

## An Instrument for Assessment of Longitudinal Community Resocialization Through a Group Process Intervention

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### Abstract

“The Family: People Helping People Project” is a community-based group process intervention involving personal sharing to confront social fragmentation in the Bahamas. A preliminary study suggested that the Family may influence gradual change in the Bahamian community, and was followed by a 3-year extension that examined aspects of resocialization in the community. Participants reported several changes after Family enrollment, with increasing significance in some areas. While earlier testing periods showed decreases in negative parameters and no changes in positive factors, later periods showed tapering of improvements in negativity with increased positive tendencies. The need to measure resocialization following therapy in The Family necessitated the development and validation of a novel instrument. The Allen Resocialization Scale™ attempts to define resocialization based on many established constructs of personal growth, and is a promising tool with many potential applications across populations.

**Keywords:** Resocialization; Family; Group process; Community; Therapy

### Introduction

Due to its location between the world’s largest source of cocaine (South America) and the primary consumer market (United States), the Bahamas has become a trans-shipment area for illegal trade, facing major issues in drug trafficking and the violent crime associated with it. The Bahamian community has been adversely affected by a regional culture of violence, brought on by the drug crisis and economic downturn of the 1980s and 1990s [1-3]. “The Family: People Helping People Project” is a group-based resocialization intervention designed to improve the resulting family and community fragmentation, and is based on the contemplative discovery pathway theory (CDPT). CDPT employs a unique approach to psychotherapy, framing therapy in the context of the community instead of more common institutionalized approaches to resocialization [4,5].

According to Dr. Dan Siegel, an important part of how people change-not just their experiences, but also their brains-is through the process of telling their stories to an empathic listener. When a person tells their story and is truly heard and understood, both they and the listener undergo actual changes in their brain circuitry. They may feel a greater sense of emotional and relationship connection, decreased anxiety and greater awareness of and compassion for others’ suffering [6]. The Family aims to create a therapeutic replica of a home-based family, allowing members to confront their issues in a safe and nonjudgmental environment. Moreover, The Family offers a separate space and encourages the expression of emotions that are normally rarely openly expressed (such as grief, empathy, love, and hope). The goal of the group process is to improve socialization despite high rates of crime, family disintegration, and economic impoverishment, with the hope of eventually re-shaping the Bahamian society by reaching as many people as possible [2,5,7].

### Background

A pilot study of The Family investigated changes in disenfranchised individuals who participated in The Family over a 6-month period, and revealed some notable changes in emotional and behavioral trends after treatment [5]. Changes included statistically significant decreases in feelings of depression, suicidality, anger and vengefulness, and significant increases in feelings of self-esteem and intimacy with others. Societally negative behaviors, such as illegal activity and participation in abusive relationships, decreased, whereas the quality of family relationships and benevolence increased. Gratitude and forgiveness were recurring themes expressed by participants. A subsequent 3-year Family study was a longitudinal extension of the pilot sessions, investigating the long-term effects of psychotherapy in The Family on these trends, as well as on general community resocialization. This paper will report the main results of the 3-year study, and also the development process of a novel evaluation tool for resocialization.

### Resocialization

The concept of community resocialization was coined by American Sociologist Erving Goffman, in which he described it as the process by which one’s values, beliefs, and abilities are deliberately deconstructed and reconstructed, usually with the goal of alignment with societal conventions [8]. According to Goffman, this was done by carefully controlling the environment of the individuals, and involved two phases. The identities and independence of the institutionalized residents are steadfastly eroded, followed by the systematic attempt to build a different personality or self [8].

In the case of societal resocialization, this entails a process of reinvention that would allow an individual to function according to the norms of the community. Societal resocialization of an individual involves many factors, such as acquiring the skills necessary to

function within a society, having thoughts and feelings that align with the norms of a society, as well as engaging in societally acceptable activities [9]. In *The Family*, the concept of community resocialization was used to describe the process by which individuals reinvent themselves within the Bahamian society, which has been ravaged by widespread social fragmentation and violent crime.

Although the term resocialization is often used synonymously with psychosocial rehabilitation, the two terms differ slightly with respect to the extent of social functioning restoration. Whereas rehabilitation refers to the restoration of community functioning that was lost, resocialization involved breaking down preconceived tendencies and reconstructing the overall well-being of the individual [8,10].

Arrigo and Takahasi described resocialization of disenfranchised homeless individuals as an eight-stage process [11]. In the first stage ("alienation"), residents examine their social, economic, and psychological standing. During the second stage ("powerlessness"), the residents experience minimal pleasure in their daily activities. In stage three ("disaffiliation"), residents realize that their current problems result from longstanding spatial and social withdrawal from mainstream culture. Stages four and five involve assumption of the values of the community and the development of the perception that the social structure of the community is open to them. Stage six ("performances") involves actions to find employment, reunite with family members, complete their education, and maintain their sobriety. Stages seven and eight involved becoming secure in a new social and achievement identity while recognizing features in themselves that led to their homeless plight [11].

