research/005008-0215-01-eng.shtml>

Vincent GM, Guy LS and Grisso T (2012) *Risk Assessment in Juvenile Justice: A Guidebook for Implementation*. Chicago: Macarthur Foundation.

Willemsen J, Seys V, Gunst E and Desmet M (2016) ‘Simply speaking your mind, from the depths of your soul’: Therapeutic factors in experiential group psychotherapy for sex offenders. *Journal of Forensic Psychology Practice* 16(3): 151–168.

Wongpakaran T, Wongpakaran N, Intachote-Sakamoto R, et al. (2013) The Group Cohesiveness Scale (GCS) for psychiatric inpatients. *Perspectives in Psychiatric Care* 49(1): 58–64.

Yalom ID (1995) *The Theory and Practice of Group Psychotherapy*. New York: Basic Books.

Yanai, A. (2001). Research report Changes and innovations in the adult probation service. Assessment by probation officers of the significance of the changes. Jerusalem:

Ministry of Welfare and Social Services, Adult Probation Services. [Hebrew]. https://www.molsa.gov.il/CommunityInfo/ResearchAndEvaluation/tb\_ResearchesAndPublication.

Yukhnenko D, Blackwood N and Fazel S (2020) Risk factors for recidivism in individuals receiving community sentences: A systematic review and meta-analysis. *CNS Spectrums* 25(2): 252–263.

**Table 1.** Comparison in time for the variables number of family and friends the participant knows (*t-test*)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of family and friends known | BeforeM | BeforeSD | AfterM | AfterSD | Significance |
| Number of family members  | 3.62 | 4.28 | 2.74 | 2.89 | *p* < 0.05 |
| Number of close friends | 5.57 | 5.86 | 4.72 | 5.21 | NS |

**Table 2**. Examination of change in constellation of social interactions over time in relation to the variable of how well the participant gets along with people today

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| How the participant gets along with people today | BeforeN | Before% | AfterN | After% |
| Better than usual | 109 | 52.7 | 147 | 70.3 |
| About the same | 82 | 39.6 | 55 | 26.3 |
| Less good than usual | 16 | 7.7 | 7 | 3.3 |
| Total | 207 | 100 | 209 | 100 |

p = 0.0; ꭓ2 = 10.66

**Table 3**. Level of group cohesiveness according to group offense type

|  |  |
| --- | --- |
| VariableGroup | CohesivenessM (SD) |
| Violence in the family (*N* = 57) | 4.16 (0.77) |
| Assault, general (*N* = 49) | 3.78 (0.80) |
| Female offenders (*N* = 21) | 3.90 (1.30) |
| Other crimes (*N* = 59) | 4.00 (0.79) |

N=no. of groups