Reintegrating Members of Armed Groups into Society: An Evaluation of Three Approaches

by

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TABLE OF CONTENTS

ACKNOWLEDGMENTS LIST OF FIGURES LIST OF APPENDICES LIST OF ABBREVIATIONS ABSTRACT	ii ix xi xii xiv
Chapter 1: Introduction	1
Introduction	1
The Haitian Context	2
A History of Political Violence	3
The Problem	5
Research Questions and Hypothesis	7
Research Questions	7
Hypotheses	7
Description of Research Data	9
Policy Significance	9
Outline of the Study	10
References	14
Chapter 2: Background	15
The Structure and Role of Armed Groups	15
A Matter of Definition	16
How do Gang Members Define Themselves and Their Conflict?	29
The Nature of Conflict	39

References	56
Chapter 3: Disarmament, Demobilization and Reintegration	60
DDR in Peacemaking Process	60
Goals of DDR	60
DDR Phases	62
Disarmament	62
Demobilization	67
Reintegration	72
Conditions Associated with DDR Success	75
History of DDR	78
Peacekeeping Process and its Relation to DDR	80
Theoretical Assumptions on which DDR is based	81
DDR in Haiti	88
A History of Instability	90
Security Sector Reform	92
From DDR to CVR	97
References	103
Chapter 4: Theoretical Review	111
The Common Experience of Trauma	112
Personality and Trauma	113
Control & Perceived Control	114

	Personal Change and DDR-based Trauma	119
	Using Theories on Criminality and Crime Reduction to Understand DDR	119
	Early Perspectives on Criminology	121
	Chicago School	124
	Psychological Theories	129
	Situational Perspectives	138
	Concluding Thoughts	142
	References	144
Chapt	ter 5: Rehabilitation Interventions	153
	Role of Education-Based Interventions in Ex-offender Rehabilitation	153
	Risk Factors of Criminal Activity Targeted by Educational Interventions	153
	Designing Impactful Interventions	155
	The Role of Sports and Recreation in DDR	161
	United Nations Framework: Sport for Development and Peace	162
	Rehabilitation through SDP	163
	SDP Promoting Youth Recovery	165
	Critical Approaches to SDP	166
	Study Interventions	167
	Intervention A: Treatment as Usual (TAU)	168
	Intervention B: Faith-Based Program	170
	Intervention C: Education Focused Intervention	173

	Concluding Thoughts	176
	References	177
Chapte	er 6: Research Methods	184
	Study Design	186
	Non-Treatment: "Eligible but declined" to participate in DDR	187
	Non-Treatment: "Eligible but not selected".	187
	Data Collection and Management	194
	Data Cleaning, Coding and Storage	197
	Clinical Measures	198
	McMaster Model of Family Functioning (MMFF) Family Assessment	
	Device (FAD).	198
	Levenson Multidimensional Locus of Control Scales	201
	General Self-Efficacy Scale (GSE)	203
	American Institutes for Research (AIR) Self-Determination Assessment	204
	The Modified Overt Aggression Scale (MOAS)	206
	Center for Epidemiological Studies Short Depression Scale (CES-D 10)	207
	Crime Questionnaire	209
	Alcohol Use Disorders Identification Test (AUDIT)	210
	Short Hardiness Scale (SHS)	211
	Social Readjustment Rating Scale (SRRS)	212
	Decision-Making Skills	213
	Grassroots Efficacy	214

Flanagan et al (2007) Civic Involvement Measures	214
Job Search Readiness Checklist	217
Supervisor Evaluation	217
Individual Protective Factors Index (IPFI)	217
Beck Depression Inventory	218
References	220
Chapter 7: Analysis	230
Data Analysis Plan	230
Individual Study Participants at Baseline	235
Program Services	240
Vocational Education and Mentorship	240
Classical Education	242
Internships	245
Informal Educational	246
Community Service	246
Social Work Services	248
Religious Instruction	249
Sports and Recreation	249
Clinical Measures	249
Criminal Behaviors	249
Violence and Other Maladaptive Behaviors	253
Psychological Factors	254

	viii
Hypothesis Testing	262
References	272
Chapter 8: Discussion	274
What I Do Determines My Future	276
Education	277
Engagement in Sports	280
Pro-Social Political Behaviors and Competencies	281
Intervention Fidelity	282
Implications for Social Work Practice	289
References	292
APPENDICES	294

LIST OF FIGURES

FIGURE

2.1 Armed Groups Currently or Recently Operating in Haiti					
2.2 Demographics of Rank and File Membership in Armed Groups					
2.3 Place of Origin of Members of Armed Groups	20				
2.4 Locus of Control of by Type of Armed Group	21				
2.5 Percentage of males (18-29) in the general population of selected neighborhoods of P	'ort-au-				
Prince claiming affiliation with armed urban groups	22				
2.6 Words commonly used by development workers when describing Haiti's gangs (2005)	5) 24				
2.7 Words commonly used by development workers when describing Haiti's gangs (2010))) 25				
2.8 Characteristics of Armed Urban Gangs versus Ex-FADH Groups	27				
6.1 Individual Selection into Intervention Programs	185				
6.2 Interview Schedule by Cohort and Program	195				
6.3 Percentage of study participants interviewed at each interaction by group	196				
6.4 Study Measures Used During Interviews	198				
6.5 Family Assessment Device (FAD) Scales	200				
7.1 Selected Demographics of Study Participants by Group at Baseline	235				
7.2 Descriptive Statistics for Study Participant Demographics	238				
7.3 Mean Number of Hours of Formal Vocational Education By Group	241				

7.4 Mean Hours of Classical Education by Group	245
7.5 Program Services and Intervention Components Received in Total by Groups	247
7.6 Mean AUDIT Scores by Group	250
7.7 Mean Score of "Friends in Armed Groups" as Reported by Respondent	251
7.8 Mean Crime Scores by Program	253
7.9 Mean Scores on the SHS by Group over Time	256
7.10 Mean Scores on the GSE by Group over Time	257
7.11 Mean Scores on the Beck Depression Inventory by Group over Time	258
7.12 Mean LOC scores on the Internality subscale by Group and Time	259
7.13 Mean LOC scores on the Powerful Others subscale by Group and Time	260
7.14 Mean LOC Scores on the Chance Subscale by Group and Time	261
7.15 Mean Scores on the McMaster Family Functioning Devices across Time by Group	262
7.16 Hypothesis #1 Estimates of Fixed Effects	263
7.17 Hypothesis #2 Estimates of Fixed Effects	266
7.18 Hypothesis #3 Estimates of Fixed Effects	268
7.19 Hypothesis #4 Estimates of Fixed Effects	270

LIST OF APPENDICES

Λ.	D	D	\mathbf{C}^{1}	NT1	IX
А	М	М	Η.	N	 ΙX

A. Appendix A: Study Measures	294
B. Appendix B: Curriculum Vitae	329

LIST OF ABBREVIATIONS

3R Reconstruction, reconciliation, and resolution

AIR American Institutes for Research

AUDIT Alcohol Use Disorders Identification Test

BDI Beck Depression Inventory
CBCL Child Behavior Checklist
CVT Cognitive-behavioral treatment
CCA Competence for Civic Action scale

CES-D10 Center for Epidemiological Studies Short Depression Scale

CISM Conseil Internationale du Sport Militaire CNDR National Commission for Disarmament

CNDDR National Commission for Disarmament, Demobilization and Reintegration

CVR Community Violence Reduction

DDR Disarmament, Demobilization, and Reintegration

DPKO Department of Peacekeeping Operations

DRS Dispositional Resilience Scale
EPQ Eysenck Personality Questionnaire

FAD Family Assessment Device FADH Forces Armées d'Haïti

FLRN Front pour la Libération et la Reconstruction Nationales

FFM Five Factor Model

FSES Financial Self-Efficacy Scale
GSE General Self-Efficacy Scale
HNP Haitian National Police

ICRC International Committee on the Red Cross

IDP Internally Displaced Persons

I-E Internal-External

IHSI Institut Haitien de Statistique et d'Informatique
 IOM International Organization for Migration
 IPFI Individual Protective Factors Index
 IPS Individual Placement and Support

LOC Locus of Control

MDG Millenium Development Goals

MINUSTAH Mission des Nations Unies pour la Stabilisation en Haïti

MIPONUH United Nations Civilian Police Mission in Haiti

MMFF McMaster Model of Family Functioning
MMPI Minnesota Multiphasic Personality Inventory

MOAS Modified Overt Aggression Scale

MPQ Multidimensional Personality Questionnaire

NRFLH National Revolutionary Front for the Liberation of Haiti

MS-13 Mara Salvatrucha

OAS Overt Aggression Scale PCA Pro-criminal attitude

PCE Prospective Civic Engagement scale
PCWO Political Conversations with Others scale

PTSD Posttraumatic stress disorder

PV Political Voice scale

REXO Reintegration of Ex-Offenders
RGCS Random GPS Coordinate Sampling
SCCT Social cognitive career theory
SDP Sport for Development and Peace

SDP IWG Sport for Development and Peace International Working Group

SE Supported Employment SHS Short Hardiness Scale

SRRS Social Readjustment Rating Scale

SSR Security Sector Reform
TAU Treatment as Usual
UN United Nations

UNDP United Nations Development Programme

UNESCO Organisation des Nations Unies pour l'Education, la Science et la Culture

UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations Children's Fund

UNODC United Nations Office on Drugs and Crime

UNSC United Nations Security Council WHO World Health Organization

Abstract

Disarmament, Demobilization, and Reintegration (DDR) programs have become a staple feature of modern peacekeeping missions. These programs combine individual, group and state-level interventions in an effort to create the conditions necessary for peaceful transitions in post-conflict societies. Little research has been done on the individual-level factors associated with DDR success. This study examined quantitative data from a longitudinal data set on 741 Haitian men from who participated in or qualified to participate in DDR programs after the 2004 coup. The three DDR interventions were: the traditional model of vocational and job placement program, a faith-based program including vocational or classical education with sports, community service, and social services, and an educationally-focused leadership training intervention. Interviewed at baseline, six months later, and then every twelve months for six years, the participants' behaviors and attitudes were examined to determine the success of components in three types of DDR approaches and to determine which of the three interventions was most effective at reducing criminal behavior and increasing pro-social behaviors of participants.

A Linear Mixed Model was used to examine the impact of education (both classical and vocational) as well as participation in organized sports and recreation activities on a variety of outcome measures including engagement in crime, socializing with armed peers, family functioning, and engagement in non-violent methods of civic participation. Both types of education were found to have a positive impact on self-efficacy and internal locus of control (which are tied to an individual's sense of control over their own life and future). Furthermore,

they decreased involvement in crime, violence, and association with armed peers, and an improvement in family functioning, the ability to make decisions, involvement in volunteering, and non-violent political engagement. Being involved in sports and recreation was similarly associated with a decrease in violence and crime and a decrease in associating with armed peers.

This findings support criminological research which suggests education has a positive impact on decreasing crime amongst those who have committed crimes in the past. This also makes a small contribution to establishing an evidence base for DDR interventions, which are widely seen by policy makers as being an essential part of the peacekeeping process in some types of conflict but for which there has been little empirical evidence of their effectiveness. Suggestions for future research and social work practice implications are also addressed including the impact of education on identity creation/reformation.

Chapter 1: Introduction

Introduction to the Study

This dissertation aims to establish which one of three Disarmament, Demobilization, and Reintegration (DDR) programs was most successful at reducing post-intervention criminal involvement of participants. DDR interventions have become a staple feature of modern peacekeeping missions. However, there has been little research on their efficacy. DDR programs combine individual, group and state-level interventions in an effort to create the conditions necessary for peaceful transitions in post-conflict societies. Over the past 15 years during which they have been most widely used, DDR programs have rarely been subjected to empirical evaluations and when thus examined, have had mixed record of success. Much of the research has focused on the state and group level conditions necessary to successfully demobilize and reintegrate former combatants or on the process of intervention implementation. Little research has focused on group or individual determinates of successful DDR efforts or on the content of particular interventions which are associated with DDR success. (de Watteville, 2002; Humphreys & Weinstein, 2007; Mendelson-Forman, 2006; Moestue & Muggah, 2009; Muggah, 2005)

In this dissertation I examine individual-level and intervention-specific variables that contribute to the success of DDR efforts, with "success" for the individual ex-combatant being characterized as separating oneself from organized armed groups, abstaining from criminal behavior, and/or engaging in pro-social community building activities including non-violent forms of political expression. Three different types of DDR interventions are evaluated: 1) vocational training and job placement services using a Community Violence Reduction (CVR)

approach (intervention A) based on strain theory; 2) a faith-based DDR program with features of a traditional DDR intervention including residential intake, counseling and vocational rehabilitation (intervention B) based on social control theory; and 3) an educationally-focused leadership training intervention modeled on efforts to rehabilitate urban gang leaders (intervention C) based on theories of social ecology and social disorganization. Intervention A most closely resembles a conventional DDR program, and is thus referred to as "treatment as usual" throughout the text. My main research question is to determine which of the three which intervention is the most successful at reducing post-intervention criminal involvement of participants in three different types of DDR programs

The study methodology is quantitative and includes the analysis of survey data collected at baseline during the fiscal year 2007-2008, at program exit (approximately six months), and at each subsequent year post-intervention. In addition, some variables were coded based on a record review of participant's educational, occupational, health and SES data collected since intake. A unique opportunity for a natural experiment was offered in this situation as a limited number of participant slots existed in the two of the program, resulting in ex-combatants being randomly assigned through a lottery to intervention B or C. Intervention A is the preferred DDR approach currently being supported by the United Nations mission in Haiti and is thus also included in the study though participants in this intervention were self-referred.

The Haitian Context

In 2004 a group of heavily armed and well-funded insurgents, backed by foreign powers and the domestic elite, overthrew the elected government of Haiti. Though it was not a coup -- as the Haitian Army had been disbanded nine years earlier -- the major players on insurgent side

called themselves the "re-created" army and included many former members of the Haitian military. They were joined by members of armed militias loyal to the country's elite as well as members of criminal gangs and private security squads hired by some of Haiti's wealthiest families. (Burron & Silvius, 2013; Cynn, 2008; Dupuy, 2005; Kolbe & Huston, 2006; Mendelson-Forman, 2006)

The armed conflict began in 2002, culminated in the 2004 ouster of President Jean Bertrand Aristide and continued to simmer through 2007 under the violently repressive interim government of Gerard Latitude, an American of Haitian descent from Boca Raton, Florida who was installed as the new prime minister. Democratic elections were held in 2007, at which point both state-sponsored violence and crime in general began to decline. (Hallward, 2008; Kolbe & Muggah, 2010) Beginning in June 2004, the United Nations mission in Haiti began disarmament, DDR campaign modeled on traditional DDR programs such as those operated in Northern Uganda, Liberia and Sierra Leone MINSTAH CVR, n.d.; MINUSTAH, 2011).

Haiti's DDR campaign was a resounding failure. Armed groups continued procuring and using their weapons, often morphing into criminal groups rather than politically motivated ones. Few members of armed groups were successfully reintegrated into society. Worse, the potential threat of armed violence continued to shape the decisions and interactions of both domestic and international political actors. In 2007 the DDR efforts changed to include extensive funding and support of community based violence reduction projects. These projects had mixed success. (Kolbe & Muggah, 2012; MINUSTAH, 2011; Muggah & Kolbe, 2012)

A History of Political Violence. Since democratization of Haiti began in the mid-1980s, armed political groups have been consistently associated with the use of violence against

civilians and have been blamed in some quarters for increased urban crime. Despite a history of relatively frequent coups and armed uprisings, Haiti has historically had low rates of crime and even today exhibits moderate to low levels of violence in relation to other Caribbean countries (UNDC, 2011). Indeed, organized violence declined steadily Port-au-Prince between 2007 and 2011 before beginning a steep incline in late 2011 and early 2012.

A host of underlying structural conditions – from persistent unemployment and social inequality to political uncertainty – influence the shape and character of violence and crime in Haiti (Maguire & McCreesh, 2011). As in other countries, crime rates have increased with recent increases in social disorganization (rapidly urbanizing and densely populated slums, limited income earning opportunities, weak penetration of services, limited educational base, decaying municipal services, and dispersed police and justice capacities), offering few incentives for members of armed groups to choose a law-abiding path in post-conflict Haiti. Membership in armed groups within particularly poor and highly populated zones has vacillated over the years, as political, economic and social conditions have changed. (Becker, 2011; Dorn, 2009)

Since its inception in 2004, the United Nations Stabilization Mission in Haiti
(MINUSTAH) has supported a succession of interventions to contain, prevent and reduce
violence across Haiti. In the wake of the failed DDR campaign between 2004 and 2006,
MINUSTAH shifted to a community violence reduction (CVR) program that has continued since
2007 to the present, though two faith-based DDR programs begun in 2004 continue without
MINUSTAH funding and several other DDR-style interventions (also not funded by
MINUSTAH) have been created by individual NGOs. MINUSTAH-funded interventions have
been, for the most part, fairly partisan in that they have targeted members of armed groups from

a particular political persuasion. Non-MINUSTAH funded interventions have ranged from those that serve only ex-combatants drawn from the "rebel" army to those that serve individuals from all sides of the political spectrum. (Department of Peacekeeping Operations, 2011; IOM, 2011; Kolbe & Muggah, 2012; MINUSTAH CVR, 2011)

In the shift from traditional DDR to CVR, the UN Security Council Resolution 1702 (2006) requested that MINUSTAH "reorient its DDR efforts towards a comprehensive community violence reduction program adapted to local conditions, including assistance for initiatives to strengthen local governance and the rule of law and to provide employment opportunities to former gang members and at-risk youth". (MINSTAH CVR, n.d.)