In substance abuse treatment, the term resocialization is associated with therapeutic interventions in employing therapeutic communities, residential programs and inpatient treatment where the individual cedes some degree of personal autonomy in an attempt to restructure personality. This may involve components such as humanity, involvement, economy, care, assistance, education, responsibility, possibility, correction, and development [12,13]. In juveniles, fostering empowering partnerships was shown to be an effective form of resocialization [13]. In the prison setting, individuals must undergo a resocialization process both when entering the prison system and upon release back into society [14]. A Turkish study on juvenile delinquents found that an individual's tendency for resocialization is tied to the degree of socialization within the family unit, and effective treatment programs aiming at resocialization must also include the family unit. This is because the family unit forms the context of society when the juvenile is returned to society [15].

*The Family* attempts to redefine the concept of resocialization, specifically in the context of the Bahamian community. In contrast with programs within institutions such as juvenile detention centers and prisons, *The Family* operates out of the community, and involves members who are already functioning inside the society. Whereas the self is broken and remolded in institutionalized resocialization settings, *The Family* uses discussion to try to break down the hard shells around the shame self, and create new layers of resilience and well-being.

The concept of resocialization is complex, and has been treated ambiguously in the literature [12-14]. Different investigators have emphasized different resocialization aspects, and agree that there is yet no generally accredited definition of resocialization. Similarly, there has not yet been a consensus on what states or traits constitutes complete community resocialization in an individual, nor has there been any instrument to measure it concretely [13]. A resocialization

inventory would be useful as a tool for identifying individuals in need of resocialization and to measure changes during the resocialization process.

Although multiple questionnaires were used to analyze *The Family* in the pilot study [5], there was a need to pinpoint the extent to which participants were resocialized following psychotherapy in *The Family*. This necessitated a more exact definition of resocialization, as well as the development and validation of a new evaluation instrument to measure it. The resulting tool, the Allen Resocialization Scale™, attempts to define resocialization based on many established constructs of personal growth and rehabilitation. The scale is a clear, easy-to-administer evaluation tool that aims to quantify the resocialization of disenfranchised persons. The validation of this scale is detailed below, as well as the results obtained upon its implementation in the fragmented community of the Bahamas.

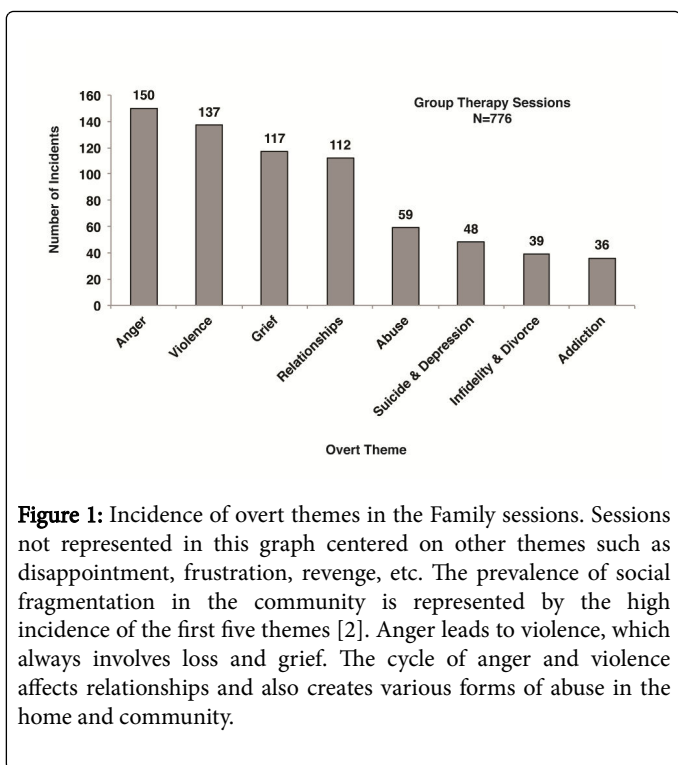
## Data and Methods

### Enrollment and family structure

*The Family* included members of the Bahamian community, and particular emphasis was placed on recruiting victims of violent crime and the socioeconomic crisis. Of the 453 participants, 200 were females and 249 were males (information not accounted for in the calculation was missing). Two hundred thirty-five (235) of the participants had primary and some secondary education, 73 graduated secondary school, 49 had some college/university education and 86 graduated from college/university. In terms of age, 273 of the participants were 29 years or younger, 42 were 30-39 years of age, 57 were 40-49 years of age and 79 were 50 years or older. In terms of income, 270 participants indicated that they earned an annual income of \$0-\$10000, 42 earned \$10001-\$20000, 29 earned \$20001-\$30000, 41 earned \$30001-\$40000, 22 earned \$40001-\$50000, 8 earned \$50001-\$60000 and 33 earned \$61000 or more.

Participants attended weekly two-hour group therapy sessions facilitated by a trained therapist, during which they shared recent experiences and progress. The sessions were open and free, and new participants were welcome to join or leave at any time. Sessions were conducted in a large circle, where individuals shared their stories of shame and pain as group participants empathize with them. In order to enhance the depth of sharing and the coping with pain, the group involves singing, silence, meditation, mindfulness, and prayer. At the end of the meeting, the therapist gave a psychological/spiritual teaching to foster education, growth, and character development. A unifying song was sung to end the sessions and provide spiritual closure. After each group session, the therapist or group facilitator wrote a praxis reviewing the overt and covert themes of the discussion that took place as well as a professional reflection on the session.