The CVR intervention was intended stabilize urban communities throughout the country, including the capital – Port-au-Prince – through a combination of targeted activities. The intervention aims to create conditions where development to take place by targeting risk factors for individual recruitment into armed groups and by improving overall community well-being. DDR projects under the new CVR mandate have focused primarily on vocational education and employment of members of armed groups and those at risk for recruitment into armed groups.

The Problem

Those orchestrating an intervention in a post-conflict setting come up against a vast array of needs. The needs most aid providers respond to first include: meeting the basic survival needs of the population, emergency health needs, and short-term security threats. However, the longer term needs of conflict survivors (both civilian and conflict participants) are often overlooked during the initial post-conflict response planning. In particular, education, recreational needs, and mental health are often unnoticed as societies struggle to keep people alive and mitigate

emerging threats to the stability of the state. This dissertation illuminates problems associated with providing appropriate rehabilitative services to ex-combatants by programs which attempt to incorporate holistic services into their intervention approach. Furthermore, it demonstrates that programs that provide participants with identity-shifting opportunities better enable participants to rejoin society peacefully.

This dissertation goes beyond the typical post-project evaluation in several ways. First, this research is based on a multi-faceted longitudinal dataset on participants in DDR programs following the 2004 coup in Haiti. The data includes attendance logs for programs, program accounts and billing, qualitative interviews with participants and evaluations with psychological-and views-oriented instruments over a seven year period. Second, having a program evaluation that spans across a long period of time affords the opportunity to assess the long-term impacts of DDR programs. Program evaluations in this field tend to be short-term oriented, since they are often focused on issues of intervention service delivery and use of funds. Lastly, this research augments its relevance by situating the findings of this research in both academic and policy-oriented terms.

This dissertation contributes to a nascent body of literature on the efficacy of DDR, furthering research knowledge in both social work and political science. Though individually-focused intervention research of this type is relatively rare in political science, this dissertation uses that method to help us understand the process of change DDR participants experience over a period of years after exposure to this popular intervention. It demonstrates that DDR programs can be an effective use of limited funds. It also highlights the importance of investing in holistic, programs which reshape participant's vocational, political, and social futures through education,

group sports and recreational activities, community service, and targeted skills-building activities.

Peacekeeping mission are by far one of the most common venues through which social work services are delivered to individuals, groups and communities. This dissertation gives evidence of the efficacy of social work interventions in post-conflict communities. It also gives further support to interventions which are known to work in other contexts (such as with prisoner reentry programs in the developed world) but which are rarely tested in other populations.

Ultimately, the problem DDR interventions are responding to is simple. Societies do not know how to best transition participants in violence from wartime to peace. This dissertation adds to what we know about what works in post-conflict transitions and suggests mechanisms that have evidence of working that can be applied in the future.

Research Questions and Hypotheses

Research Questions. There are two research questions at the heart of this study. First, what is the relative effectiveness of these three different approaches to DDR? With this question, I what to make policy-relevant recommendations based on the measured impact of these DDR approaches. Second, which aspects of interventions more effective than others? To answer this, I look at what specific components of an intervention are shared and how individual responses to these interventions differ.

Hypotheses. This study proposes four hypotheses and finds support for each:

Hypothesis #1. Receiving education increases an ex-combatant's confidence in their own ability to make change as quantified by the participant's scores on the Generalized Self-Efficacy Scale and the internal locus of control score.

Hypothesis #2. Receiving education reduces the likelihood that the participant will engage in criminal or maladaptive behaviors including associating with armed peers, abusing alcohol, being violent, or engaging in crime.

Hypothesis #3. Participants who engaged in sports and recreation were less likely to revert to criminal behavior or interact with armed friends in the post-demobilization

Hypothesis #4. Receiving education is associated with increased pro-social capacities and behaviors.

Two findings, in particular, stand out as these hypotheses are assessed. First, the faith-based intervention (intervention B) significantly outperforms the other two interventions. One of the key factors behind this is the fact that it successfully provided vocational- and classical-education services which contributed the formation of a new identity. The high intervention fidelity and active participation of ex-combatants demonstrated that this intervention format was successful at reducing the risk of maladaptive behaviors in the future. Furthermore, we can rule out the possibility that participants with better prospects self-selected into intervention B, since participants were randomly assigned into intervention B or C.

The second notable finding is that intervention A (treatment as usual) was extremely ineffective in this case study. In fact, those in the intervention had more maladaptive behaviors after the intervention than the control group. This is partially explained by the low intervention fidelity. The program purported to provide educational and other rehabilitative services, but in reality, very few participants actually completed the entire program. Furthermore, the intervention provided spaces and opportunities for ex-combatants to gather, meet each other, establish transregional networks, solidify criminal attitudes, and plan future criminal acts. This

finding, in particular, has tremendous policy implications. This demonstrates that DDR interventions which are poorly done are worse than no intervention at all.

Description of Research Data

The data includes rich and detailed records of each individual's participation in the intervention activities include their attendance sign-in sheets, billing records, class and group attendance check-off sheets, internal program notes, medical examination records and test results, vocational testing data, casemangement notes, and additional documentation from each participant's dossier. In addition to program-recorded data, an extensive interview as conducted with study participants during eight interactions over a period of seven years.

The specificity of the data allows me to be precise about what in each intervention is being compared. This overcomes a major obstacle in program evaluation: often the services planned for an intervention do not take place as specified or are not all received by all participants. Through available records I was able account for the number of hours, days, or units of services each participant actually received. This rich data on the implementation allowed me to take seriously the issue of intervention fidelity and account for cases where there were incomplete or interrupted intervention services. This illuminated the serious problem of intervention fidelity which was discovered with treatment as usual (traditional DDR) participants.

Policy Significance

One of the most surprising findings of this study is that the traditional DDR approach, in this particular case, is grossly ineffective. The treatment as usual approach ex-combatants *worse* off than those who were eligible to participate but got no services. This means that there is a

burden on the peacekeeping organizing community to implement rigorous monitoring and evaluation steps during DDR implementation with clear consequences for programs which fail to follow the plan outlined in their Terms of Reference (TOR). In this case, not one of the traditional DDR participants received all of the services in all areas which were planned. Some dropped out early. Others skipped vocational training classes due to illness, transportation problems, personal crisis, because they lacked reading skills needed in the program to which they had been assigned, or for other, unspecified, reasons. Based on desk review of records, it is clear that no effort was made to hold program leadership accountable for this oversight while participants were still in the program and while deficiencies could still be remediated.

Thus, it is unclear if traditional DDR, when done properly and completely, is ineffective. What is clear is that when DDR programming is done poorly, it is worse than if nothing had been done at all. The conclusion of this study should not be to drop the traditional DDR approach. Rather, the conclusion one should draw from this is additional research is needed to determine if this finding holds in other incompletely implemented traditional DDR programs.

Outline of the Study

Because the content and research questions of this study cross disciplinary boundaries in a number of areas, I will begin by giving a broad background to position and contextualize the history, theoretical basis, and existing research knowledge on which this study was created. In the second chapter I begin by discussing the Haitian context and recent developments influencing the character of the interventions examined. Though Haiti has a rich history of protest, dissent, insurrection, and intervention that could inform a discussion of recent DDR

efforts, fully covering this history is beyond the scope of this dissertation and thus, this section is limited to the events preceding the most recent UN intervention.

In chapter two I discuss the structure and the role of armed groups in Haiti. Included in this this discussion is the definitional issues posed by implementing an intervention designed for insurgent group members in post-conflict countries in a country whose armed conflict may or may not be considered war and whose participants may or may not be considered combatants. I discuss the lack of research on armed groups, the known characteristics of armed groups including urban gangs, and the relationship that armed groups have with each other and the community in general. I end the first chapter by framing this content within the question of whether the recent armed conflict in Haiti can be defined as a type of war.

Chapter three provides context to the DDR intervention within the peacekeeping process. I outline the relationship of DDR programs to peacekeeping missions in general and to the complementary components of peacekeeping such as security sector reform. I give extensive background for those programs in Haiti and the relationships they have currently and historically with DDR. I describe the history and work of the DDR programs in Haiti.

Then I turn to reviewing, in chapter four, the existing literature on the specific areas of research relevant to the questions posed in this dissertation: specifically I look at the theoretical assumptions and research knowledge about trauma, self-efficacy, and crime as it relates to young men (the target population of the intervention). In this chapter I examine the place of the theories of change adopted by the three interventions: social strain (intervention A), social control (intervention B), and theories of social ecology and social disorganization (intervention C). I also

look at trauma, locus of control, and self-efficacy as I contextualize the position of these concepts in this research study.

Chapter five focuses on DDR intervention components. The first section of the chapter furthers my review of the literature by looking. at the role of particular programmatic thrusts in reducing criminal behavior of young adults in DDR programs, in violent communal contexts, and in general. I focus on two areas, education and organized sports, which were included in Haiti's DDR efforts. In last part of the chapter I describe the three intervention projects. I discuss their theories of change and the specific components that they incorporated into their programming.

Chapter six introduces the data set and describes the three interventions being studied.

Also included in this chapter is a review of the clinical measures included in the data. The methods used for collecting, organizing, storing, retrieving, recoding, and analyzing the data are also presented in this chapter. The background of the three programs and the content of their intervention efforts is detailed.

Chapter five begins with a description of the data and the demographics of the participant and control groups. The concept of intervention fidelity and challenges related to that with this data set are presented. I describe the changes which took place across time and across groups during and after the intervention period. Key relationships between variables are also presented and examined. Next I turn to testing several proposed hypotheses regarding the invention content and short and long term effects on participants.

Chapter six contextualizes these quantitative findings within the larger body of literature and the current practices within DDR programs as well as within the larger dialogue of

international social work and the relevancy of social work to post-conflict reconstruction and development. Also included in this this chapter is a summation of the limitations of this research study along with suggestions for future research directions. Policies which help – and hinder – the adoption of evidence-based interventions within DDR programing are discussed as they relate to the findings of this study. Specific programmatic and policy changes are suggested at the local and international level. This discussion is situated from a right-based perspective, reflecting social work values.

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Chapter 2: Background

The Structure and Role of Armed Groups

Though a preoccupation with organized violence has dominated much of the discourse on politics and development in Haiti, little research exists on Haiti's urban gangs and insurgent groups. It is difficult to tackle Haiti's complex urban issues, development challenges, or political dilemmas without being confronted with the specter of armed urban gangs. These omnipresent groups are credited with overthrowing governments, silencing the political opposition, preventing foreign and local investment, creating a nascent kidnapping industry, and terrorizing entire cities. (Becker, 2010; Cockayne, 2009; Dorn, 2009; Dziedzic & Perito, 2008; Kovats-Bernat, 2006; Lacey, 2007; Lunde, 2012; Marcelin, 2011; Reed, 2011; Willman & Marcelin, 2010.)

While many narratives have been advanced about the origin of Haiti's armed gangs, most are similar in form and content to Becker (2010):

"[President] Aristide resorted to distributing weapons to youth groups (known as *bazes* or bases) in exchange for their support. Weapons provided to defend Aristide also gave the groups the wherewithal to commit crimes and dominate neighborhoods. With his departure, these gangs (which at that point were fully involved in criminal activity) quickly established control." (p. 137)

This narrative, as well as others describing the role and behavior of these groups, has shaped the character of stabilization and development activities. Assumptions about the role and influence of Haiti's urban gangs have also profoundly influenced the country's internal politics. Political parties and politicians alternate between overtly using armed urban gangs to distancing

themselves from them entirely (and sometimes doing so simultaneously). As a result, it is impossible to discuss Haiti without addressing the issue of gangs. Yet there is scant empirical knowledge about the groups, their composition, their activities, or their motivations and few researchers have questioned members about their own identity and functions (Hagedorn, 2007).

A Matter of Definition. Though the international community typically defines Haiti's armed urban groups as "gangs" and "criminal networks" (and in some cases the youth members are called "child soldiers"), Haitians see things differently. Indeed, most conceive of these groups as "political associations," "community associations," and most commonly, as "bases". For its part, the specialized unit of the Haitian National Police tasked with monitoring and reducing criminal activity generated by these groups is called the "anti-gang unit". It is specifically focused on armed urban groups in Port-au-Prince's popular zones.

Other police units as well as MINUSTAH, the United Nations Mission in Haiti, have responded to and investigated Haiti's other organized armed groups including the disbanded Haitian army (referred to as the ex-FADH) which re-formed and then occupied government buildings in recent years. In 2002 and 2003, when the ex-FADH groups first began engaging in armed combat against the Haitian National Police, there were at least four different groups of ex-FADH (collectively they were called the "Rebel Army") and most of the members appeared to be former soldiers. By early 2004 the ex-FADH groups had taken over large parts of the country. At that time, though the ex-FADH groups remained separated from each other they appeared to work in cooperation, and their membership had expanded to include recruits from other armed groups, private militias and urban gangs in major cities outside of Port-au-Prince.

More recently, ex-FADH groups appear to have coalesced into one united entity with the leaders being former soldiers from the Forces Armées d'Haïti and the bulk of their rank and file membership being comprised of young people who never served in the Forces Armées d'Haïti. Thus, the fact that these groups are referred to as the "ex-FADH" is somewhat misleading since only their leadership and a small percentage of the rank and file are actually former soldiers with the remainder being young people who support the recreation of the Armées d'Haïti.

Urban gangs are only one of several armed groups which currently or recently operated in Haiti (see Figure 2.1). Other groups include the ex-FADH (a group of disbanded Haitian Army soldiers and their followers), private militias working for businessmen and/or traffickers, criminal networks involved in trafficking and kidnapping, as well as armed insurgent groups based in rural areas which, in cooperation with the ex-FADH, ousted Haiti's president in 2004.

Armed groups which are not from urban popular zones are treated in a markedly different way by the international community and the Haitian government. For example, since 2012, groups affiliated with the erstwhile army have openly held armed marches, called well-attended press conferences denouncing the present government, and were allowed to present various demands to representatives of the international community and the Haitian government, some of which (including demands for cash payments) were granted by the current administration.

Despite some high-profile arrests of leaders, the ex-FAHD and the other insurgent groups involved in the 2004 overthrow of the elected government are widely viewed as politically motivated insurgent organizations while urban gangs are seen as criminal entities (Hallward, 2011). Interestingly the rank and file membership of these two types of armed groups is similar

in some ways, notably their reason for joining the organization and childhood experiences of family violence (see Figure 2.2).

Figure 2.1

Armed Groups Currently or Recently Operating in Haiti

Group

Urban Gangs such as Baz Labanye, Lame Ti Machete, Bois Neuf, Armee Sans Tete, Baze Solino, Rat

Ex-FADH groups such as Front pour la Libération et la Reconstruction Nationale, the Revolutionary Artibonite Resistance Front, Gonaives Resistance Front/Cannibal Army, Lambi 12 Grande Saline, and Group Zero.

Private Militias

Characteristics

Small, geographically isolated groups comprised of (mostly) young men in the urban popular zones. These groups may or may not be politically motivated and are often financially backed by businessmen. They usually engage in small scale crime including violence against those perceived to be a threat to their neighborhood, extortion from local businesses or street merchants, and local sales of contraband. Urban gangs usually provide social services to residents including assisting with medical care and burial costs, paying tuition fees for disadvantaged children, garbage collection, home repair, and the organization of social and musical events.

Group size ranges from several dozen to several hundred at each location; groups are nationally coordinated and leadership is comprised of former soldiers. Recently ex-FADH groups occupied former military bases and other government properties throughout the country and operated training programs for new recruits. Rank and file members are considered recruits; they have access to weapons and may advance into leadership positions.

Comprised mostly of men who have worked for private security companies, these groups identify with those who hire them and thus often lack group names and a sense of group identity. Private militias may engage in criminal activities including trafficking, extortion, and union-busting, though many limit their activities to security provision that is similar to - though more extensive than - that provided by private security companies. Rank and file members are regarded as employees; they have access to weapons

	and occasionally advance into leadership positions.
Criminal Networks	Also not generally identified by a particular name, criminal networks are usually regional or national and are often associated with wealthy and powerful families. These groups are involved in both legal and illegal business ventures including imports/exports, trafficking of weapons, drugs and people, the lottery, money-lending, protection rackets, and money laundering. Rank and file members are regarded as employees; they have access to weapons though advancement into leadership positions appears to be determined by familial ties.

Figure 2.2

Demographics of Rank and File Membership in Armed Groups (from Kolbe, 2013)

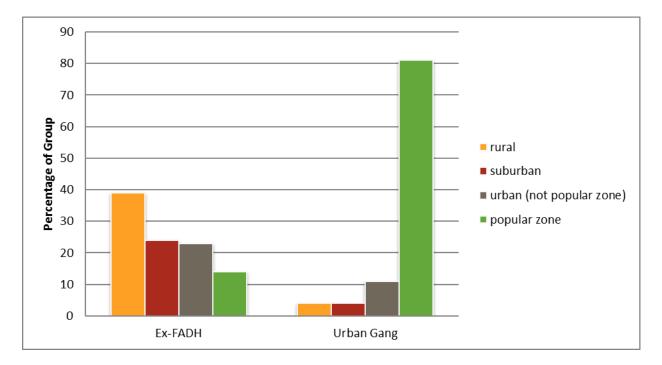
	Armed Insurgent Groups (n=88)	Armed Urban Gangs (n=432)
Mean Age	25.70 (SD: 9.44)	22.06 (SD: 8.31)
Gender	Male: 96.59%	Male: 95.83%
Mean years of education	11.13 (SD: 4.22)	6.95 (SD: 2.36)
Reason for	To serve my country: 30.4%	To serve my community: 28.8%
joining the group	To improve my life: 58.7%	To improve my life: 31.6%
Mean Locus of Control Score	8.15 (SD: 2.50)	6.98 (SD: 2.90)

Additionally, the attitude that group members exhibited about their ability to influence events in their own lives, was measured using the Rotter Locus of Control (LOC) scale, which has been widely used in international social science research (Smith, Trompenaars, & Dugan, 1995). An individuals' locus (Latin for "location") ranges on a scale from internal to external with "internals" believing that their actions determine what happens and "externals" believing

that outside forces such as a higher power, chance or an authority has control over what happens to them (Crandall & Crandall, 2013; Eckstein & Gniewosz, 2013; Lefcourt, 2013).

Figure 2.3.

Place of Origin of Members of Armed Groups (from Kolbe, 2013)

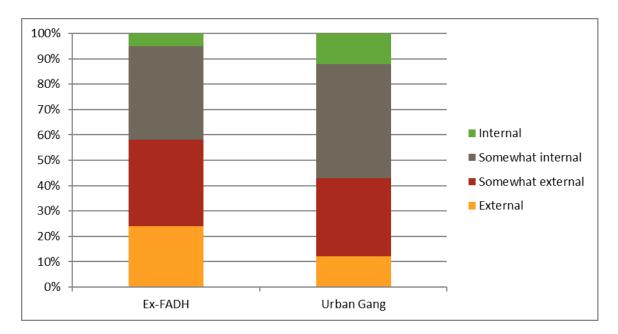


The concept of LOC emerges from social learning theory which proposed that a combination of both environmental (social) and psychological factors influence individual behavior (Oskarsson, Dawes, Johannesson, & Magnusson, 2012). Locus of control orientation is linked to engagement in political behavior such as demonstrations, voting, joining community organizations, and engaging in other forms of political and social change (Condon & Holleque, 2013; Dawes, Cesarini, Fowler, Johannesson, Magnusson, & Oskarsson, 2014; Eckstein & Gniewosz, 2013). In this case we see that members of ex-FADH groups were more likely to be

externally motivated while members of armed urban gangs were more likely to believe that their actions could impact the world around them (Figure 2.4).

Figure 2.4.

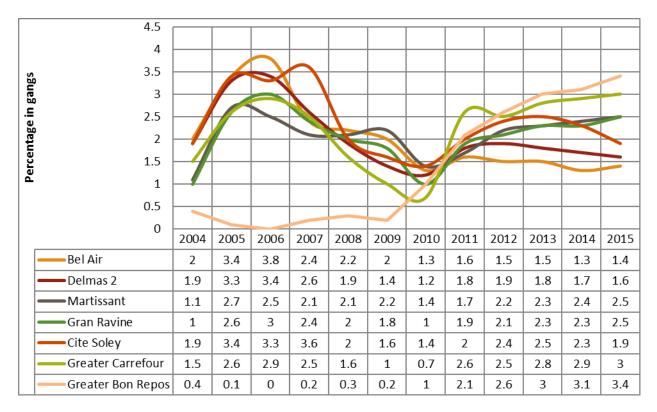
Locus of Control of by Type of Armed Group



Membership in Haiti's armed urban gangs has vacillated over the years. Figure 2.5 demonstrates how the percentage of young men aged 18-29 who are in gangs in the capital's impoverished neighborhoods has ebbed and flowed in a similar pattern over time. In the early 2000s when armed ex-FADH groups launched an insurgency against the government of Haiti led Jean-Bertrand Aristide of the Lavalas political party, many urban gangs took sides in the conflict aligning themselves with the pro-democracy/pro-Lavalas movement or the anti-Lavalas/rebel movement. After the insurgency was successful in early 2004 leaders of the interim Haitian government hailed the ex-FADH and their allies as "freedom fighters" and a period of increased political repression against the Lavalas movement began. (Hallward, 2009)

Figure 2.5

Percentage of Males (18-29) in the General Population of Selected Neighborhoods of Port-auPrince Claiming Affiliation with Armed Urban Groups



During this three year period of political repression, membership in armed groups across the spectrum increased. Both pro- and anti-Lavalas gangs actively sought funding and members. When ex-FADH supported anti-Lavalas gangs and attacked pro-Lavalas gangs, it only fueled the membership drive and accelerated violence. Crime, committed by both political actors and crime committed by opportunistic criminals, increased. As shown through observations of Haitian politics and empirical evidence demonstrated through survey research, periods of democratic crisis are frequently associated with increased crime more generally. One exception

to this pattern is Greater Bel Air (including Delmas 2): between 2007 and 2013 the relative risk of gang involvement for young men (aged 18-29) in this area decreased considerably.

Overall, the policy and research literature on armed groups in Haiti tends to be methodologically weak and analytically imprecise. There has been little field-based empirical research conducted with members of armed urban groups in Haiti. As we can see from above, even the definition of what is and is not such a group is in dispute. This reflects a larger debate among policy makers and academics about how to define gangs (Hagedorn, 2008). Competing definitions impact how and where policing as well as violence prevention and reduction interventions are carried out, and this definitional confusion complicates measurement of violence over time and obscures the evaluation of public policy interventions (Hagedorn, 2005). It is difficult to compare the few studies which have been conducted on Haiti's gangs when no common definition has been established. Moreover, most assessments do not adequately account for the fast-changing social and political dynamics or the impact that outside political forces and funder priorities have on the location, targets and parameters of anti-gang interventions. (Donais & Burt, 2015; Donais & Knorr, 2013; Dorn, 2009; Kovats-Bernat, 2000; Schuberth, 2015)

The overwhelming negative perceptions of Haiti's gangs as described by Becker is reinforced by the Haitian government, multilateral and bilateral agencies, the media, and practitioners involved in providing security and development support. Yet the stereotypes of gangs and gang members featured in the daily narrative often conflict with reality. In 2010, when 245 foreigners working or volunteering full time in Port-au-Prince on community development and social welfare projects were asked to define "gang" their answers varied considerably (Kolbe, 2013). Another similarly composed group of 250 foreign development

workers interviewed in 2005 gave wildly different answers, reflecting the push, at that time, to vilify members of the political opposition by accusing them of "gang activity" (Kolbe, 2013). Though the demographic composition, political affiliation, and basic characteristics of gangs changed little between 2005 and 2010, the perception of gangs among those who opinions influenced policy changed considerably. The word clouds below (Figures 2.6 and 2.7) represent the words and phrases commonly appearing in transcripts of qualitative interviews with development workers, with the increased font size representing increased frequency of mentions. Figure 2.6

Words Commonly Used by Development Workers When Describing Haiti's Gangs (2005)



Uncritical representations of the severity of violence in Haiti can reproduce overly aggressive policing responses and severe peacekeeping interventions. As a result, heavy handed interventions can inadvertently harm innocent bystanders, alienate residents, and contribute to marginalization of a given neighborhood within the wider society. Likewise, sensationalist

reporting of supposedly gang-led campaigns of violence and beheadings dubbed "Operation Baghdad" by the media and false allegations of terrorist connections with pro-Lavalas groups led to increasingly aggressive tactics by special policing forces and peacekeepers between 2005 and 2007. Though "Operation Baghdad" and reports of beheadings were later revealed to be rumor rather than an actual event, it is still widely believed by some to have occurred and has even been the subject of an admittedly simplistic academic study (Hallward, 2009; Kovats-Bernat, 2006; Lunde, 2012).

Figure 2.7

Words Commonly Used by Development Workers When Describing Haiti's Gangs (2010)



A similar situation has occurred, albeit on a much larger scale, with the Mara Salvatrucha (commonly known as MS, Mara, and MS-13), a street gang that originated in Los Angeles and,

as members were deported from the United States, spread throughout Mexico and Central America. This group differs from Haitian street gangs in the severity and use of force, access to firearms and sophistication of organization, but it has also experienced a similar shift towards organized crime that is seen in Haitian gangs. Poorly conducted journalism and weak analytical studies of MS-13 have led to misconceptions about the true nature and extent of its activities. In particular, journalists tend to see the group as an ultra-violent criminal organization while some scholars have produced unsupported claims of an Al-Qaeda connection (Hamm, 2009; Papachristos, 2005; Seper, 2004). These misconceptions have led to heavy handed or "mano dura" policing tactics that have, overall, been counterproductive, instead increasing social exclusion of marginalized persons and, paradoxically, fueling the growth of gangs (Miguel Cruz, 2010; Rodgers, 2009).

One of the challenges with defining Haiti's gangs is due to the evolution of armed urban groups over time. When asked to describe how gangs differed from insurgent groups, members of armed groups, residents, community leaders and development workers were in dispute about which groups were more violent and which groups existed legally but a common set of criteria nevertheless have emerged (see Figure 2.8). These characteristics can be used to (loosely) determine if a group is an ex-army insurgent group or if it is an urban gang, but they do not fully resolve the problem of definition, and thus, eligibility for traditional DDR interventions.

Figure 2.8

Characteristics of Armed Urban Gangs versus Ex-FADH Groups

	Ex-FADH Groups	Armed Urban Gangs
Location	Primarily rural with some urban and peri-urban presence; not tied to one particular base	Urban, almost entirely in the popular zones; based in a neighborhood with clearly defined boundaries
Leadership	Military structure with clearly defined leaders	One main leader who has trusted assistants
Current or Recent Activities	Training, patrolling the streets, demonstrating, policing	Provides protection for neighborhood, crime including extortion, solves local problems for residents
Origin	Created by members of the disbanded Haitian Army	Emerged naturally in poor neighborhoods where people felt threated and marginalized
Higher Authority	Wealthy elite from a particular political background who fund the groups	The group itself, the leader of the group, residents of the area, funders
Physical Appearance	Army uniforms or civilian clothes with some elements of an army uniform; tend to be between 20-40	Similar in physical appearance and dress to others of the same age group and socioeconomic background; tend to be between 15-30
Weapons	Some arms, carries weapons openly at times	Few arms, weapons rarely carried openly
Remuneration for members	Small stipend paid to rank and file members, unknown payment to leaders	Members receive what they need from the group and are sometimes allowed to keep the spoils of conflict

Another problem impacting definition relates to the use of violence. Violence committed by armed groups in Haiti is not necessarily attributed to exclusively political or economic

motivations. Rather, it is often informed by a complex fusion of the two, in addition to social factors. It is important, however, to recognize that "politicized" actors – whether aligned to state or non-state interests – are often the key proponents of community violence. As Figure 2.5 demonstrates, reported membership in armed groups varies considerably over time and geographic location. During periods of decreasing repression, membership in armed groups drops as individuals move on to other forms of political participation, leaving leftover members to turn to less ideologically-motivated activities, including crime. While crime overall decreased between 2006 and the present, it was also more frequently committed by criminals, neighbors, non-political gangs, and unknown individuals. (Kolbe & Hutson, 2006; Kolbe & Muggah, 2012)

This reflects the larger body of research on sporadic community violence. In most cases of violent outbursts worldwide, the majority of individuals in a high-risk community never actually turn to violence. However, the complex interaction of risk factors concentrated in a particular geographic area is what leads to violence amongst subsets of the population. In a modest attempt at examining why the youth of Citè Soleil engaged in violence after 2004, Willman and Marcellin (2010) conducted a household survey (N=1575), 10 focus groups, and 15 ethnographic interviews. Qualitative findings indicated that conflict is fueled by the propensity of residents to give up on trying to change things (i.e. parents reforming children and residents simply moving away). As a result, the fragmented community is unable to hold violent youth accountable. Second, some youth see violence as their only option for acquiring things they want or need. Third, youth in the survey pointed to violent behaviors learned from adult role models as a contributing factor for their actions. Ultimately, the authors conclude by pointing out that the

line between being any agent of violence and being a victim of circumstance prone to violence is very thin.

While the groups themselves evolve and the dynamics within and between groups shift over time, so does the understanding of the groups and their role in society. As Haiti experiences economic, political and social change it is not surprising that the definition and perception of gangs also changes. At times it is difficult to distinguish gangs and gang-related activity in Haiti from organized crime and criminal networks – a problem encountered in other countries as well. It may very well be that in Haiti, gangs and organized criminal networks are not mutually exclusive and can only be distinguished by their current complexity and degree of integration with within a geographically specific community. (Papachristos, Hureau & Braga, 2013)

How do Gang Members Define Themselves and Their Conflict? To better understand how DDR programs attain success, we must first understand the perception gang members have of themselves and their activities. During 2009 and 2010, 432 members of armed groups participated in a series of qualitative interviews with a research team from the Small Arms Survey examining their role in the development of their community and their relationship with residents, the government, international bodies and one another. A focus of the discussions was on whether or not hostilities during the post-coup period (2004+) had reached the level where they could be considered a gang war. They thought that including armed violence between urban gangs in the definition of war would increase the number of those eligible for services under DDR programs. Facilitators began part of the discussion by explaining how social scientists determine if an armed conflict tips over to war. Participants were then asked to reflect on current

and recent conditions to evaluate whether the situation had at any point approximated a gang war.

War was defined for participants as the contentious use of lethal violence by "combatants" composed of at least two organized groups, states or other organized parties. The use of war is strategic and instrumental; actors that engage in war have specific aims that they believe are most expediently achieved through armed conflict with another organized group or state. War is not new or accidental. War is a learned behavior deliberately used to achieve a particular end. When human beings are able to develop peaceful alternatives to war, it will cease to be used to resolve political problems. This definition of war, incorporating elements of definitional terms and aspects of war from multiple classical sources in the political science literature, was provided to participants in both an oral description and in written form.

War as violent activity with participants. Participants discussed each aspect of the definition of war individually. War has alternately been described as a "state of being", a "contest of wills" and as a "continuation of politics by other means (Clausewitz, et al, 1989). Interviewees discussed whether in order for a situation to be considered a war, it must involve actions or whether periods of political repression or a "war of words" that proceeded periods of intense fighting were also considered war. Are all wars comprised of a series of events, some of which involve armed combat or the use of weapons against combatants or both combatants and the civilian population? In response to this question by the researcher, the discussions included, but went beyond, international legal norms such as the Geneva Conventions, that are used to define war. Participants raised additional questions as well: If there

is no fighting, can it be said to constitute a war? If weapons are not used, is it war? If armed violence is only carried out against civilians, is it a war or is it a massacre?

All members of armed urban gangs interviewed in the study agreed that wars needed to involve a high degree of violent activity. While they agreed that the use of the term "war" to characterize ideological and social campaigns is useful to raise political awareness (for instance, to say that the political opposition is waging war against a group in the media by spreading rumors and making fallacious allegations), such actions are not actually wars. There was some dispute over whether armed violence against those who were unarmed, unable to defend themselves or unwilling to respond with violence (including non-violent urban gangs), constituted war. As one 19-year-old said:

"At different periods we decided not to fight back [when we were attacked]. That doesn't mean that the other side wasn't at war with us. They were at war. They were waging a war on us. But we didn't have the political capital to fight back so we rested and waited until another time to respond... We can't say that that year was a year of peace. It was still a year of war."

Other gang members pointed out that urban gangs are often unarmed because guns and ammunition were difficult to obtain in Haiti and that during times when groups were unarmed, state actors still engaged in violence against the gang and their communities.

"In 2003 and 2004 we didn't have any guns. But the foreign military, the police, everyone was doing a war on us. They came here, shooting all over the place. Many, many people were killed. They said we had guns when we didn't and they used it as an excuse to massacre us."

Another gang member agreed:

"I can say that for the year or two after [the February 2004 coup] we were defending ourselves with rocks. I didn't have a gun. None of us did. A rock was my weapon. It might not have been a war, but it felt like it." A 25-year-old from Martissant put it this way: "When I don't have weapon with which to defend myself, if my zone is attacked it is still a war. It's a just a war that we're going to lose."

Are gang members combatants? The difficulty of distinguishing gang members and combatants poses a challenge to DDR programs, since these definitions influence the target population of an intervention. During the Small Arms Survey interaction with members of armed groups, an oral translation of the Third Geneva Convention was provided. This document defines a combatant according the third Geneva Convention. A combatant is a person who conducts military operations according to the laws and customs of war, is part of a chain of command, wears a fixed distinctive marking visible from a distance, and bears arms openly. (International Committee on the Red Cross (ICRC), 1949)

There was disagreement between the gang members over whether gang members were combatants or not. Some gangs followed a strict chain of command while others stated that their groups were more loosely organized. Every gang member who participated in the Small Arms Survey study agreed that gangs had leaders and those to whom they were accountable (these included funders – usually wealthy businessmen – and communities as well as "ideals" such as democracy or patriotism). Both leaders and members of armed urban gangs pointed out that the chain of command is often porous and that in all armed groups – both state and non-state ones –

the rank and file may answer to more than one authority. One low level gang leader put it this way:

"We have always gotten money and political support from the [name of wealthy business owner]. So we are accountable to him. You can say that he's at the top of our chain of command because all he has to do is call my cell phone and [closing phone] that's it! I do what he wants. I send my guys out to take care of the problem. He has an issue with his employee, someone is stealing from him, or there is someone in competition for his business, we take care of it.

"But I'm still the boss and I still have a boss. Maybe my boss and [the businessman] disagree and [the businessman] wants us to take out someone, but my boss doesn't want to do that because it's someone we know or have an agreement with. Then my boss gets his way and we lie [to the businessman] or suggest another solution... In the army they had the same thing. A soldier answers to his commander but the commander might be friends with this general or that other politician and so even though the President thinks he's calling the shots, he isn't really at the top of the chain of command."

Another gang member put it this way:

"A man is not a dog. We don't have just one master. We answer to our boss but we also answer to God. We answer to our beliefs. The conflict happens with the guy above you says to do something and you have another master. Maybe your master is the Church. Or your family. Or your beliefs, like you want democracy or you are patriotic. If one order violates the order of the other master, what do you do? Who do you follow?

This is a dilemma we all face, even the police, MINUSTAH [UN peacekeeping] soldiers and the [disbanded Haitian army] – everyone has this problem."

Gang members who participated in these conversations did cite a number of problems with the criteria listed in the Third Geneva Convention. Many noted that this criterion defines combatants as those who follow the laws and customs of war while some "combatants" in Haiti do not.