Family group sessions are often focused on a theme topic. Previous themes have included violence (including trauma), grief, anger, relationships, abuse, infidelity and domestic violence, addiction, suicide and depression. The themes anger, violence, and grief were discussed most frequently during Family sessions (Figure 1) [16]. Separate groups for adults and teenagers provided psychotherapy to enhance interpersonal skills and promote mental and spiritual healing. Example topics include anger management, and practical information on issues such as HIV/AIDS, insurance, legal issues, and social support.



**Figure 1:** Incidence of overt themes in the Family sessions. Sessions not represented in this graph centered on other themes such as disappointment, frustration, revenge, etc. The prevalence of social fragmentation in the community is represented by the high incidence of the first five themes [2]. Anger leads to violence, which always involves loss and grief. The cycle of anger and violence affects relationships and also creates various forms of abuse in the home and community.

**Assessment of resocialization**

In the longitudinal 3-year Family study, participant resocialization was assessed every six months. Participants were administered a

background questionnaire, coupled with a test. The test consisted of either a battery of previously validated questionnaires (Cohort 1) or the Allen Resocialization Scale (Cohort 2). During each testing period, previously enrolled participants received only the test, whereas new participants also received the baseline questionnaire. The sample size of participants tested (in both Cohorts 1 and 2) was increased each testing period.

**Cohort 1: Test battery of questionnaires:** Testing for Cohort 1 was conducted over Periods 1 through 6. Participants in Cohort 1 were administered a battery of previously validated quantitative measures that assessed an aspect of resocialization. The battery included the Beck Depression Inventory, Buss-Durkee Hostility-Guilt Inventory, Gratitude Questionnaire-Six-Item Form (GQ-6), The Hope Scale, Self-Deception Questionnaire, Internalized Shame Scale (ISS), the Spiritual Well-Being Scale (SWBS), Satisfaction with Life Scale (SWLS) and the Transgression-Related Interpersonal Motivations Inventory-18-Item Version (TRIM-18) [17-25]. For more information, refer to Table 1 of [5].

**Cohort 2: Allen resocialization scale:** Testing for Cohort 2 was conducted over Periods 2 through 6 (after completion of the Allen Resocialization Scale development). Participants in Cohort 1 were administered the Allen Resocialization Scale, which was comprised of 41 items, grouped into 8 subscales which each described an aspect of the global theoretical construct of resocialization. The subscales were well-being, spirituality, awareness, resilience, stress management, friendliness, self-protection, and family bonds. The Allen resocialization scale was first administered in testing period 2 of the longitudinal Family study.

	Period 1 N=91	Period 2 N=100	Period 3 N=112	Period 4 N=130	Period 5 N=112	Period 6 N=141
(-)	-Depression*	-Depression*	-Depression*	-Depression	-Depression*	-Depression
	-Hostility*	-Hostility	-Hostility	-Hostility	-Hostility*	-Hostility
	-Anxiety	-Anxiety	-Anxiety	-Anxiety	-Anxiety*	-Anxiety*
	-Shame	-Shame*	-Shame*	-Shame*	-Shame*	-Shame
					-Hope*	
(+) )	-Forgiveness	-Gratitude	-Gratitude	-Gratitude	-Gratitude	-Gratitude
	-Spiritual well-being	-Forgiveness	-Forgiveness	-Forgiveness	-Forgiveness*	-Forgiveness
		-Hope	-Hope	-Hope	-Hope	-Hope*
		-Satisfaction with life*	-Satisfaction with life*	-Satisfaction with life	-Satisfaction with life	-Satisfaction with life*
	-Spiritual well-being*	-Spiritual well-being*	-Spiritual well-being	-Spiritual well-being	-Spiritual well-being	

\*Assessment areas demonstrating significance; (+) positive change; (-) negative change

**Table 1:** Summary of longitudinal family trends in cohort 1.

**Statistical analysis**

Statistical significance on questions using either a “score” or an ordinal response (“Strongly Agree”, “Agree”, etc.) was tested one of two ways. For comparisons within the same group of participants between

two different time periods (before joining The Family vs. after), a paired t-test was used. This involved calculating the difference for each respondent in their two responses, and testing whether the mean difference was significant. Cohen’s d statistic was used to estimate the effect size for both paired and two-sample t-tests. For comparisons

between groups of participants (i.e. by length of time in The Family), the usual two-sample t-test on means was used. To adjust for multiple comparisons, the family-wise error rate was controlled. For continuous variables, t-tests or Wilcoxon Sign Rank tests were used to test for differences. Statistical significance on the difference in proportions was done using a chi-squared test. Significant changes were defined as having a p value of <0.05 during statistical analysis. For each measured parameter, sample size varied (depending on whether participants filled out that section or left it blank). Participants were also grouped into participation time in The Family, depending on distribution. Results were analyzed for significance using a one-way ANOVA.