"If the police rape our women, that's not following the laws of war. But the police are the same as soldiers."

"Sometimes we don't follow the customs or laws of war. Sometimes we steal.

Sometimes we don't respect the rights of the residents [of this zone]. But that doesn't mean that we aren't fighting a war... We are more likely to violate the laws of war by doing crimes against the population when we are in war than during times of peace.

Sometimes this is just what the circumstances call for and we are forced to steal from the people."

"MINUSTAH [The UN Mission in Haiti] and the PNH [Haitian National Police] those are the combatants we were at war against in 2005. So when the foreigners and the police killed children. Killed women. Raped people. Kidnapped people. Tortured people. When they did this, wasn't it against the laws of war? So what do we say about this? Do we say they are not combatants even though they have uniforms and they follow command?"

"When the customs of war violate the laws of war, then I say it is still a war."

"Instead of saying it is a war because the soldiers meet these criteria; we should say it is a war when the soldiers are doing military operations. Because you can have an army that is in reserve for when you are attacked. Right now we are not at war, but I say that [name of gang] is our army."

One interesting discussion appears in the transcripts of more than half of the interviewees; this was whether private security companies hired by businesses and wealthy families, and sometimes deployed as private militia, meet the definition of combatants. Gang members agreed that although individual people may be the ones engaging in violence, they must be doing so on behalf of an organized group, party, nation or state. Lone individuals committing acts of violence, no matter their motivation, are terrorists or criminals, not soldiers. The debate emerged about whether individual private security guards engaging in violence were combatants, even if they were not acting within a group.

"A private security guard is a mercenary. He does whatever the guy who hired him wants, even if it's illegal. He is part of a chain of command. He wears a uniform and he acts on behalf of the bourgeois."

"When a company turns their private security into a militia to protect their business interests, it is a crime. For a business to do violent acts to protect the interests of the business, this is against the laws of our country."

"If we say that the private security hired by the business is not made up of combatants what do we say when the business gives money to [name of an urban gang] to protect their business? Then is [the gang] comprised of combatants while the private

security workers are not defined as combatants? For me, I would say that if they are killing people then they are both combatants."

Gang members were split over whether private security guards could be considered combatants or not. Most agreed that while historically their groups had been at war, they were not currently at war. This was one justification for rejecting the designation of 'combatant'. However, others pointed out that though the past year has been relatively peaceful in comparison to previous ones, that the groups are still organized to respond to violence when it threatens their community, making them the equivalent of a "reserve" or "standing" army (one young man defined his group as a "public community security force" in contrast to the private security forces hired by businesses and wealthy families).

Even though it is a prerequisite for participating in most DDR interventions, accepting the designation of "combatant" is complicated by other issues as well. Gang members participating in the Small Arms Survey study pointed out that some gangs have complicated and formal methods for inducting members while others are more loosely associated. Nearly all agreed that interpersonal relationships and a high degree of trust is necessary for an individual to be a member of a gang, leading to some uncomfortable situations in which individuals whose families are not well known in the area are labeled as "non-members" by both residents and gang members, despite having the same function and responsibility as group members.

If gang members are defined as combatants, another problem emerges as well: how do we define those individuals who are not members but provide essential services for the armed urban groups? Are they members of the armed group? Are they eligible for DDR services? All of the gang leaders interviewed stated that numerous non-member residents provided services for

the group including support services (e.g. cooking, delivering messages, taxi rides, etc.) and work tasks that were illegal (e.g. collecting protection payments from small business owners and street merchants, being a guard or lookout during a crime, hiding stolen property, etc.). During interviews there was consensus among both residents and gang members that such individuals are not members of the urban gangs, however, under Haitian law simply associating (even as friends) with gang members is an illegal activity and puts these residents who provide support services at risk of arrest.

Another justification for rejecting the term "combatant" was that group members did not agree that they were organized in the same way as an army and that they do not openly bear arms. Some stated that they were organized for political change and that the violence was used against their group, any responses were self-defense and that the group itself was not organized with the purpose of committing violence or crime.

How do residents define gangs? Residents of popular zones have a complicated relationship with armed urban groups. Those that are more predatory inspire fear and disgust from residents while those armed urban groups which provide protective, advocacy and social services to residents are spoken of with respect and admiration, albeit with some apprehension as well. As one resident of Bel Air put it:

"The guys from [name of gang] are like the mafia that you see in the movies. You have a problem with your business or some guy is bothering your wife, you can go to them. They'll back you up. They'll help you out. But you don't want to get on their bad side either."

Members of the gangs are defined by residents based on the behavior of the group as a whole rather than on the purported aims of the group or what the group members say about their objectives. Gangs that have a political bent or history are comprised of "militants" while those which engage mostly in crime and intimidation are referred to as "criminals." The term "bandit," widely used in reference to people arrested and accused of gang affiliation during the post-2004 coup period is eschewed by ordinary Haitian citizens.

"The word 'bandit' is like 'chimere'," explained one Delmas resident, referring to the derogatory term used against young men in the city's poverty-stricken popular zones suspected of supporting the Lavalas political party, "You say it to defile the person. A 'bandit' in [the government's] eyes is someone from the popular zones, someone from the pro-democracy movement, someone that is a threat to the establishment, or someone you can call a criminal so you can arrest him for malfeasance and keep him in jail without a trial. To call someone a bandit, used to mean they were criminal, but now it's a word that's used so much against people who are not criminals, that it has lost any meaning."

When presented with the same material reviewed by members of urban gangs who participated in qualitative interviews, residents overwhelmingly disagreed with the assertion that gang members are combatants. Most stated that they were ordinary residents who were either criminals or were forced to defend their neighborhood against real and perceived threats. The organized aspect of urban gangs was minimized by residents who pointed out that gang leaders hold positions of leadership because of interpersonal power relations, not because they are commissioned or authorized by a higher authority. Many residents also noted that though gang members may own weapons they generally own fewer weapons than wealthy Haitians and they

are often unable to bear arms openly because they don't have the funds or connections to obtain a gun permit.

The nature of the conflict. Residents and members of urban gangs were asked to decide what characteristics were important for defining a conflict as a war. During the course of interviews key themes emerged including the type and severity of violence in proportion the provoking event, the justification for the use of violence, the relative authority of those using violence, and the intention behind the use of violence.

Interestingly, all four themes reflect ideas within existing scholarship on just war. The discourse on just war balances two separate but related dimensions: the right to go to war and the lawfulness of conduct in war. These two dimensions are independent, in that an unjust war can be fought in accordance with the rules of just war and a just war can be in a way that violates the principles of just conduct in war. The justness of a war is usually the burden of the state (or, presumably, the insurgent group initiating the war); the justness of conduct during the war is the burden of the combatants and those leading them. The criteria used to determine if a war is morally and legally defensible is *jus ad bellum. Jus ad bellum* includes at least six separate criteria, each of which must be met to be a just war – all of which were raised repeatedly during interviews with gang members.

Types and severity of violence. The criterion for proposed DDR interventions is usually set out in a Request for Proposals (RFP) written by the funding agency. The RFP includes a summary of the type and severity of violence experienced by the community during the conflict. Generally the RFP solicits DDR intervention projects which respond to their understanding of the scope, type, and severity of violence during the conflict. This is key because implementing

partners may shape their DDR intervention to respond to the funder's perception of the type and severity of violence, rather than the needs of the actual community. The RFPs examined during a desk review of DDR project proposals considered for the Small Arms Survey study and this dissertation research included both confusing and inaccurate information about the type and severity of violence during the conflict period.

The type of violence experienced by urban Haitians has differed in recent years, as has the perpetrators. While police and non-state actors including members of ex-FADH insurgent groups were blamed for half of all murders and nearly a third of all sexual assaults in 2005; they were assigned responsibility for only five percent of murders and less than one percent of sexual assaults in 2012 (Kolbe & Hutson, 2006; Kolbe & Muggah, 2012). Port-au-Prince residents were significantly less likely to be arrested without being charged, exposed to tear gas, and beaten by state agents or accidently shot in 2012 than they were seven years earlier (Kolbe & Hutson, 2006; Kolbe & Muggah, 2012). But when one examines residents of the popular zones where conflict between competing gangs created regular street fights, it becomes clear that residents are actually more likely to be murdered in the post-DDR period than they were in 2005 (Kolbe, Puccio & Muggah, 2011). Living in popular zones is becoming increasingly dangerous for residents, in large part because of an increase in homicides tied to gang conflicts which emerged after the January 2010 earthquake (Kolbe & Muggah, 2012).

In order to understand the reasons why this is the case, some context on the post-2010 earthquake is needed. In the immediate aftermath of the disaster the vast majority of residents stopped sleeping inside their homes; those that had yards or lived in neighborhoods with lightly traveled streets slept in tents or under the open sky near their own house. But people living in

densely populated areas often lacked yards or shared their yard with multiple families. These popular zones also lack sufficient roads, and have narrow dirt paths forming chaotically organized corridors between buildings. The absence of a yard was one of the strongest predictors of which households ended up moving into Internally Displaced Persons (IDP) camps. Those without yards were, in general, the city's poorest and most marginalized residents. (Kolbe, et al, 2010)

As households relocated to new neighborhoods, moved between various IDP camps, and resettled in new homes (often in different areas of Port-au-Prince) existing social networks which provided a protection against crime were disrupted. Individuals who previously were protected from some types of crime by virtue of their residence in a neighborhood where a particular gang was active suddenly became vulnerable to crime. New neighborhoods and "cities" were created, such as the Corail IDP camp where hundreds of thousands now live on an isolated and windy desert plain near the city's garbage dump. To fill the void, new gangs were formed and old gangs split, created new alliances, and took over territory formerly controlled by other groups. Boundaries which had been solidified by years of fighting, negotiations, threats and alliances became porous.

At the same time, the rapid influx of money into popular zones and IDP camps further disrupted existing social networks. Development efforts spearheaded by NGOs, foreign governments, MINUSTAH, and religious organizations pumped cash and resources into neighborhoods, often with little accountability or thought to how the money might influence the political, economic, and socio-cultural environment of the community. Many groups, and even some gangs, formed neighborhood associations and applied for funding from foreign entities.

In one neighborhood a successful "cash-for-work" program where youth removed rubble and cleaned canals was run entirely by a local gang. A leader of the group, who had previously been deported from the United States and thus wrote in English well enough to complete a grant application, suggested that the gang created an association so they could apply to a faith-based charity for funds. The gang/association was awarded a USD \$50,000 contract which they used to employ several hundred youth for five months. Because they used the money judiciously and spent little on administration, the group was able to keep the program going for three months longer than they were required to do in their contract.

However, not all groups and leaders were as responsible as the abovementioned gang. Corruption, nepotism and exploitation (sexual and otherwise) of residents were rife (Klitgaard, 2010). Many international organizations wanted to do work in poor neighborhoods but lacked the necessary contacts or language skills to navigate the process (Schuller, 2007). More often than not, mobilizing funds to people who used them well occurred by default rather than design. The sudden surge of cash and access to resources gave some groups -- both gangs as well as other community groups -- and individuals new forms of power; community leaders who had previously been able to advocate for the neighborhood or were a bridge between gangs and the rest of society were suddenly voiceless. Despite official positions by many international organizations prohibiting interaction with gangs, most NGOs and development projects did end up negotiating, working, or forming informal relationships with gangs. Some gangs that had been weak before the earthquake became stronger due to covert relationships with corrupt NGOs and development workers, emboldening their members to engage in violence aimed at expanding the group's reach. (Griffin & Persad, 2013)

Proportional use of violence. According to jus ad bellum, conflict should be waged only if there is the serious likelihood that it will be successful. War should be not be used for futile causes. Any armed conflict should have reasonable probability of success without the use of disproportionate force. If disproportionate force must be used to assure a likelihood of success, than the war doesn't meet this criteria. Macro-proportionality is also important. The benefits that will emerge from war must be greater than whatever costs the war will generate for the civilian population. And war should only be used as a last resort, after all efforts at peaceful settlement have been exhausted and negotiations breakdown. This can be an arduous process involving threats, promises, and intervention by multiple actors. Strategies such as economic sanctions and blockades should, in principle, be used before war (though some political scientists and policy makers disagree with this perspective) (Barker, 2009).

Members of armed urban groups overwhelmingly agree that while the use of violence should be in proportion to a threat against the group or its community, the amount of force used and the severity of violence with which conflict is waged in Haiti is rarely proportional to the reality of the situation. One gang leader discussed a 15-month armed conflict between the police, foreign troops acting in concert with the police anti-gang unit, and the gangs in the area of Bel Air. Reports from journalists and human rights workers indicated that U.S. marines and Haitian National Police engaged in unprovoked attacks against civilians in this neighborhood while attempting to find and arrest suspected supporters of the Lavalas, the political party to which the overthrown president belonged. After a number of bystanders were shot by U.S. marines in early 2004, Haitian radio stations began reporting that weapons and ammunition caches used by gang members against the police were hidden in the neighborhood.

At the time, gang leaders publically stated that they were in possession of few weapons and no ammunition:

"Looking at the events I see all the steps that the Americans, [President] Latortue, and then MINUSTAH took in their war against Lavalas. Their response was an overreaction to the reality. But by overreacting, they created a new reality so that the threat looked greater than it was and this justified the level of their violence.... In turn, [another armed group] responded with violence and that started a cycle that went on for, I don't know, a year?

"The foreign military blocked our neighborhood. You couldn't get in or out. They made threats against us in the media. They also made promises of peace and municipal services if we turned in our weapons. The problem was that in justifying the initial violence against [Bel Air] and making an excuse for shooting our women and children, they created an illusion that the benefits of violence against us out-weighted the costs of accidently shooting a few market women. It was a no-win situation for us. So we had to fight back, even if we were just fighting with rocks."

Other gang members interviewed for the Small Arms Survey study agreed that disproportional response is often linked to cyclical violence by armed gangs:

"When we fight [another armed urban group], the violence we use against this is a lot more than they used against us. Say, for example, that I come into your zone. And don't have good relations. So you beat me up. And then my guys go and use a knife to cut someone in your zone. Then you come back and shot my girl. So I send my friends out and they kill two of your friends. It keeps going and going."

"I think that all confrontations using guns involve more violence than is necessary. The Americans didn't need to invade the whole Middle East to kill Sadaam Hussein. The PNH [national police] don't need to shoot everyone in a house when they come to make an arrest. We don't need to go after everyone in neighborhood when we have a problem with one person. When someone has power and they can use as much force as they want, that's what they do. They have the strength to do it so that is what they choose. Then, when the other side responds they will use the maximum violence possible."

The authority of those using violence. Jus ad bellum requires that those waging war must have the proper authority to do so. This authority is often established through international institutions. An institution such as the United Nations passes resolutions which authorize intervention by member states, though there is debate about how much support within the UN is needed for action to be taken (some have argued that if the security council passes a resolution with key members abstaining or opposing then proper authority hasn't necessarily been established). States should avoid taking unilateral action, as this can be construed as an attempt to circumvent establishing proper authority before intervening.

But how does this apply to the Haitian context? Did insurgent groups such as the Cannibal Army have the right to initiate a war? And what about an armed urban gang? Since DDR efforts are designed to target those who have the right to initiate war, should armed urban gangs even be included? These questions were posed to residents and members of armed groups to better understand the context within which DDR was being implemented.

Residents and members of armed groups interviewed by the Small Arms Survey research team were in marked disagreement about who has the authority to initiate a violent conflict. Two thirds of the members of armed groups interviewed were in favor of non-state actors such as gangs, having the right to initiate a war as long as they were organized and politically motivated while less than 3 per cent of residents agreed with this assertion. Where the two types of interviewees did agree was in relation to the authority that a gang exerts to protect its neighborhood. Nearly all gang members and two thirds of all residents interviewed thought that if a neighborhood is attacked by a state actor or foreign peacekeepers than the gang has the authority to respond on behalf of the neighborhood. Some residents went so far as to call defense of the neighborhood a "duty", and said "I don't like the behavior of those guys [in the gang] but if the police come in here shooting, [name of gang] has an obligation to protect us."

One resident explained the difference in gang's authority to engage in armed conflict on behalf of the neighborhood like this:

"If the government comes to hurt us, then [name of gang] is like our security guards. They have to protect us. But if [name of gang] gets into a conflict with [another gang from a different area] then their conflict is likely personal or it is regarding their crime. So when [that other gang] attacks us to punish [the gang in our neighborhood] we get resentful. They don't have the right to force us into a fight between thieves. But they do have the right to defend us if we are targeted by [the government]."

Intention behind the violence. According to jus ad bellum, the use of violence must be done with just cause; action should be taken if it is to save innocent human lives that are in immediate danger whose lives would be lost without an intervention. Intimately related to "just

cause" is "right intention". Just wars are not for economic interest or out of revenge. Though it is possible for a war to be waged for a just cause, but without a right intention, for instance, when human life is in danger, but the intervening actors would not intervene unless they received some other benefit. But ideally armed conflict should be initiated when the intention is to save innocent lives. (Stahn, 2007)

"I only hurt people to protect my own people."

"Some [gang members] delight in violence. They like the smell of blood. We don't want those kind of people in [our gang]. If you kill someone it should be a rational decision. You shouldn't kill someone because you get hot and you want revenge."

"We can say that when [there was armed fighting in 2005] this was a war because it was for defense. Wars are about defending yourself, your family. When people start something because they want [to expand the geographic boundaries of the gang's territory] that is not defense, so it's not a war. It's greed."

"It is only a war if you do it to better the lives of the people. A crazy person does a war just to make others suffer."