### Development of the Allen resocialization scale

The Allen Resocialization Scale was created by conducting a thorough literature review of current accepted scales of rehabilitation and wellness, followed by the selection of 80 evaluation questions from different established quantitative questionnaires that have been demonstrated to measure various aspects of well-being relevant to resocialization. These include items assessing the management of emotions, as well as other theoretical constructs like alexithymia (feeling awareness), resilience, and outlook on life. Each item had been already validated in the context of the respective scales, and showed high factor loading. Responses were standardized to a Likert-type scale, ranging from 1="Strongly disagree," 2="Disagree," 3="Neither agree nor disagree," 4="Agree," 5="Strongly agree." A Likert scale is an ordinal psychometric measure of attitudes, beliefs and opinions. In each question, a statement is presented in which an individual must indicate level of agreement/disagreement in a multiple-choice format. The advantageous side of the Likert Scale is that they are the most universal method for survey collection, therefore they are easily understood. The responses are easily quantifiable and subjective to computation of some mathematical analysis. Since it does not require the participant to provide a simple and concrete yes or no answer, it does not force the participant to take a stand on a particular topic, but allows them to respond in a degree of agreement; this makes question answering easier on the respondent. Also, the responses presented accommodate neutral or undecided feelings of participants. These responses are very easy to code when accumulating data since a single number represents the participant's response. Likert surveys are also quick, efficient and inexpensive methods for data collection. They have high versatility and can be sent out through mail, over the internet, or given in person.

Participant responses were tallied at the end to form a comprehensive score.

The 80-item scale was administered to a large sample of volunteer respondents (n=887), and submitted to the factor analysis procedure for reliability (stability, consistency, and standard error of measurement) and validity (empirical and construct). This sample is similar to other large normative community samples used to develop other measures of well-being, life satisfaction, and related constructs.

### Factor analysis

Factor analysis revealed high face validity amongst 8 of 16 identified subscales, and strong factor loadings between the items. While each subscale represented empirically validated constructs with strong internal consistency, all subscales correlated with a common factor which can be referred to as resocialization.

Each of these subscales represents a reliable measure of an underlying construct as determined via factor analysis. Forty of the items that best reflected these subscales were selected for inclusion in the final Allen Resocialization Scale. A single additional item was added, inquiring about belief in God or a higher power. This was necessary in order to aid in interpretation of the other items assessing spirituality. Subscales were named to reflect positive attributes, consistent with the scoring method.

All items exhibited factor loadings of 0.5 or higher to their respective subscale, and exhibited positive correlation to the primary factor common to all of the items. Only items with the strongest correlations were retained. This produced a scale with a very high reliability, and also the strongest correlations with each of the subscales. Adding additional items would not significantly improve the reliability of the questionnaire.

Reliability, as estimated by Chronbach's alpha, ranged from 0.62 (Family Bonds, three items) to 0.95 (Spirituality, six items). Overall reliability for the entire questionnaire (40 items) was 0.94. The present study provides strong evidence of both face validity and construct validity to the full-scale and subscales comprising the final version. Supplementary file 1 displays the associated subscales and factor loading for each of the 40 items recommended for inclusion. Supplementary File 2 provides the correlation matrix for the 8 subscales. Supplementary File 3 provides the mean, standard deviation and reliability for the full scale Socialization scores and subscale scores.

### Cross-validation

The Allen Resocialization Scale was cross-validated in The Family populations, which was a contrast to the random large cohort initially used to develop the scale. A confirmatory factor analysis was performed, and the factor structure was found to remain relatively stable with the Family population. However, the difference between populations was not remarkable, and the Family population did not score significantly lower on the questionnaire than the random large cohort, as hypothesized. This could be due to many factors, such as self-denial or similar baseline amounts of resocialization between populations.

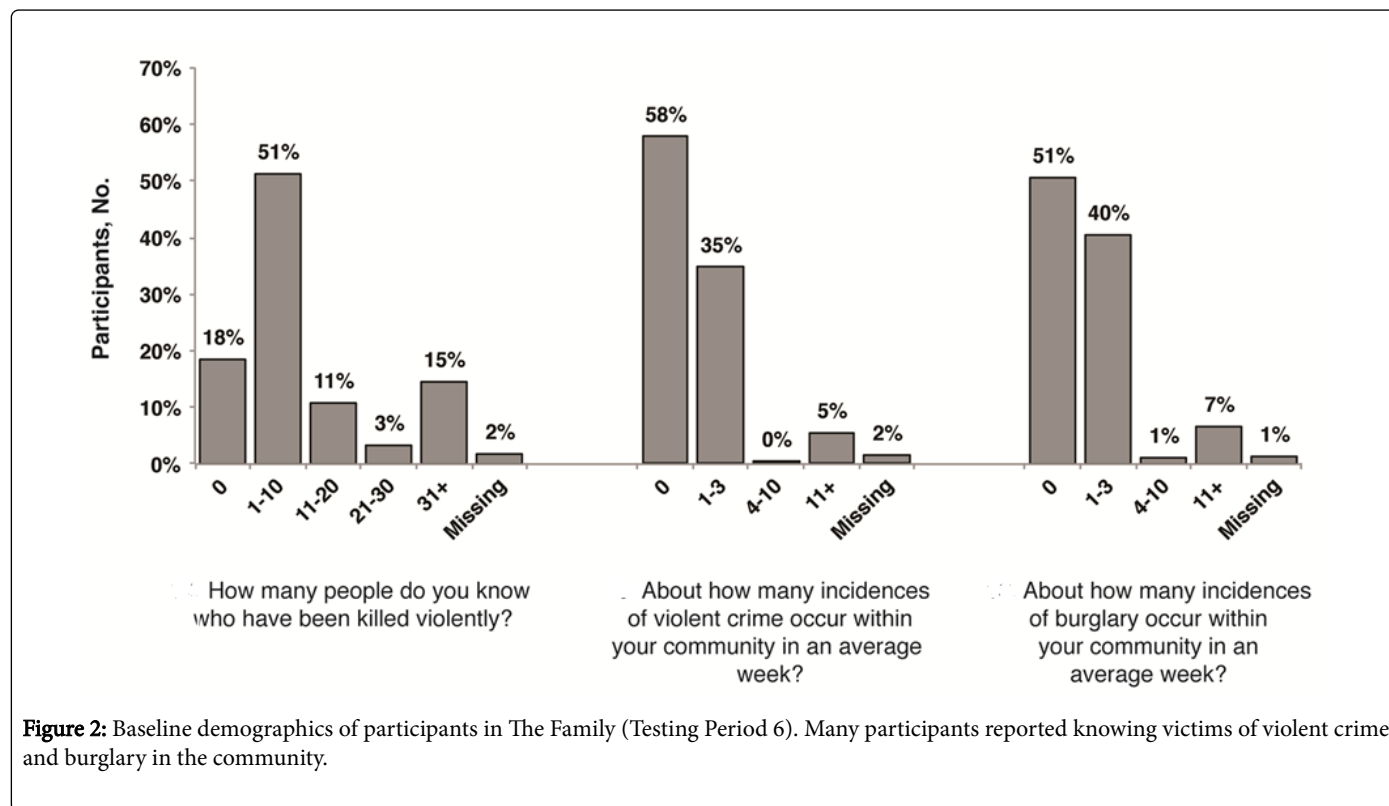
The Allen resocialization scale was also cross-validated in the clinical setting, among a known group of participants who were clinically evaluated to be on different levels of resocialization (poor, average, fair, good). Test scores were compared to their empirical progress, and it was determined that The Allen Resocialization Scale was effective at discerning between different grades of clinical resocialization. However, the differences were evident mostly within each subscale and when comparing subscales, than obtaining a numerical value of the total score. A guide on the scoring technique for the Allen Resocialization Scale is included in the Supplementary File 4.

### Results

Participants in The Family originated from all social classes, ages, genders, occupations, education, and income brackets. Characteristics were similar between Cohorts 1 and 2. Many participants had experienced some juvenile behavioral problems, and had experienced previous abuse. Many participants had family members who had experienced depression, alcohol and/or drug abuse, or medical problems, but few had been in a substance abuse program themselves. Approximately half of participants had received some sort of psychiatric, psychological or emotional counseling, but few received

medication for such issues. Some participants had family members who had attempted or committed suicide, and many knew at least one

person who had been killed violently. Incidences of violent crime or burglary were common (Figure 2).



**Figure 2:** Baseline demographics of participants in The Family (Testing Period 6). Many participants reported knowing victims of violent crime and burglary in the community.

### Cohort 1: Analysis using the test battery of questionnaires

Results from the first testing period (October 2013) showed evidence of the beginning steps of resocialization, with many statistically significant and directional decreases in societally negative emotions and actions, but few trends in societally positive measures. Results from testing Period 2 (April 2014) showed a similar decrease in negativity, and also more improvements in positive measures. Results from Period 3 (October 2014) showed evidence of the continuation of resocialization, with many continued decreases in negative behaviors such as shame and guilt. Previously dormant areas of positivity showed directional trends, which suggest continued improvement in resocialization.

Results from Period 4 (April 2015) showed continued decreases in negative behaviors, including previously unchanged areas such as shame and hostility, and more areas of significance than Period 3, although areas of positivity continued to show directional trends. Period 5 (October 2015) showed more areas of change (particularly decreases in negative attributes) than in Period 4, including many which were not observed in Period 4.

Period 5 also began to show more increases in positive areas, which were directional in previous testing periods. In the final testing, Period 6 (April 2016), previously significant negative attributes became nonsignificant, whereas areas of positivity that were previously nonsignificant were shown to be significant. The pattern throughout the testing periods points to the evolution of the resocialization process.

In all testing periods, participation in The Family led to decreases in negative thoughts after joining The Family, which translated into

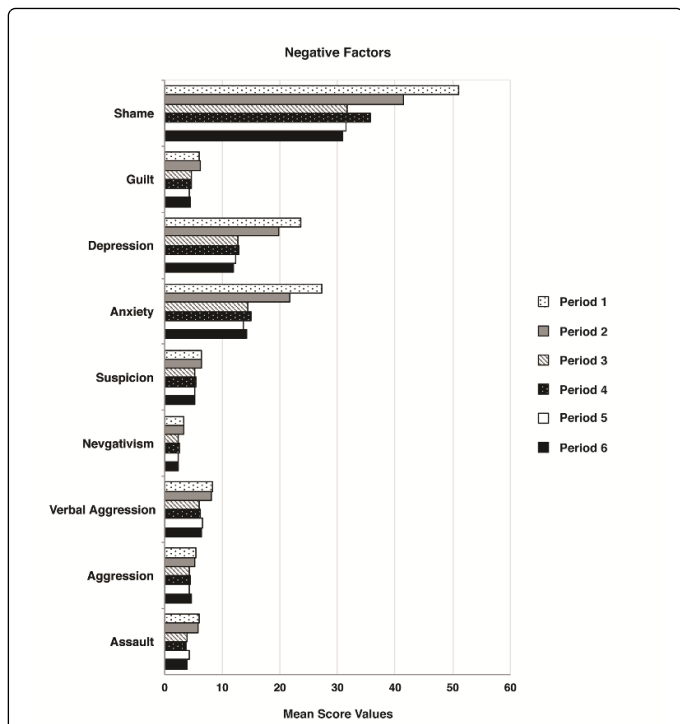
fewer destructive activities (Figures 3 and 4). Participation in The Family led to changes in self-perceived outlook on life and well-being, compared with before participation in The Family. Respondents reported participation in significantly fewer destructive behaviors (e.g. illegal activity, involvement in abusive relationships) after joining The Family.