Clarity on the intention behind violence is helpful in structuring the content of DDR interventions. If violence is initiated because members of armed groups feel a strong need to protect their neighborhoods and members from other armed groups, or from police, then understanding then DDR efforts may need to include community-level interventions such as peace accords between neighborhood gangs and the police. This strategy was employed by the Brazilian NGO Viva Rio in the Bel Air neighborhood of Port-au-Prince. Each month in which there were no murders committed in the zone resulted in each party to the peace accord (gangs

and police) being offered incentives including primary school scholarships to give to their supporters.

If the intention behind the violence stems from anger, revenge, hate, bias, or a similar "thirst for blood" (as one former gang member but it), then DDR projects may need to include components that address psychosocial aspects of interpersonal relations, self-control, anger management, or similar skill-building or coping interventions. Without a clear understanding of the intention(s) behind violence, policy makers are left creating a DDR Request for Proposals (RFP) that includes only what they suspect are the reasons for the violence, rather than that which is actually expressed by participants in the violence.

Weapons of war. Schelling (1966) points out that an essential component of war is the power to hurt, basically the ability to use lethal force against your enemy. Similarly, for Cicero (1913), the acts of war are those in which weapons (axes, swords, pikes and the like) are used to kill. The weapons used in war are not limited to firearms; other weapons which have the power to hurt are also included under this definition. Bombing, even when no solider ever sets his foot on enemy soil, is still war. So too was primitive warfare where battles were fought with sharpened sticks, rocks, or by hurling fire at ones opponent (Weir, 2005).

Weapons need not directly and immediately kill in order to satisfy this definition. For instance, the use of gas that disables and potentially kills, or poisoning the water supply used by your opponent's military would also be an acceptable "weapon" under this definition. Similarly, the weapons used must be capable of killing; if only flash grenades and Tasers are used in battle then it's not a war (Schneider, 1997).

Contrary to the assumption that members of armed urban gangs are actually armed, individual gang members often lack weapons, and gangs as a whole possess fewer weapons per member than those owned by upper income Haitian families. Rocks, knives, fists and feet were the most commonly used weapons in physical altercations initiated by gang members. Many gang members noted that the perception that the group is armed is what gives them an advantage in conflict. Interviewees in the Small Arms Survey study noted that toy, water, paintball and airsoft guns (with the orange safety cap pried off) were commonly carried by members to give the impression of being armed (Kolbe, 2013).

"I'm one of the old guys here. I'm 35 and I haven't had a gun in ten years. I lost my gun when I got arrested. I haven't had once since. I don't need one because I have the reputation of carrying a gun in my pants... If I ever did need to shoot someone, I could go get a gun. But for right now, why do I need a gun?"

"You don't have to actually have a weapon; you can just make then think you have one. If you put your cell phone in your pants like this [demonstrates] then they think it's a gun and that intimidates people."

"The only weapon I have used is a rock. I didn't like using it because it makes the violence too intimate. I would prefer to use a gun but I don't have the money to buy one."

"Once I pointed a [toy gun] at this guy and he handed me his wallet. I was just joking around. I gave it back. But I didn't forget that incident because I see that the belief I am armed is what makes me strong."

"I have a gun. It's an old one that I got from my father. I knew that [name of another gang] was invited to this [interview] so I brought it to show them. [laughter] The

guy at the door made me lock it in the closet before I could come in. [laughter] It isn't loaded. The bullets are pricey! I have to pay for my boy's school fees so I can't buy any bullets. But when he grows up I want to teach him how to shoot and give him my gun. When you have a gun you just feel like a man."

Gun ownership in general is remarkably low in Haiti. When asked in 2009 whether or not they held a weapon, 1.9 per cent of Port-au-Prince area households reported owning firearms. (Kolbe and Muggah, 2011) This increased to 2.3 per cent in 2010 but dropped to 2.1 per cent by 2013. (Kolbe, 2013). This is considerably less than the percentages given by MINUSTAH and other international actors in 2009 and 2010 who estimated that 8 to 22 percent of all households are gun owners (ICR Haiti, 2015). Poor households and those in popular zones were much less likely to own a gun than wealthier households and individuals from other parts of Port-au-Prince. (Kolbe & Muggah, 2013)

Surprisingly, gang members are no more likely to own a weapon than other residents of their neighborhood. In fact, gang members are significantly less likely to own a gun than a middle or upper-income person of the same gender (Kolbe & Muggah, 2013; Short & Hughes, 2006). There is no statistically significant relationship between gun ownership and political involvement, a family history of gang membership, or current membership in any armed group (Kolbe, 2013).

The lack of guns poses a unique challenge for DDR programs and their participants since the first step in entering DDR is usually the voluntary, and often ceremonial, disarmament of the insurgent groups. If gangs members are not armed and do not produce weapons during the disarmament period, it may appear that armed urban gangs are refusing to fully comply with

peace accords or other agreements by refusing to give up their guns. During the 2004-2007 period, armed urban groups responded to the "disarm or die" campaign and other efforts to force, coerce, or cajole disarmament by turning over a few unusable or older weapons. Most study participants said that urban gangs retained roughly half of their weapons stock, but that a gang of 50-100 members usually only had four or five weapons to share.

Participants in the Small Arms Survey study were under the impression that turning in a gun was a perquisite for participating in DDR. Whether it was, informally demanded or was a formal part of the DDR process in Haiti is unclear. Official documents state that any member of an armed group could present himself at the program office and request to be placed in the DDR program. However, more than forty interviewees in the Small Arms Survey study said they were told by Haitian DDR office staff that they could not enter the program without turning in a weapon or being "referred" by a United Nations staffer.

How do we understand the scope and intensity of the conflict? Though there will continue to be debate about the definition and characteristics of Haiti's armed groups, it is still possible to try to understand causes, effects of and alternatives to armed urban conflict.

Understanding the scope and intensity of the conflict assists policy makers in creating and evaluating DDR efforts and helps us understand why and how some intervention components are needed more than others. Creating a model for measuring the scope and intensity of the conflict is one step towards the experience of what Cicero (1913) called "contention by force." A common definition for these groups and their conflict is still essential, but towards that end, so is an understanding how we can quantify the nature of the conflict created by such groups. Ideally,

this should have been resolved before DDR efforts began so that a country level or regional level measure of success or failure of the DDR efforts could have been established.

Residents of popular zones, community leaders, development workers and members of armed groups have all identified common themes which can shape a model of conflict scope and intensity. This includes the structure of the group and its relationship to the community and other groups, the types and severity of violence used, the intention behind the violence and its proportion in relationship to provoking events, and lastly, the nature of the battles and weapons themselves.

Researchers have favored murder or death rates over economic costs studies, medical care utilization rates, or responses to clinical measures during household surveys as method for quantitative study to determine the scope and intensity of conflict. Before, during, and after rates can be compared. In DDR evaluation efforts, murder rates are often an easy to use quantitative indicator of success. For example, the research department at the Brazilian NGO Viva Rio has used murder rates in favelas (both those that participated in peace accords and those which did not) along with murder rates in their invention zone of Greater Bel Air (in Port-au-Prince) to demonstrate the efficacy of their non-traditional DDR efforts. Decreased murder rates can be used to demonstrate DDR success on the community or group level while high murder rates in non-participating communities can be used to illuminate the need for DDR programming or to lobby policy-makers for increased DDR funding.

Comparing murder rates. One seemingly easy way to determine the scope of the conflict is to look at how many people have died, how they died, who killed them, and where they were killed. In Haiti, murder rates are clearly associated with increased gang activity during some key

periods. As groups engage in street battles, the number of those killed (intentionally or unintentionally, as in the case of bystanders) goes up, so too do criminal murders as the focus on the gang's conflict (gang vs. gang or gang vs. state actors) consumes much of the group's time and energy, opening the space for opportunistic crimes by non-members against residents who are normally protected by the gang. Household survey research has been successfully used to estimate crude murder rates as well as to establish the frequency of perpetration by various groups, the methods used for killing and the place of the murder. However, it is unclear how many deaths are necessary to tip the scale from ordinary levels of crime to a state of emergency or from a state of prolonged conflict that is not war to a state of something that is war.

Small and Singer (1970) set the bar at a thousand battle deaths. But this creates two serious and related problems. First, it defines war in such a way that the measure of the cost of war is intrinsically linked to its definition. This creates an inferential problem if a scholar wanted to research what causes wars to be more or less costly as the inclusion criteria for wars will be armed conflicts that have a particular cost. Secondly, Singer and Small only included battlefield deaths in their definition. Not only did they limit the deaths to those occurring among soldiers, but they also limited the deaths to those as a direct result of combat.

Wars are messy. Rousseau (1762) was one of many who pointed out that combatants are not the only ones killed in war. In fact civilians frequently bear as much or more of the costs of war as do soldiers. Some estimate that as many as 100,000 civilians have been killed thus far in the Iraq War (Burnham, et al., 2006). An estimated 3.9 million were killed during war in the Congo (Coghlan, et al., 2006). In Haiti, 8,000 people died in the capital the 22 months after the main events of the 2004 civil conflict, far more than the several hundred who were killed on the

battlefield in the years of rural fighting by insurgent groups which preceded the overthrow of the government.

Combat is not the only way that soldiers die. Combatants are killed in accidents, friendly fire incidents, and by preventable illness. In 1918 half of the American soldiers who died in Europe were killed not by a bullet or a bomb, but by influenza. In 2010, for the second year in a row, more American soldiers committed suicide (n=468) than the number of those killed in battle (n=462). It is clear that war kills both civilians and soldiers and it kills both on and off the battlefield. Taking all of this into consideration, any discussion on the definition of war cannot simply be based on battlefield deaths. Though war is violent and through it people are killed, the definition of war proposed in the Small Arms Survey study requires only one death of a combatant. This opened the door to further study of the true costs of war, study that won't be limited by the bias in Singer and Small's definition.

Definitional Issues in Haiti.

Clearly, the narrative that has dominated the discourse on Haiti's gangs is overly simplistic. The research that does exist on Haiti's armed groups demonstrates that complexity of gang identity, roles, functions and the impact on stabilization and development activities. The role of the media, political groups, financial backers and the international community further complicates efforts to understand and address gang violence as researchers strive to unpack how conflict tips the scale from "ordinary" violence to war.

Haiti's armed groups are heterogeneous. Despite similarities among the rank and file membership, motivation and relationships – both personal and historic – play a large role in motivating individuals to be active with and within armed groups. Differentiating between

groups is key for policy makers working in the DDR arena as the motivation and relationships influence both the success of community violence reduction efforts, as well as the success of security and policing efforts. The lines between groups are not always easy to distinguish and in the past, misunderstandings about the political affiliation, financial backing and access to resources of particular gangs has hampered stabilization and development efforts.

It should also be noted that the perceptions, functions and activities of armed groups change over time in Haiti. Efforts to establish democratic governance and the presence of foreign peacekeepers have had a profound impact on the development of gang violence in urban Haiti, with membership in gangs and other armed groups increasing during times of government repression. It is important to note the shift in how armed groups are viewed by residents and development workers as well as also how they viewed themselves. The use of generic and allencompassing concepts such as "gangs" may obscure rather than reveal underlying motivations.

Armed groups in Haiti have comparatively sophisticated understandings of the basic rules of war, even if not described as such. Indeed, there are established understandings about the use of force, proportionately, authority structures and other factors. The experience of such groups in Haiti forces us to revisit our understandings of "tipping points" from conflict to war and our understanding of who should participate in DDR efforts.

In the next chapter I expand on this discussion by tackling the relationship of DDR to peacekeeping efforts. I begin with a review of DDR preconditions, processes, and theoretical underpinnings. I discuss the history of DDR in Haiti as part of the Security Sector Reform (SSR) process. I also discuss the role of DDR in the larger peacemaking and peacekeeping process in Haiti as well as the current status of DDR efforts.

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Chapter 3: Disarmament, Demobilization and Reintegration

A brief review of Disarmament, Demobilization, and Reintegration (DDR) is useful for understanding the significance and content of this study. In this chapter I will begin by providing an overview of DDR including the preconditions for DDR and the role that DDR plays in the larger peacemaking process. Next, I go on to give a short history of DDR efforts in Haiti, particularly efforts to reduce crime through DDR in conjunction with Security Sector Reform (SSR). I end by discussing the current status of DDR in Haiti.

DDR in the Peacemaking Process

DDR is becoming an important part of post-conflict peace resolution; it has emerged as an essential feature in peacekeeping operations during the last 20 years (Dupuy & Peters, 2010). DDR is not only an important component of peace stabilization; it is also vital for the long-term economic development of the country (Spear, 2006). The first D in DDR is disarmament: the collection, control, documentation and disposal of ammunition, explosives, small arms and other weapons controlled by the combatants and, sometimes, civilians (Jackson, 2015a). The second D, demobilization, is the formal and controlled disbandment of combatants from insurgent groups or armed forces (Lebow, 2014). And lastly, reintegration is the process by which the excombatants acquire civilian status, a sustainable livelihood, and permanent community-based housing. Reintegration is not only a social and political process, but it is also an economic exercise that takes place within the community at the local level and within a given time frame (Ojeleye, 2010).

Goals of DDR. The literature identifies a number of complementary goals undergirding DDR. These goals include providing stability and security, reducing the hazard of future conflict, producing individual-level change, and resolving the difficulties which created or facilitated the growth of an insurgent movement. The goal which, arguably, receives the most attention and funding is the creation of a stable and secure post-conflict environment which is vital to enabling the start of development and recovery. This is initially accomplished through disarmament, since a sustainable peace is difficult to establish in areas where the population retains small arms and light weapons after armed conflict ceases (Dupuy & Peters, 2010; Jackson, 2015b). But, past experience reveals that disarmament alone is not the most effective way to achieve this goal; it should be accompanied by demobilization as well as reintegration of ex-combatants to increase the possibility of success (Roach, 2013).

Another goal of DDR is to reduce the possibility of conflict reemerging. This goal is accomplished at the macro, mezzo, and individual levels through the creation of peacekeeping missions. At the macro level, donor countries in peacekeeping missions support the internally- or externally-conflicted states with foreign aid which can be used for infrastructural development, movement towards the rule of law, and helping with treaty and agreement monitoring. This is important because treaties and agreements specify post-conflict actions to be taken by the state, and external intervention adds a layer of accountability to the process.

At the mezzo level, DDR addresses the state's actions to address the problems (if any) associated with public support for the armed conflict. These problems are diverse and can include anything from ethnic strife to lack of economic stability. The state is charged with resolving problems in conjunction with international actors and responding to citizen concerns in

the post-conflict period through the creation of programs and policies, the reformation of state institutions, and distribution of resources to the public. Weinstein (2007), in explaining patterns of rebel violence during civil wars, argues there are two types of insurgent groups: resource-wealthy and resource-poor. The former, he writes, attract opportunistic individuals, while the latter, being forced to rely on social endowments such as political ideology or religious identity, attract highly committed individuals. The latter may be motivated, he explains, by a strong commitment to addressing social injustice, inequality, oppression, lack of political voice, or other problems in society. The DDR process is a time for the state to make mezzo-level changes to address these motivating influences, if they were not resolved during the war or during the treaty and peacemaking course.

At the individual level, efficacious post-conflict DDR is accomplished by addressing the issues which led to individuals to decide to take up arms and which complicate an individual's economic and social stability once they leave the armed group. An essential aspect of reintegration is engaging ex-combatants in viable economic activities and in the larger socioeconomic developments of society (Er, 2009). In this way, DDR is a holistic exercise which benefits all members of society, including the spouses and dependents of the ex-combatants. Community-based approaches are often used in DDR to meet the goal of social engagement by intervening with services such schools, recreation clubs, clinics, garbage pick-up services, and public works projects in the neighborhoods and communities where ex-combatants will be reintegrated (Dwyer, 2012).

DDR Phases

Disarmament. DDR serves central roles in creating peace and stability among countries that have experienced internal conflicts. The first stage of this aspect of DDR is to disarm the civilian population in order to ensure peaceful negotiations are reached and upheld. Disarmament is conducted in a way that the rebels or ex-combatants are given an opportunity to surrender their arms without making them feel they have capitulated or lost standing in the community. Past experience reveals that sustainable peace in the country requires the disarmament as well as weapon management programs which address the root problem of the issues that triggers the conflict (Jackson, 2015). In addition, fruitful disarmament programs should include disarmament procedures and obligations that should be incorporated in a peace agreement and DDR plan (Wagle & Jackson, 2015). International bodies, such as the United Nations, should encourage the involved parties to include provisions that will ensure that the weapons that will be recovered are destroyed. This will help in avoiding a situation where the weapons that have been collected from being used in another conflict (Jackson, 2015).

Furthermore, the Department of Peacekeeping Operations (DPKO) recommends that disarmament of ex-combatant should be complemented by a program that is comprehensive and which helps in managing the weapons that are collected from the ex- combatants. This program should come up with measures that target irregular armed individuals and groups as well as the procedure that control the entrance of new weapons in the country to the extent possible (Unruh & Williams, 2013). The neighboring countries, as well as other countries that supply weapons to this country, strict monitoring facilitates the respect of these arrangements aimed at successful disarmament (Lebow, 2014). In addition, policymakers stress the importance that effort is made to ensure any United Nations-mandated embargo is achieved during this process (Roach, 2013).

Operations manuals from peacekeeping organizations stress that during the disarmament phase information about the profile, size and deployment of the armed forces should also be collected. It is also necessary to sensitize the public about the disarmament exercise in order to alert the population and encourage them participate if needed (Civic & Miklaucic, 2011).

Past experience has shown that weapons which are surrendered in the first phase are usually either useless or of poor quality (Jackson, 2015). This was true during Haiti's 2004-2007 disarmament efforts. In 2004, disarmament began in Haiti with "a small pile of [50] rusted, taped and dilapidated weapons" surrendered to French troops ("Haiti Disarmament Begins," 2004). According to Dupuy and Peters (2010), as disarmament exercise continues, high quality weapons are surrendered with mutual confidence and trust building up gradually. In most cases, during the disarmament exercise, the best weapons are surrendered at the last stage of the process; they were often reserved to that point due to possibility of reoccurrence of the conflict. This never occurred in Haiti, where disarmament efforts produced only small numbers of low quality weapons, even after peacekeepers and the Haitian National Police moved from voluntary and incentivized disarmament to a highly publicized "disarm or die" campaign (which was equally unsuccessful in locating and capturing weapons stocks). (Disarmament Delayed", 2005; Action Aid, 2006)

In order to build greater confidence during the disarmament exercise, well planned monitoring and verification plan can be executed (Bryden et al., 2012). Since it is not easy to predict how fast the confidence will grow, internal policy documents from DDR funders and peacekeeping organizations recommend that national DDR campaign efforts include a reasonable measure of flexibility in the timetable phases. DPKO operations manuals further

emphasize that it is very important to provide security to the combatants who have surrendered their arms in initial phases in order to ensure disarmament exercise to be successful. In cases where the public security forces are unreliable or nonexistent, the peacekeeping forces should provide security to these people (Jackson, 2015).

It is also important for the disarmament planning group to consider expertise such as military, political, humanitarian as well as public information that is available in order to plan a disarmament program that is comprehensive before implementing the process (Lidegran, 2014). The main goal of providing security is to ensure that the people who have surrendered their weapons in the initial phases can do so without fear of future attack by other armed group members (Munive & Jakosben, 2012). This requires that in disarmament exercise there should be enough police officers that are backed by military forces, who are well armed and equipped to provide security to ex-combatants, as well as the weapons that have been surrendered. It is unclear which of these aspects failed in Haiti though themes which emerged in the Small Arms Study survey (discussed in the previous chapter) highlight the lack of security experienced by members of armed groups in the post-conflict period.

Disarmament in Haiti. In Haiti the DDR process did not include ceremonial disarmament. It is likely that ceremonial disarmament, in which armed groups give up weapons during a public ceremony on the order of their commanders, was absent from Haiti's process because there was no peace process involved in the post-coup period. The international community refused to respond to insurgents until after they had nearly overthrown the democratically elected president (in part because the elected president was unpopular with the U.S., Canada, and France, which invaded in 2004 as part as part of the Interim Multinational

Forces (IMF), under U.N. Security Council authorization, not to establish or keep the peace, but to complete the coup d'état). Foreign support for the Rebel Army and other rural insurgents complicated matters. At the time of the 2004 overthrow of the elected president, he and his party was supported by roughly half of the population. The multinational forces then were seen as invaders who opposed democracy rather than peacemakers. No effort was made to establish a peace process, and if such an effort had been made, it is unclear what the IMFs would have considered to be an object of such a process, given their involvement in furthering violent conflict within Haiti.

In June 2004, a little more than three months after the IMFs invaded Haiti and completed the overthrow of the elected government, the United Nations established a peacekeeping mission. With this mission came the first efforts at DDR. However, with no peace process in place, an unclear categorization of armed groups (rural armed insurgents affiliated with the "winning" side and supported by the IMFs were called "freedom fighters" and were not labeled by the IMF as insurgents, while armed urban gangs which had, for the most part, not engaged in the conflict or in any action against the government, were labeled as insurgents and targeted with indiscriminate violence by the IMFs). The new UN mission inherited a difficult DDR situation. With competing policies and ideas about who should be demobilized, bias against pro-democracy and Lavalas supporting armed groups, and with political pressure to avoid disarming the rural anti-democracy insurgents, the DDR faltered from the beginning.

There was no formal peace process. The DDR leaders lacked credible carrots and/or sticks to persuade armed groups to enter into the process. Misinformation about who was armed and who wasn't, lack of accurate information about the scope and nature of the armed conflict,

and lack of political will within the UN system and from the main MINUSTAH funders, hampered DDR activities and the creation of a DDR process. Eventually, foreign DDR staffers found themselves negotiating, through Haitian staff intermediaries who themselves had competing interests, with individual armed gangs to try to get them to join the DDR program. No large-scale or formalized disarmament ever took place.

The rural insurgent groups which organized and led 2002-2004 armed conflict against the Haitian government were never disarmed or targeted for disarmament in the DDR process. Weapons and equipment, include grenade launchers, surface to air missiles, helicopters (which were transferred to the island as part of the US government military equipment drawdown program), and more than 20,000 guns were retained. Some circulated back into individual household stocks through the market, others were hidden, and some were retained and used as the anti-democracy insurgent groups engaged in public demonstrations and trainings between 2004 and 2013 in an effort to advocate for re-creation of the disbanded Haitian army.

Demobilization. The other role of DDR is the demobilizing of ex-combatants from armed forces. Demobilizing refers to the controlled and formal discharge of active combatants from the armed groups or forces (Lebow, 2014). There are normally two stages of demobilization and the first one involves getting individual combatants and putting them in temporary centers such as cantonment sites, barracks, or assembly areas. In this stage also, there is massing of troops in cantonment sites: camps, hospitals, residential institutions, or other facilities that are designated for this role (Lidegran, 2014; Munive & Jakosben, 2012). The second stage is called reinsertion and it entails providing the support package to the demobilized combatants (Lidegran, 2014).

Cantonment sites are crucial during DDR process especially if the ex-combatants have to wait for a certain period of time before they are transported back to their homes to be resettled. In a comprehensive and efficient DDR program, peacekeeping forces as well as other implementing agencies are well guided and informed on how to construct and prepare cantonment sites (Dupuy & Peters, 2010). In addition, DDR funding agencies advise providing joint cantonment sites that share facilities in order to ensure that the parties to the conflict reconcile in earlier stages. The ideological training and cultural programs that are offered in the cantonment sites can help to instill the ex-combatants with a strong sense of loyalty and this make them to be more willing to be the members of the communities they come from. (DPKO, 1999)

There are certain factors are recommended for consideration while identifying and setting up the cantonment site. Cantonment sites should be located in an area that is accessible and also not far from ex-combatants concentrations or bases (Civic & Miklaucic, 2011). This will encourage the ex-combatant to participate in disarmament and demobilization exercise. The site should also be located in area where there are effective mode of transport such as roads and airfields (Jackson, 2015). This will enable the combatants to access cantonment site and surrender the weapons in their hand. Furthermore, the cantonment should also be located in an area where there is ample security and the ex-combatants will feel protected. The forces should guard the perimeter wall of the site at all times and any act of intimidation or harassment should not be tolerated. An internal threat that could arise should be reported to the relevant authorities and appropriate actions be taken (Bryden et al., 2012). The cantonment should also have an armory or weapon storage facility that is well guarded. The weapons that are collected from the

militia group should be stored in these facilities in a temporary basis before they are transported to the main armory. The weapons that have been surrendered should be transported out of the camp as soon as possible and they should be transported to the permanent storage site while under tight security (Jackson, 2015; Roach, 2013; Lidegran, 2014).

It is also recommended by DDR program funders that the period during which excombatants live in the cantonment site should be short as possible because due to high cost of staff to deal with logistics and the cost of the residential component. Policy makers argue that this aspect of the DDR exercise requires a significant amount of funding and it is therefore necessary to make it as brief as possible in order to cut the costs (Roach, 2013). Additional reasoning given by DDR funders is that extensive cantonments periods can lead to disenchantment and boredom among the ex-combatants and this can lead to the emergence of demonstrations or internal conflict, which in return can lead to the attack of peacekeeping forces and personnel who guard the cantonment site, stealing of food and other supplies, or destruction of property. However, there no publically available empirical research which examines the relationships between cantonment period and post-DDR success at the individual, group, or state level. Assumptions about negative impacts of "prolonged" or lengthy cantonment on individuals or groups have not been empirically examined to date.

There are cases when the families of ex- combatants accompany ex-combatants to the cantonment sites. In DDR exercises, there is no clear policy that address these families.

According to Munive and Jakosben (2012), there is a need for clear guidelines to be developed that respond to critical concerns of these families. DDR program evaluators have recommend that such guidelines include clarification on who is responsible to look after family members

during demobilization exercise, the kind of support they should be given as well as the criteria to be used to determine the families to be given the assistance as well as the person who will come up with that criteria (Ojeleye, 2010). Additionally, families moved to cantonment sites may include women who have been abducted, raped, or partnered with the insurgent against their will, as well as children who are a product of rape (Wilén, 2012). The cantonment site is often the first opportunity to address the needs of these women and their children as well as the desire of abducted girls and women to separate from the armed insurgent. In past DDR interventions, girls and women who were violated by insurgents experienced a secondary violation when they were forced to stay with the insurgent in the cantonment site and repatriated to his village, rather than returned to their own home and family village (Otega, 2010).

Demobilization in Haiti. In Haiti the DDR process did not include a cantonment period. This likely occurred because the events in Haiti did not follow the traditional process of a peacekeeping mission. The United States, which led the IMFs, invaded Haiti while the democratically elected president was still in office and participated in his removal from power (and in deed, from the country itself). A problem of labeling occurred. In the politically charged public narrative put forth by the United States, which justified the IMFs intervention and their own activities, U.S. politicians labeled armed urban gangs as insurgents and identified the actual insurgent groups (which had been waging a war for two years and had captured nearly all of the north, the central plateau, and parts of the south) as rebels against an unpopular administration who should be supported in their activities. In February 2004, when US marines first landed in Haiti, armed urban gangs were rarely engaged in violence and those that they did engage in was limited in scope and geographic location. It was only after the interim Haitian government (IHG)

came to power and began targeting oppressed minorities and political groups affiliated with the pro-democracy movement that urban gangs became a major player in the national conflict.

In a typical UN peacekeeping mission, the intervention of peacemaking troops would have occurred to support democracy, approval from the UN Security Council would not have occurred after U.S. troops were already on the ground, and the insurgent groups engaged in armed combat would have been targeted for DDR. Instead, the armed urban gangs, which were concentrated in poor urban areas historically associated with the overthrown president's political movement, were targeted. Cantonment was not offered (or perhaps even suggested) because it was not necessary. In March 2004, the armed urban gangs were living at home in their communities doing what they had always done. They were not part of a large, organized effort to overthrown democracy. Nor were they engaged in organized combat.

Later, when armed urban gangs did engage in what may be considered combat, some DDR projects were funded which included short-term cantonment. The two programs examined during a desk review completed as a part of the background research for this study targeted children under 18 (whom the project proposals referred to as child soldiers but who likely never engaged in any form of combat given the nature and structure of armed gangs in Haiti's urban areas).

Cantonment may have been particularly useful if DDR efforts had initially targeted those insurgents who were actually engaged in combat. The Rebel Army and other rural insurgent groups which overthrew the government in 2004 were comprised of a mix of older, former members of the disbanded Haitian Army (many in their late 30s or 40s) and younger disenfranchised rural youth who joined the groups for a mix of personal, political, social, and

economic reasons. Cantonment would have been an opportunity to separate impressionable youth from older, politically motivated ex-army insurgents, so that these young insurgents could have targeted services and the opportunity to make a real choice about whether they wanted to continue in the group or leave. It would have also given those with an interest in establishing peace a chance to negotiate peace accords with leaders and disgruntled members of the disbanded Haitian army.

Reintegration. The other role of DDR is reintegrating the people who have been demobilized into the society and encouraging them to engage in sustainable income generating activities, as well as ensuring they acquire civilian status (Ojeleye, 2010). Reintegration is normally an economic and social process that is implemented within a given time frame (Jackson, 2015). In addition, it normally takes place at the local level and it is a part of general development of the country that most of the times require long-term external help (Dunne & Wight, 2013). Unlike disarmament and demobilization procedures, which require hard data on forces and weapons, reintegration usually requires information on aptitudes, skills, intentions as well the expectations of ex-combatants (Ojeleye, 2010). During the reintegration process certain aspects, such as the objectives of reintegration which are part of national strategic plan for reconstruction, reconciliation and development can also be considered (Jackson, 2015). In addition, DDR funders recommend that the priorities, scope, time frame and goals of the program for every target group be considered as well as the preliminary needs assessment as a baseline for future evaluations of the reintegration process (Lidegran, 2014). Other aspects which may need to be considered during this process are the funding mechanisms, mechanisms for

coordination, implementation and monitoring of the program, as well as the information and technical support that is required in order to ensure that the exercise is successful.

Disarmament, demobilization as well as reintegration normally requires a significant change in attitude of former combatants and also the civilian population, especially the ones who live in areas where the rebels return to (Munive & Jakosben, 2012). DDR funding organizations recommend that priority be given at all levels of planning and in particular the implementation process to public dimension (Baas, 2012). Moreover, local and national inputs are also very important in this process.

The other factor that needs to be considered in the reintegration process is the inclusion of specific provisions that deal with child soldiers (Roach, 2013). Donors, peace negotiators as well as child advocates should agree as early as possible the help or assistance that is appropriate for child soldiers who were engaged in the war. It is also necessary to agree on the form and how long the assistance should be provided (Dupuy & Peters, 2010). There is need for the policies as well as strategies which address the conditions of demobilized child soldiers be developed and implemented according to the assessment of impacts of the conflicts on these children and their families. In DDR programming, there is need for standardized and transparent procedures be performed in order to identify the combatants who fail to meet the criteria of age limit and length of service. In addition, it will also help to identify the ex-combatants with special needs and who deserve special attentions such as the people with disability or child soldiers (Baas, 2012; Brincat, Lima & Nunes, 2012; Veale & Stavrou, 2007).

The reintegration process should promote the best interest of the child soldiers.

Programming should not only enhance their self-esteem but should also promote integrity in

order to enable them participate actively in the lives of the families and communities from which they come. The activities that will be allocated to these children should also be based on their age as well as developmental stage (Baas, 2012). In addition, the special needs of the children with special needs should be considered in order to avoid leaving them out of DDR program or marginalizing them. Reintegration program can only be effective if it is developed through confidence and trust. Furthermore, there is need for adequate and sustained commitments of both time and resources as well as close and continued cooperation of all the stakeholders (Lidegran, 2014).

Reintegration in Haiti. Under the IMFs there was no effort at any aspect of DDR including reintegration. From the creation of MINUSTAH in 2004 through 2007, reintegration efforts were coordinated at the national level by a committee and were administered from a centralized DDR office. Beginning in 2007 the national DDR committee was disbanded and its work was absorbed into the Brazilian NGO Viva Rio and UN related DDR efforts were officially coordinated by the newly created Community Violence Reduction (CVR) office located at Camp Charlie on the outskirts of Port-au-Prince. CVR is officially part of the DPKO.

Reintegration efforts have been funded by a variety of sources including the DPKO, the United States Agency for International Development (USAID) and other national foreign aid bodies, the UNDP, other international and regional organizations, NGOs, and a variety of charities and religious organizations. Typically funding agencies have supported DDR programs by issuing a Request for Proposals (RFPs), selecting projects in line with the DDR goals from among those responding, and funding the implementing partner (IP) agency or organization. This process all takes place within 12 months, so projects are often funded for as little as six months

at a time, with most receiving funding within a few months of the start of the funding cycle and offering about nine months of continuously funded services. This haphazard and uncoordinated process to creating and offering reintegration services has led to serious gaps in the availability of needed services with some communities and hundreds (if not thousands) of eligible excombatants being excluded from the DDR process.

Conditions Associated with DDR Success. The literature identifies several preconditions associated with increased DDR success. On the macro and mezzo levels, success is associated with the establishment of domestic security early in the process. The environment must have a minimum level of security before conflicting parties are willing to give up their weapons (Rotberg, 2010). Increased security also gives DDR institutions a chance to operate effectively without being disrupted by violence. Normally, third parties such as the African Union (AU) or United Nations (UN) play a crucial role, through peacekeeping missions, in ensuring that there is compliance with a ceasefire and respect for public order (UN DPKO, 2010). Clearly, the presence of peacekeeping forces is not expected to end all violence and hostility; however, these forces become a credible deterrent to unilateral agreement violations that would jeopardize an entire DDR program (Diehl, 2013).

The inclusion of both or all sides of the conflict is also associated in establishing a safe post-conflict environment. This implies that all the parties need to be included in a DDR program and all parties must also disarm at the same time. Failure to include all relevant actors facilitates the resumption of fighting, perhaps giving the side which has not yet fully disarmed an advantage over the already-disarmed actors (Rudolph & Lahneman, 2013). This is a classic example of how a commitment problem can undermine reaching a mutually-preferred settlement

in a conflictual bargaining situation. Actors have uncertainty about the future intentions and actions of the other party, and fear that the agreement will be broken if the other party has an opportunity (Walter, 1997). Thus, leaving one or more actor, even a seemingly insignificant one, on the sidelines can derail the peacemaking process by encouraging spoilers to a peace deal (Newman & Richman, 2006).

Relatedly, some researchers argue that is very important that the parties involved develop a degree of ownership of the DDR process (Humphrys & Weinstein, 2005). This reduces the possibility that group members and leaders believe one actor or several actors are favored in the process. Rather, it should be clear to all the parties involved that each group or side is being treated the same way, hence giving them the same kinds of opportunities to reintegrate with the society. The institutions which implement DDR processes can facilitate cooperation by communicating with all actors at both the political and the military commander level (Von, 2011). Peacekeepers and other external observers, must be perceived as neutral, credible, and impartial by all the sides so they can be useful in expediting the process in a way in which all sides can take ownership

A commitment to Security Sector Reform is also associated with DDR success on the macro-level. Both the conditions of inclusion and security reform need to be integrated into the political agreement in order to end hostilities during the DDR process (Muggah, 2008). Over the past 15 years, DDR programs have not always been successful at driving the peace process (McMullin, 2012). To be successful, DDR should be implemented in conjunction with a ceasefire and either a negotiated settlement or peace agreement. It is very clear that DDR reinforces an agreement by ensuring that it guarantees security and confidence building

measures. The DDR process cannot precede a political agreement. Normally, shared political will, reconciliation, and a policy of amnesty tend to create optimal conditions for DDR program implementation (Betts, Loescher and Milner, 2013). Some of the specific issues that need to be directly addressed through the peace process and through the integration of the political agreement include: clear criteria for program participation, establishment of a credible DDR implementing institution, the definition of the realistic goals, and an implementation framework.