There were also notable differences in self-assessment depending on length of time in The Family. Trends over time indicate gradual positive improvements in many positive outlook factors, such as gratitude, hope, spiritual well-being, and satisfaction with life. These positive changes generally emerged after transient increases in negativity (Table 1).

### Cohort 2: Analysis using the Allen resocialization scale

Cohort 2 was introduced in Period 2, but the sample sizes were not sufficient for proper analysis until Period 4. In every subsequent testing period, the number of analyzed participants increased. It is important to keep in mind that the majority of participants have spent less than a year in The Family to date, compared to the distribution of Cohort 1, which has more participants who have been with The Family for longer.

The results of Cohort 2 appeared to have similar patterns of behavior as Cohort 1 (Table 2). However, new areas of measurement not covered in the battery make direct comparison of the two methods more difficult. Similar to the early analysis of the test battery, data from the Allen Resocialization Scale showed yet few significant trends.



**Figure 3:** Periods 1-6: Negative factors with the family (Cohort 1). Participation in The Family led to statistically significant decrease in negative thoughts after joining The Family, which translated into fewer destructive activities.

When evaluating the changes in the Family as measured by the scale over Periods 2-6, some gradual areas of improvement were observed in certain subscales, such as stress management and family bonding, whereas no changes were observed in other areas.

This suggests that the Family psychotherapy sessions may be more effective at improving certain areas of resocialization. Interestingly, the longitudinal study has shown that the changes in participant responses have correlated with the themes of Family psychotherapy sessions. Focuses on different topics over the course of the Family sessions would likely lead to greater changes in the same areas. More time is needed to measure definitive effects, which will be examined in future studies.

## Discussion

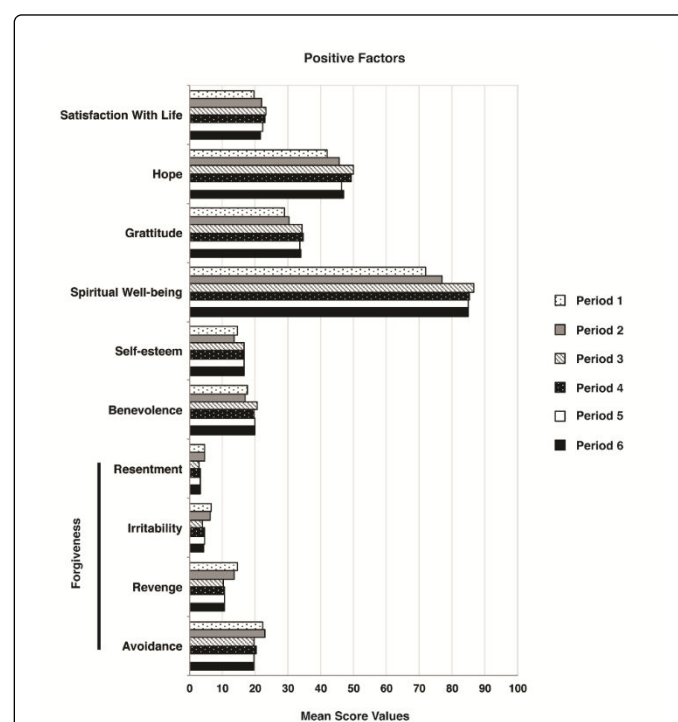
### Implications of The Family research

Overall, results of The Family over a 3-year period suggest an amelioration of the well-being and resocialization of the participants in The Family over time. The process of resocialization, as expected, is long and could take up to decades of reinforcement to see concrete changes in the community.

Over 3 years, decreases in negative feelings and behaviors were consistently lower than baseline, whereas positive changes, while slower to appear, were beginning to emerge. These results are encouraging for The Family, as it supports the effectiveness of the discussion psychotherapy approach, and points to a positive trend in the Bahamian community.

It was noted that although there was a general upward trend in resocialization, the areas of significance shifted between testing periods. For example, in Testing Period 4, significantly fewer participants experienced aggression, whereas no significance was noted in Testing Period 5. Interestingly, these shifting patterns of significance may be correlated with the themes discussed during Family sessions in each session.

These study results suggest evidence of the stepwise development of resocialization, in which negative thoughts and behaviors were the first to decrease, followed by improvements in positive thoughts and behaviors, followed finally by changes in general well-being. Transient trends in the opposite direction were often seen before improvements are observed (i.e. decreased hope). Trends over time suggested positive improvements over the 3-year period.