DDR programs that are multi-dimensional and address the needs of the entire community have a greater chance at success. This is because by taking a comprehensive approach, less jealousy is fostered between participants and members of the community. (Banholzer, 2014) Programmatically, in cases where DDR involves a large number of soldiers, complex processes are required to ensure coordination among different actors. Successful comprehensive approaches embed DDR within the process of peacekeeping, development and recovery. This can be done by integrating the efforts of national actors, international military forces, the police, government institutions and key civilian actors (Shibuya, 2012).

Successful DDR, thus, requires the integration and coordination of services, agreement on programmatic goals and policies, and an agreed upon theory of how change will occur (Fusato, 2003). In addition, links should be made with related programs including any SSR, rule of law efforts, or community development efforts happening in communities where demobilized individuals are being reintegrated (Verkoren, Willems, Kleingeld & Rouw, 2010). DDR programs are not likely to succeed without careful coordination at both national and local levels (Willemijn, et al, 2010).

Failing to accomplish all three of the steps in DDR can have dire consequences for a community's recovery. For example, disarmament alone populates a community with socially stigmatized individuals who may still with to pursue organized violence. (Diehl, 2013)

Alternatively, implementing planned social and economic reintegration but failing to disarm, may result in short lived peace, since small skirmishes may escalate quickly if many people are armed (Jackson, 2015).

History of DDR.

DDR programs have become a popular approach to addressing intra-state conflict, especially in the case of civil war. The need for a unified approach to internal conflict was evident in the late 1980s as states in both Africa and Central America experienced internal conflicts. The United Nations Observer Group in Central America (ONUCA), operating in Nicaragua, was the first peacekeeping mission whose mandate included the DDR process in 1990. (UN DPKO, 2010) DDR quickly became a fixture in peacekeeping. Although a number of regional and international organizations have operated DDR programs, the United Nations continues to coordinate and fund most DDR operations around the world. In 2007, the Office of Rule of Law and Security Institutions (OROLSI) was established in the United Nations Department of Peacekeeping Operations (DPKO) located in New York. This office was charged with strengthening and coordinating DPKO's activities in the areas of SSR, mine action, and DDR. The Office is headed by Assistant Secretary-General Dmitry Titov who reports to the Under-Secretary-General for Peacekeeping Operations Hervé Ladsous.

Approaches to DDR following the cessation of violent conflict have become diverse. In the case of Mozambique, for example, when the two conflicting parties decided to reconcile in 1992, the DDR program took effect and a small new national army consisting of volunteers from both parties was established. In Uganda, the armed conflict had dissipated several years before DDR programs were initiated. A large number of soldiers of the previous regime in Uganda were absorbed in the National Resistance Army that had newly been formed. (Ojeleye, 2010)

In 2006, the UN adopted a rights-based approach to DDR as part of the larger liberal peace building agenda. This rights-based approach is intended to address problems of the armed groups and their participation in the social rebuilding of war torn areas. It also calls for the release of children from armed groups, regardless of the situation and time (Civic and Miklaucic, 2011). One of the most significant changes to DDR was the shift towards a human rights-based approach. The Brahimi report viewed the human rights as being very critical to effective peace building. So, expectations were emerging in 2006 around rights-based development in the UN system (Peou, 2010). DDR programs were modified to address the seeming incompatibility of DDR and the human rights agenda. The DDR programs began to emphasize not only security and restoration of order, but also concern for victims of the conflict and support for accountability (United Nations, 2010). The justice versus peace dichotomy was, thus, partially reconciled by incorporating concern for human rights into the agenda.

In the mid-90s a holistic approach to DDR was developed. This approach encapsulated mid- and long-term planning as well as concern for the effective transition of the ex-combatants. Since DDR projects happen as part of a fixed UN or organizational mandate, planning for the future is difficult. Thus, DDR can be viewed as part of the peacekeeping system, which exists in the larger system of UN-based economic development. Normally, DDR emerges as a solution it the context of a peacekeeping system and it has the capacity to try and provide both negative and

positive feedback into the system. Positive feedback results from building confidence between the parties, and addressing their interests.

Currently, most practitioners and donors have viewed the DDR programs as a short term technical exercise typified by counting weapons, handing out packages of reinsertions as well as establishing the demobilization camps (United Nations, 2010). The emphasis of DDR programs has been to prevent individuals or ex-combatants from being spoilers of peace. However, a shortcoming is that DDR programs often lack the resources to pay attention to community needs in locations where the ex-combatants are being reinserted.

Peacekeeping Process and its Relation to DDR

DDR is a formal part of the peace-building process in the countries that have experienced armed internal conflicts. The armed combatants as well as both state and non-state armed forces can help establish a climate of security and confidence, which is crucial for the start of process (McMullin, 2012). The DDR process is highly structured and works towards the goal of ending hostilities and enhancing any comprehensive peace agreement reached by the parties. In many cases, the parties who accept a ceasefire and start peace agreement negotiations face two challenges: they do not trust each other, and they do not have the capacity to implement a DDR program (Baas, 2012). Thus, a third party, like the UN, is needed to interject and broker a peace agreement. Furthermore, assistance from the third party is needed for the planning and implementation of the peace-building process. DDR is an initial step in a series of peace-building measures. DDR normally focuses on immediate management of the people who previously associated with armed groups or forces; lay the framework for sustaining and safeguarding the community where these individuals will live as law-abiding citizens and build national capacity

for long –term security, peace and development (McMullin, 2012). Even though DDR does not usually fully resolve conflicts, it can help in establishing a secure environment where other peace-building strategies such as security sector reform or weapon management be implemented (Levely, 2014).

Theoretical assumptions on which DDR is based.

A review of the research literature identifies six assumptions which underlie DDR:

- 1. Ex-combatants will cause future conflict in the absence of an intervention that satisfies their interests. (Mcmullin, 2012)
- 2. Ex-combatants will want to continue sustaining the legacy of war if they continue interacting with their colleagues (Mcmullin, 2012; Planta & Dudouet, 2015).
- If ex-combatants are unemployed, they will revert to violence. (Annan & Aryemo,
 2009; Munive & Jakosben, 2012; Wilén, 2012)
- 4. Ex-combatants do and will commit crimes (Baas, 2012; Ojeleye, 2010)
- 5. The community deserves to benefit from DDR. (Baas, 2012; Levely, 2014)
- Community-based approaches are superior for the reintegration phase of DDR.
 (Civic & Miklaucic, 2011; Mcmullin, 2012)

Each of these assumptions shape the decision making process at all stages of DDR. The basis in reality for these assumptions and the implications of each should be examined.

The first assumption holds that ex-combatants are likely to return to war if they are dissatisfied or are not offered alternate opportunities (McMullin, 2012). In the absence of intervention, ex-combatants may engage in criminal activities in order to earn a living and this can cause political conflict and instability (Munive & Jakosben, 2012). Thus, offering ex-

combatants employment opportunities may help them to cut ties with other ex-combatants. Furthermore, the ex-combatants can protest violently if they do not have the means to support their livelihoods (Annan & Aryemo, 2009). Although policymakers and academics perceive war to be a complex phenomenon that normally results from both deep-rooted and proximate causes, the DDR process tends emphasize the potential resurgence of conflict from ex-combatants as a major potential cause of war (Brincat, Lima & Nunes, 2012). Thus, ex-combatants are disproportionately perceived as destabilizing citizens with the potential to opportunistically undermine the peace.

The second assumption on which DDR is based is that ex-combatants can continue sustaining the legacy of civil war if they continue interacting with each other (McMullin, 2012; Planta & Dudouet, 2015). There is the fear that the young combatants can be forced by their former commanders either to work for them or pay bribes. Furthermore, the group of excombatants can intimidate the local community in order to make them consolidate the commanders' political and economic status after the war is over (Wilén, 2012). There is a possibility that the ex-combatants' chain of command will remain intact even after the war is over. The commanders can maintain contact with their former subordinates along political, personal, and economic lines (Brincat, Lima & Nunes, 2012). Additionally, even if the excombatants' associations are non-violent, such as engagement in collective economic ventures or social interaction, they are still considered as threatening to the peace process. This is because such associations are considered to be sufficient evidence of residual chains of command continuing to exist post-conflict (Lidegran, 2014). The ex-combatants are considered to be the source of instability in some cases even if they are engaged in conflict management and

resolution (Levely, 2014). In situations where the ex-combatants are incorporated into civil society groups, these groups are also considered as a threat. It is argued that any group which includes ex-combatants as their members can cause future threats.

Third, the unemployment of the ex-combatants is assumed to be a threat because they are likely to revert to criminal activity (McMullin, 2012). The ex-combatants are presumed to be volatile, unless they are proven otherwise over time. The ex-combatants that lack employment opportunities after being reintegrated into the community are assumed to be likely to cause another civil conflict, hold protests against the government and continue maintaining ties with their former colleagues. Unemployment and idleness of working-aged populations are considered major factors behind the occurrence of civil war (Ojeleye, 2010; Wilén, 2012). In some instances, employment can also be considered a security threat (Wilén, 2012). The excombatants who are employed can engage in massive protests in order to present issues or grievances that relate to working conditions (Jackson, 2015).

The fourth assumption behind DDR is that ex-combatants are perpetrators of crime (Baas, 2012). Society perceives these people as perpetrators and a burden on the community instead of an asset. The community is likely to resent these people because they are a perceived or real cause of past conflict and are receiving benefits over others in society. To others in society this may seem like a reward for bad behavior (Civic & Miklaucic, 2011). Societies are destabilized by the fact that unemployed youths can easily be absorbed into the violence either as participants in rebel militias, urban gangs, or illicit business dealings, even if they have never been involved in the civil war in their lives.

Fifth is the assumption that the community deserves to benefit from post-conflict reconstruction. This means that ex-offenders should not be the only parties to benefit, but rather, the community is entitled to some of the benefits of DDR as well. According to Baas (2012), offering too much assistance to one group is considered to be unfair and can fuel tension. The costs incurred by communities include the loss of lives, destruction of property, and loss associated with forced evacuation. These costs are pervasive and it is therefore fair to prioritize the community as a whole over any particular group (Levely, 2014). Including the community in the DDR process may lessen feelings of resentment harbored by its members.

The last assumption is that community-based approaches are superior to others for the reintegration phase of DDR (Munive & Jakosben, 2012; McMullin, 2012). From a social justice standpoint, communities are entitled to participation because they should be empowered to move beyond past trauma and to set the agenda for themselves. However, not only is it fair to include the community, it is also more efficient and more likely to be effective in the long run

The implementation of programs that do not target or involve the community are unlikely to yield the intended results (Civic & Miklaucic, 2011). Furthermore, non-community based programs are more likely to fail, since the support of the community is paramount for long-term success (Baas, 2012; Ojeleye, 2010). So, there are several advantages that are characterized by adoption of community-based approaches during the reintegration process. These advantages include, the reduction of costs associated with project implementation and, that it makes it easier to force ex-combatants stop identifying themselves as special groups, since the community knows the history of each person. Thus, the design of DDR projects should focus on reconciliation between community members and the ex-combatants (Civic & Miklaucic, 2011;

Levely, 2014). So, while providing employment opportunities is important (as discussed above), it is equally important to focus on the interests of the communities into which they will be reintegrated (Baas, 2012).

Current context of DDR. The demobilization, disarmament, and reintegration process have become integral to peacekeeping operations as well as post-conflict reconstruction. The long-term peace building prospects in any society often hinges on the success or failure of a DDR program (Fineman & Thomason, 2013). However, despite the increased experience with demobilization, disarmament and reintegration over the years, program implementation still remains a challenge.

This has, therefore, led to initiatives on effective implementation. The United Nations has developed an integrated set of DDR standards. One of DDR's key mechanisms for demilitarizing both the official and unofficial armed groups is through the reduction of arms possession and use (Bryden, et al., 2012). This is achieved through ensuring sufficient state security services, disbanding the non-state armed groups, and trying to assist ex-combatants as they re-enter civilian life. (United Nations Department of Peacekeeping Operations) The DDR process creates an environment where there will be an overall process of peace and a long term development through political, social reconciliation and economic and social rehabilitation. This is achieved through a myriad of strategies. For instance, states provide mechanisms that will help disarm excombatants. The rebel groups must be provided with opportunities to lay down their weapons without creating a perception that they are surrendering. This will enable the state to move forward with peace building and to return to status quo political operations by having elections and providing social services. (Lebow, 2014).

However, while DDR is an imperative part of the peace process, it only has the capacity to influence a narrow range of security and political objectives. In addition, DDR tends to be limited in duration. It is, therefore, important to limit expectations about the potential outcomes of DDR. For instance, DDR may lack the capacity to overcome major obstacles, such as the parties having inadequate will to participate in the process (Curtis and Dzinesa, 2012; Levely, 2014). Though the process of DDR can be helpful in mitigating conflict; it cannot unilaterally prevent conflict from recurring. Similarly, DDR can only have a limited impact on economic development and long-term outcomes. So, DDR should be coupled with programs that have long-term goals, such as a small arms nonproliferation program.

DDR programs have broadening mandates that move beyond promoting stability and are beginning to address political mechanisms for consolidating peace. DDR must, therefore, be tailored to local political contexts since there is variety in post-conflict political conditions (Cohn, 2013). The state guides the development of a comprehensive DDR framework that ensures the enhancement of security, economic recovery, and peace consolidation. Having the state involved helps make the goals and assessments of DDR more realistic and provides opportunities for early implementation. Usually, the state helps clearly define appropriate target groups, eligibility criteria, and types of benefits that are being offered (United Nations, 2010).

In the current context, DDR programs have been used in both short-term and long-term capacities. The short-term priority is to restore stability and security which is achieved through disarming the warring parties. The demobilization of armed groups, on the other hand, tends to happen over the long-term. Though a short-term DDR program can initiate the process of demobilization, it is likely to require protracted political effort to fully execute.

It is important to be mindful of the limitations of DDR. DDR programs have the long-term goals of ensuring sustained economic and social reintegration of ex-combatants into a peaceful society. DDR programs, however, are not comprehensive development projects and often fall short of this goal. Normally, DDR imposes temporary measures to facilitate a transition from war to peace. For a DDR program to be successful in the long run, it needs to be integrated as well as be supported by post-conflict reconstruction and economic interventions.

DDR program targets. DDR processes are usually planned and implemented in conjunction with stakeholders in the conflict and external actors. For instance, in South Sudan, the most crucial stakeholders in the DDR program are government ministries and commissions, armed factions, international organizations including United Nations Children's Fund (UNICEF) and the United Nations Development Program (UNDP), funding partners, and national civil organizations.

Successful DDR programs recognize that not all the ex-combatants usually have the same needs. Effective programs are flexible; they also tend to adapt interventions to specific needs of different target groups. Programs try to balance the needs of the larger community and those of the ex-combatants. They carefully approach the process of resettlement, since providing exsoldiers with assistance is likely to foster resentment in the community (Von, 2011). Effective DDR also tries to provide specific programs aiming at the most vulnerable groups within the category of ex-combatant, including child soldiers and women as well.

The practice of using child soldiers tends to be more pervasive in poor countries.

Children are likely to enroll in the armed groups that are engaged in internal conflict. In most cases, child soldiers are neglected. DDR programs must, therefore, take their special

vulnerability into account. The child soldiers are the most difficult ex-combatant group to reintegrate in the society. From past DDR programs and experience, it has been suggested that child soldiers ought to receive services separately from other ex-combatants. This allows for safeguards against abuse from military authorities (Martz, 2010). This also increases the chance that they are easily and quickly demobilized and reintegrated. DDR programs also tends to offer long term psychological support to these children. This normally helps them in recovering from negative war experiences and reduces their propensity for aggressive behaviors (Scheffer, 2012).

DDR programs have not yet adapted to adequately meet the needs of women. Families of the female ex-combatants as well as abducted women tend not to be reached by DDR programs (Wilén, 2012). Female combatants can easily be discriminated against, especially by their male counterparts. This is even most likely to happen when they lack an official rank and are relying on men to confirm their status and grade. Many of the women that are abducted by groups of combatants during war are used for sexual services. These women are likely to be left out of the DDR process since they are not technically ex- combatants. Their families also in most cases were directly involved in the conflict, so addressing the post-conflict needs of their female family members is difficult. Thus, the needs of female ex-combatants and abductees should be addressed by DDR programs (Bouta, 2005; Otega, 2010; Wilén, 2012).

DDR in Haiti

A History of Instability. Haiti has been characterized by outsiders as a fragile, failing, or failed state since at least the 1980s. It has experienced considerable political volatility over the past two centuries, with more than 30 coups since independence in 1804 and no fewer than nine UN missions since 1990. While geopolitical interference in Haiti has played a significant role,

particularly since the 1990s, certain analysts point to the country's extreme concentration of authority and wealth in the hands of the elite—elected and otherwise—as a source of persistent instability (Muggah, 2008; Maguire, 2009).

For some of Haiti's diaspora and certain foreign governments, the heavy-handed dictatorships and associated paramilitary rule from the 1950s to the 1980s afforded a degree of stability. Yet, from the perspective of the vast majority of Haitians, especially those eking out an existence in the country's popular zones (shantytowns) in and around Port-au-Prince and other major cities, the Duvaliers—father and son—terrorized the population into submission. They did this both through the arming of the so-called Tonton Macoute militia and by empowering Haiti's police force, then part of the Haitian armed forces, to use indiscriminate killings, torture, and arbitrary detention to enforce their power.(Lundahl, 1989)

In the latter half of the 1980s, the country experienced a rocky transition to democracy during which President Jean-Bertrand Aristide became the country's first democratically elected leader in 1991. In addition to promoting political participation by the impoverished majority of the population—a first in the country's history, which won him supporters and critics both in Haiti and abroad—Aristide demobilized the Haitian armed forces by presidential decree in 1994 and created the country's first civilian national police force, the Haitian National Police (HNP).