**Figure 4:** Periods 1-6: Positive factors with the family (Cohort 1). Increases in many scores of positive measures in Period 6 compared to previous periods. The scores for positive emotions and actions as increasing with participants in the Family over time suggest that the nurturing resocialization community in The Family is efficacious. Note that forgiveness is inversely related to resentment, irritability, revenge, and avoidance.

Throughout the course of the research, anger has been a predominant theme of social fragmentation. Similarly, when persons move toward resocialization, anger and negativity are impacted or reduced.

Decreases in anger and negativity were noted in both Cohorts 1 and 2. Participants also reported a decrease in suicidal thoughts, an increase in presence of role models and confidants, family relationships and satisfaction with life. Involvement in abusive relationships was significantly lower since joining The Family. Spirituality was also significantly increased.

The use of two evaluation methods reveals similar but often multidimensional patterns of participant resocialization, indicating a general directional tendency towards resocialization. However, community resocialization involves too many factors to be captured by a single evaluation, but rather, is more effective over a period of time.

	Period 2 N=53	Period 3 N=149	Period 4 N=204	Period 5 N=291	Period 6 N=312
<b>Increase</b>	-Well-being	-Friendliness	-Friendliness	-Well-being	-Awareness
	-Resilience			-Spirituality	-Stress
	-Stress management			-Awareness	-Management
				-Resilience	-Family bonds
				-Stress management	
	-Friendliness			-Friendliness	
				-Self-protection	
<b>Decrease</b>	-Spirituality	-Well-being*	-Well-being*	-Family bonds	-Well-being
	-Awareness	-Spirituality	-Spirituality		-Spirituality
		-Awareness	-Awareness		-Friendliness
		-Resilience	-Resilience		-Self-protection
<b>No change</b>	-	-Stress management	-Stress management	-	-Resilience
		-Friendliness	-Friendliness		
		-Self-protection	-Self-protection		
		-Family bonds	-Family bonds		

\*Assessment areas demonstrating significance

**Table 2:** Summary of longitudinal family trends in Cohort 2.

To support the difficulty of this undertaking, previous endeavors in the literature have investigated resocialization in the context of specific populations, such as juveniles or prison inmates, but have never tried to define the constituting factors behind resocialization as a construct. Our efforts, while preliminary, is a good first step into this vast subject [12,14].

### The Allen Resocialization Scale

The final 41-item questionnaire of the Allen Resocialization Scale offers a unique and potentially clinically useful outcome measure for use in at-risk populations such drug/alcohol-dependent individuals, prison inmates, or juvenile detainees. Individuals undergoing resocialization-oriented treatment may be expected to show improvement on the question items in the scale, often over a longer period of time.

The subscales of the Allen Resocialization Scale were created to reflect key elements of resocialization, including many of the elements measured in the old test battery. Common elements include shame, depression, suicidal ideation, and satisfaction with life, and new elements include alexithymia, resilience, and stress management. Although testing showed similar trends, directly comparing the results of the two testing methods is not entirely possible, as they measure

different parameters. In the longitudinal study, not as many participants experienced significant changes using the Allen Resocialization Scale, as the test battery, because most were new recruits. This pattern is similar to the first testing periods using the test battery (Supplementary Files 5 and 6 for an interpretation guide for the Allen Resocialization Scale).

Compared to the test battery, the Allen Resocialization Scale contains considerably fewer question items. However, due to this difference, fewer data points are collected per testing period, which may be seen as giving less information per testing. For optimal use of the Allen Resocialization Scale, a 2-part evaluation approach is proposed, where there is an initial intake assessment (applicable to individuals entering mental health/public health clinics), and punctate follow-up assessments of the effectiveness of change in individuals engaging in psychotherapy.

An important implication of this study on the greater picture of societal resocialization is the greater awareness of the need for a more universal measure for the extent of resocialization in marginalized populations. An instrument such as the Allen Resocialization Scale to measure resocialization in previously disenfranchised individuals may have a great utility in rehabilitation settings and penal settings. Effects of these types of resulting evaluations on policy regarding

institutionalization may also arise in the future if they were used to improve the understanding of resocialized populations.

## Conclusions

Limitations of The Family longitudinal study include its length and depth. The study is limited to 3 years, and as such, cannot extrapolate beyond this time limit. In order to measure real community evolution, it is necessary to follow the study for an even longer period, such as 10 years. Additionally, as The Family enrollment is on a voluntary basis, attendance is not mandatory, and participants may come and go as they choose. As a result, data points are often incomplete and it is not possible to follow the same person for long periods of time. Although a more stringent study would be to follow the same cohort of people through the years, the open nature of The Family makes this difficult. However, despite these limitations, the longitudinal Family study has made several observations about the evolution of the resocialization process over time.

Future directions include continuing treatment and analysis on The Family to look for more measurable changes to personal and community socialization, as well as expanding the juvenile Family group to work towards more specialized topics and sessions that involve tailored issues. Additionally, continuing implementation of the Allen Resocialization Scale in other populations is key to refining the breadth of the scale, and eventually finalizing it and making it widely available for use. Long term goals include expanding the scope of The Family project to other fragmented areas to observe sociocultural differences.

Persistent questions that remain include: Does continued psychotherapy in The Family produce lasting results to improve the socialization in the Bahamas? Will the effectiveness of The Family differ between different populations? There are also questions pertaining to the continuing analysis on the Allen Resocialization Scale: Will the scale be able to evaluate resocialization in the various populations in which The Family is being operated? What information does the scale give us about the progression of the participants?

Since its founding, The Family has been constantly evolving and growing in size, and has implicated many more members of the Bahamian community over the years. Currently, there is an average weekly attendance of 310 participants in the 24 Family groups. The eventual hope is to reach more and more people through this initiative, and bring gradual change through constructive dialogue. New populations are constantly being enrolled, such as members from a prison, juvenile basketball initiative, and other programs. Similarly, a parallel goal is to implement and find applications for the Allen Resocialization Scale in The Family and other groups. The long-term goal of The Family will be to expand further into the community and reach more people.

## References

1. Smart RG, Patterson SD (1990) Comparison of alcohol, tobacco, and illicit drug use among students and delinquents in the Bahamas. *Bull Pan Am Health Organ* 24: 39-45.
2. Hanna CA (2011) Reducing murders in the Bahamas. A strategic plan based on empirical research. Commissioner of Police, Royal Bahamas Police Force. ISBN 978-976-8205-08-7.
3. United Nations International Drug Control Programme (1998) Economic and social consequences of drug abuse and illicit trafficking. Accessed on Feb 1, 2017.
4. Allen DF, Mayo M, Allen-Carroll M, Manganello JA, Allen VS, et al. (2014) Cultivating gratitude: Contemplative discovery pathway theory applied to group therapy in the Bahamas. *J Trauma Treat* 3: 197.
5. Allen DF, Allen Carroll M, Allen VS, Bethell KY, Manganello JA (2015) Community resocialization via instillation of family values through a novel group therapy approach: A pilot study. *J Psychother Integrat* 25: 289-298.
6. Thompson C (2010) Anatomy of the soul: Surprising connections between neuroscience and spiritual practices that can transform your life and relationships. Tyndale House pp: 1-304.
7. Jekel JF, Allen DF, Podlewski H, Clarke N, Dean-Patterson S, et al. (1986) Epidemic free-base cocaine abuse. Case study from the Bahamas. *Lancet* 1: 459-462.
8. Goffman E (1961) Characteristics of total institutions. Holt, Rinehart and Winston United States of America 312-338.
9. Little W, Vyain S, Scaramuzzo G, Cody-Rydzewski S, Griffiths H, et al. (2005) Introduction to sociology-1st Canadian Edition. Available at: <https://opentextbc.ca/introductiontosociology/>.
10. World Health Organization (2010) WHO guidelines on health-related rehabilitation (Rehabilitation Guidelines). Available at: [[http://who.int/disabilities/care/rehabilitation\\_guidelines\\_concept.pdf](http://who.int/disabilities/care/rehabilitation_guidelines_concept.pdf)].
11. Arrigo BA, Takahashi Y (2006) Reconviction: A theoretical and critical criminological inquiry. *Theor Criminol* 10: 307-336.
12. Liaudinskien G (2005) Resocialization barriers of juvenile delinquents. *Soci Sci* 1: 41-48.
13. Skiecevicius P, Leliugiene I (2012) Empowering partnership as resocialization form of juveniles subject to delinquency: Findings of empirical research. *Social Sciences/Resocialization form of juveniles subject to delinquency. Socialiniai mokslai* 1: 30-40.
14. Mesoniene S (2009) The problem of efficient resocialization: Legal regulations and social demands. *Jurisprudence*. 118: 235-246.
15. Ulugtekin S (1989) family background and resocialization of Turkish delinquents. *Intl J Offender Ther Comparative Criminol* 33: 27-35.
16. Bethell KY, Allen DF, Allen-Carroll M (2015) Using a supportive community group process to cope with the trauma of social fragmentation and promote re-socialization in the Bahamas. *Emerg Med* 5: 244.
17. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J (1961) An inventory for measuring depression. *Arch Gen Psychiatry* 4: 561-571.
18. Buss AH, Durkee A (1957) An inventory for assessing different kinds of hostility. *J Consult Psychol* 21: 343-349.
19. Wood AM, Maltby J, Stewart N, Joseph S (2008) Conceptualizing gratitude and appreciation as a unitary personality trait. *Pers Individ Dif* 44: 621-632.
20. Pattengale J (2002) The hope scale: A measurement of willpower and waypower. Retrieved from <http://www.sc.edu/fye/resources/assessment/essays/Pattengale-10.11.02.html>.
21. Gur RC, Sackeim HA (1979) Self-deception: A concept in search of a phenomenon. *J Pers Soc Psychol* 37: 147-169.
22. Rybak CJ, Brown BM (1996) Assessment of internalized shame: Validity and reliability of the internalized shame scale. *Alcohol Treat Quarterly* 14: 71-83.
23. Diener E, Emmons RA, Larsen RJ, Griffin S (1985) The Satisfaction with life Scale. *J Pers Assess* 49: 71-75.
24. Watkins PC, Woodward K, Stone T, Kolts R (2003) Gratitude and happiness: Development of a measure of gratitude and relationships with subjective well-being. *Soc Behav Pers* 31: 431-452.
25. McCullough ME, Root LM, Cohen AD (2006) Writing about the benefits of an interpersonal transgression facilitates forgiveness. *J Consult Clin Psychol* 74: 887-897.