Haitians were initially hopeful that this new body, the HNP, would effectively control crime and increase safety, especially in the larger cities. During the 1990s, property crime and violence were widespread, in sharp contrast to Haiti's historically low crime rates. Business owners and the wealthy relied on privately hired armed guards—who were frequently implicated in vigilante-style violence—to provide basic security. Despite considerable investments in

capacity development and training of the nascent force, the HNP was unable to address community-level criminal violence adequately during its early years (Hayes and Wheatley, 1996).

Insurgent Activity. The political and economic situation in Haiti began to deteriorate dramatically during the late 1990s and early 2000s. Growing instability tested the HNP's ability to fight criminal violence and respond to organized armed violence committed by insurgent groups. Trafficking in persons, weapons, and drugs, reportedly connected to Haiti's business elite, and continued unabated, bringing financial support to the few while generating political unrest. As tensions mounted between the Haitian government and certain members of the international donor community, such as the United States and France, former members of the disbanded Haitian armed forces created the 'rebel army', also known as the National Revolutionary Front for the Liberation of Haiti (Front pour la Libération et la Reconstruction Nationales). The rebel army was Haiti's largest insurgent group; it was composed of paramilitary thugs active during the 1991–94 military coup. It was most active beginning in 2001 through demobilization (2005-2007) and it continues to exist is a modified form in some parts of rural Haiti today. With foreign backing and support from the national elite, as well as supporters in key positions within the HNP itself, the rebel army proved to be a surprisingly resilient opponent. Heavily armed with assault rifles and a firm supply network, the force began launching quiet but efficient attacks against border towns and urban centers between 2000 and 2004, with the goal of overthrowing the elected Haitian government. HNP officers struggled to respond. International and US-led restrictions against arms sales to the government since the early 1990s had never been fully lifted, effectively prohibiting the HNP from legally purchasing

weapons. HNP officers who remained committed to upholding the rule of law had few arms and little chance of surviving direct armed conflict with the rebel army.

By 2004, following successful insurgent attacks by the rebel army and allied insurgent groups in the towns of St. Marc and Gonaïves, the HNP was overcome and scattered. The insurgents rapidly advanced on the capital. With Aristide removed from power by foreign diplomats and with US marines occupying the National Palace, the insurgents were free to take the capital. Indeed, one of the insurgents' first actions after entering Port-au-Prince was to march two blocks past the National Palace to the National Penitentiary, where they freed hundreds of convicts.

International Intervention in the Interim Haitian Government Period. Despite the circumstances surrounding the interim government's establishment, the international community stepped in to support it with a stated goal of reshaping the fragile security sector. Much like the US-led de-Baathization process in Iraq, the HNP was purged of 60 per cent of its officers, many of whom fled to other areas of the country or to the Dominican Republic, fearing that remnants of the rebel army might exact revenge. Some 540 members of the rebel army, many of whom had been soldiers in Haiti's long demobilized armed forces, were integrated into the 'new' HNP during demobilization. Few of them, if any, were required to undergo the formal training and graduation from the police academy required of new recruits (Hallward, 2010, p. 128; ICG, 2005; Mendelson-Forman, 2006).

At the request of the new interim government, the United Nations Security Council established the UN Stabilization Mission in Haiti (MINUSTAH) in June 2004. Led by Brazil, Canada, the European Union, and the United States and involving more than 40 countries, the

large-scale deployment of international peacekeepers and police support marked an important turning point. With nearly 9,000 blue helmets and 3,000 international police deployed, the mission focused on ensuring stability by enhancing HNP capacities, extending the rule of law through improved delivery of justice services, and rebuilding the country's dilapidated judicial system (Muggah, 2010).

Though initially formed to uphold a coup government widely viewed by Haitians as illegitimate and repressive, MINUSTAH was successful in establishing strong support among both Haitian policy-makers and segments of the general population. Thus, MINUSTAH was able to maintain its presence even after the transition to a democratically elected president was made in late 2006. Many international organizations and institutions—from the UN to the Organization of American States and the International Organisation of La Francophonie—devoted considerable energy to the reform and strengthening of Haiti's security and judicial system, an important step related to Haiti's DDR process. Support ranged from financial assistance to the provision of technical expertise in policing, investigation, customs, and corrections reform.

Security Sector Reform. Donor-supported efforts to promote judicial reform since the mid-1990s have included the restructuring and revision of judicial procedures, legal codes, and protocols. Since 1998, efforts to codify and implement improved criminal and corrections laws have yielded few returns. The most significant development in reforming the judicial sector during the past decade was arguably the passage of laws by Parliament in 2007 to create the Superior Judicial Council, mandated to devise rules for the training, recruiting, and disciplining of magistrates and the regulation of Haiti's magistrates school. In 2007, the Ministry of Justice

and Public Security published a 'roadmap' identifying a range of key priorities to enhance the quality and quantity of justice, and, in particular, service delivery (UNDP, 2009).

To enhance implementation and improve access to justice for the population, an approach to justice reform emerged, focusing on simultaneous reforms across the judicial, policing, and corrections sectors and linking these to enhanced accountability. For example, a Citizen's Forum (Comité Coordonnateur du Forum Citoyen) was created both to enhance citizen engagement and to monitor government transparency. Nevertheless, the country continued to feature outdated and disregarded laws, weak human resources, and practically non-existent infrastructure to manage cases. Citizens continued to turn to insurgent groups to provide both policing and to resolve problems normally handle by the courts including business disputes and the investigation and punishment of crimes.

Challenges to Policing. Many international organizations have been involved in reforming Haiti's security and judicial system. Over the past two decades, a major obstacle to high-quality judicial, police, and corrections service delivery was their illegitimacy in the eyes of Haitian civilians. This was particularly true during the years when unelected governments were in power. For instance, during the military dictatorship (1991–94), police officers were frequently implicated in the illegal arrest and torture of ordinary citizens (O'Neill, 1995). This changed from October 1994 to February 2004, as the country was in a period of struggling democratic governance, and state leaders rejected the use of the police force to exert political control. However, the post-coup interim government of President Boniface Alexandre and Prime Minister Gérard Latortue (2004–06) flirted with using the police as a tool to suppress popular dissent and punish political opponents (Dupuy, 2005).

As a result of the HNP's inefficiency and susceptibility to corruption, but also, in many cases, officer involvement in a wide range of human rights violations during the 2004 coup and its two-year aftermath, both international donors and local populations lost faith in the police force's capacity and willingness to deliver services. It was challenging to convince citizens to support disarmament when the police were unable to provide the security they were given by insurgent groups and private militatias. To bridge this legitimacy gap, donors invested heavily in police reform, recruitment, and human rights training, as well as community policing from 2004 onwards (CIGI, 2009).

The HNP from 2004-2009. Although the 1987 Haitian Constitution sets out the terms for a national police force—including provisions for its composition and purpose—the official HNP force was not established until the mid-1990s. Formally launched by President Aristide in 1995, the HNP was intended to serve as the exclusive armed entity responsible for maintaining law and order and protecting the life and property of citizens. Following the dissolution of the armed forces (the Forces Armées d'Haïti) in 1994, the HNP enjoyed wide jurisdiction. Haitians initially greeted the formation of the HNP with considerable enthusiasm. Despite investment from the United States and Canada and two UN missions (MIPONUH I and II), however, popular support for the police began to erode between 1996 and 2003 (Muggah, 2005).

Administratively, the HNP is overseen by the Ministry of Justice and Public Security.

Similarly, the Prisons Administration Directorate and the emergency fire brigade (sapeurs pompiers) fall under the jurisdiction of the HNP. According to an internal review led by the Haitian authorities, the HNP has faced a host of inadequacies and problems since 1995, including limited staff, weak training, unpredictable funding, limited senior personnel, systemic corruption,

poor inspection capacities, and a history of violating human rights. To the average Haitian, the police were seen as having limited effectiveness at best. Armed groups – including urban gangs – were relied on for day-to-day security provision in place of the ineffective police force.

With assistance from the UN and bilateral donors, the institutional infrastructure of the HNP experienced considerable reforms beginning in the mid-1990s. By 2009, there were more than 236 HNP facilities throughout the country. Yet an estimated 39 of these—including seven precincts and 32 sub-precincts—were still considered non-operational prior to the January 2010 earthquake. Moreover, the overall size and configuration of the country's motor fleet was limited—with an estimated 600 vehicles of varying make and quality—resulting in major maintenance challenges. The HNP was physically unable to reach some areas of the country which were controlled by rebel groups, other than by traveling on foot.

Some international organizations credit MINUSTAH with having improved security across Haiti, particularly between 2007 and 2009 (Muggah, 2010). However, human rights groups and researchers also heavily criticized MINUSTAH's early tactics, particularly its repressive handling of gangs (Hallward, 2010; Kolbe & Hutson, 2006). Specifically, between 2004 and 2006, heavy-handed interventions pursued by the HNP with support from MINUSTAH were designed specifically to arrest and neutralize armed elements which had been excluded from the DDR process. In some cases, these activities—described bluntly as 'disarm or die' campaigns—resulted in the accidental shooting deaths of dozens of citizens, including children.

Against a backdrop of MINUSTAH-led stabilization efforts, UN civilian agencies were busy crafting a reform plan for the HNP with local counterparts in 2006. In view of the frequency of natural disasters and the legacy of political unrest in Haiti, donors placed an

emphasis on improving HNP capacity to counter floods, fires, and hurricanes throughout the country. By 2009, there was growing confidence among international actors in the potential of the HNP to provide security, with the UN Security Council acknowledging key gaps but also citing real improvements.

The HNP since 2010. The impact of the earthquake on the human and physical infrastructure of the justice and security sector—and particularly the HNP— was extensive. Almost 80 HNP personnel were killed and another 253 injured directly by the earthquake. By UN estimates, almost one quarter of Haiti's police capacity was rendered non-operational. MINUSTAH records show that 55 buildings used by the HNP were affected, including some 28 facilities suffering 'major damages', such as collapse, and another 27 experiencing 'minor damages'. If these structures are added to the 39 facilities that were already non-operational at the time of the earthquake, almost 40 per cent of HNP capacities could not be used after the January 2010 earthquake.

In the immediate aftermath of the earthquake, the focus of the UN and international donor community was on rapidly ensuring the delivery of life-saving supplies, personnel, and equipment and restoring police communication, coordination, and response capabilities, particularly in anticipation of increased violence by armed gangs and insurgent groups. The rebel army experienced a strong comeback, establishing a base just a few miles outside of Port-au-Prince and holding a publically viewable boot camp for new recruits. By mid-2010 the rebel army was holding marches through parts of Port-au-Prince.

International observers were concerned that damage and displacement generated by the earthquake—coupled with the impact of the global fiscal crisis on food prices—could generate a

humanitarian disaster and an upswing of crimes against property and violence. In the first six months after the natural disaster, fears that escapees from prisons (some of whom were high level insurgent leaders) would perpetrate targeted attacks, extortion, and kidnappings were commonplace among NGOs and international organizations working in Haiti (Muggah, 2010). International aid providers were worried that, if such violence were to occur, it would hamper relief efforts in Haiti and exacerbate instability if humanitarian assistance did not successfully reach affected populations. In certain cases, US officials turned away flights delivering supplies and medical personnel so that planes with US combat troops could land instead.

Throughout this period, MINUSTAH military and police personnel supported domestic efforts alongside US and Canadian troops. Fears of food riots, fleeing prisoners, and growing disorder were matched with massive investments in restoring public security. The so-called 'security umbrella' generated by this international presence was credited by some with enhancing humanitarian aid distribution, search and rescue operations, and the gradual return of national police to challenging areas. Meanwhile, a growing number of large, foreign private security companies began to explore opportunities in the country. However, the HNP, which for years had recruited politically motivated insurgents into their ranks, continued to struggle to replace the armed groups as the country's main security provider.

From DDR to CVR. The traditional DDR intervention included in this study were part of the larger community violence reduction effort in Haiti. As not all DDR programs targeted insurgents and members of armed groups, only participants from identified projects to serve members and former members of armed groups or the disbanded Haitian army were included in the study. The current focus on DDR in Haiti has evolved to the CVR, or second generation

DDR model. DDR in Haiti is operated by MINUSTAH, the UN peacekeeping mission in Haiti which has been in place since June 2004. The transition from traditional DDR to CVR began in 2007.

The MINUSTAH CVR program has accomplished an impressive and diverse array of activities since 2007. Many CVR interventions have received internal and external press coverage, particularly in wake of the January 2010 earthquake. The scale and breadth of its interventions and the flexibility and resourcefulness it displayed in the aftermath of the earthquake was impressive and led to increased resources to support to aid the CVR effort. Within MINUSTAH, CVR is widely acknowledged as an important contributor to development and reconstruction efforts. The program's tangible contributions to post-earthquake relief provide visible evidence of investment; these include, for example, the restoration of transport, watershed and canal infrastructure), education and vocational programs, and provision of filtration units for improved access to potable water. There are also less visible, but no less crucial, outputs from CVR's efforts in the last five years such as the temporary work opportunities for thousands of Haitians, psychological support services for women and children surviving sexual and gender-based violence, and events to promote community cohesion and solidarity. As an example of an innovative financial disbursement mechanism for rapid support to local partners it is without peer in the UN system in Haiti (and possibly globally), particularly since 2010. (Molloy, 2010; Muggah, 2010)

In functional terms, the CVR program operates as a strategic coordinator and funder of a portfolio of interventions. The key comparative advantage is the speed with which CVR identifies partners and disburses resources. The CVR program thus coordinates selected

interventions though actual implementation is undertaken by sub-contracted partners. The CVR program is organized thematically around five declared core "pillars" of mandated activities with attention to gender equality treated as a transversal or cross-cutting priority. Organizationally, and in theory, the CVR section is staffed by a centralized core of roughly 40 personnel that are expected to work closely with communities to accompany projects, solicit partnerships and provide direction, and ensure oversight and monitoring of discrete activities. Since the 2007 transition from traditional DDR to CVR, the institution has supported more than 500 discrete projects throughout the country including in Cap Haïtien, Gonaives, Jacmel and Les Cayes, though the vast majority of its operations are in violence-affected neighborhoods of Port-au-Prince.

Rather than invest only in traditional, individual level interventions common with the DDR programs of the 1980s and 90s, the MINUSTAH CVR program has emphasized a community-based approach toward reducing violence in Haiti's most marginalized urban areas. Demobilized individuals from armed groups received the same vocationally focused services they did in the past, but the agency also invests a great deal of money and time in efforts to improve the neighborhoods where violence most frequently occurs. By improving the community to which demobilized men are returning the hope is that individuals will be able to integrate into lawful employment and that communities will be addressing neighborhood and state level problems such as lack of employment, social marginalization, and political disenfranchisement which may have previously prevented demobilized individuals from successfully reintegrating. (Muggah, et al., 2009)

This focus emerged on the basis of trial and error. CVR antecedents can be traced to an earlier ill-fated disarmament, demobilization and reintegration (DDR) effort and collaboration with the Haitian government's National Commission for Disarmament (CNDR and later CNDDR) which occurred between 2004 and 2006. The Haitian government's National Commission for Disarmament's efforts were absorbed into programs operated by a Viva Rio, a Brazilian nongovernmental organization which is supported today by CVR. Early efforts were viewed as ineffective or exclusionary. Groups from some political parties and movements argued that the early DDR efforts extended the discrimination they experienced after the 2004 coup and unfairly excluded or targeted particular political organizations. (Hertz, Kolbe, Hutson, Miles & Trzcinski, 2010; MINUSTAH, 2005; Mobekk, 2006)

CVR represents a departure from these earlier efforts in its focus away from what could be described as first generation DDR to something approximating stabilization or second generation DDR. And while adapting between 2007 and 2010, CVR purposefully maintained an emphasis on the city and neighborhood – or community - scale. After the January 2010 earthquake, CVR dramatically scaled-up its activities more than fourfold (despite losing some personnel in the earthquake) and while continuing to focus on core priorities in affected communities, CVR also expanded its portfolio to account for additional short-term (post-quake) priorities that were not necessarily oriented-toward violence reduction per se.

Theory of Change. An underlying assumption guiding CVR activities is that certain urban communities of Haiti – and in particular the *quartiers défavorisés* of Port-au-Prince – exhibit a high degree of social disorganization. Social disorganization theory posits that rapid urbanization and urban living can unsettle social ties resulting in communal relationships that are

temporary, transitory and instrumental. These newly configured relationships can, it is argued, give rise to more violent social interactions. As such, an underlying, if unstated, expectation of CVR is that efforts to promote social organization can reduce the incentive of young males from joining gangs and stem the onset, duration and intensity of urban violence. In this way, CVR also borrows from conventional criminological and sociological approaches to reducing violent crime, including so-called broken-window theory.

In advancing the five pillar approach, the CVR program has adopted a number of strategies to strengthen the social organization of violence-affected communities. While not explicitly stated as such, CVR has promoted an approach that focuses on minimizing risk factors giving rise to violence and promoting protective factors amongst key population groups. Imputed risk factors include youth unemployment, limited skills amongst youth, psychological trauma, physical and economic vulnerability of women, and weak community institutions. Practically, then, CVR has advanced several operational priorities to address these risks and thus strengthen the protection of targeted communities. Key areas of intervention include the promotion of economic opportunities for youth (18-25), training for youth, physical and psychosocial protection for women and girls, psychosocial and medical support, and community outreach.

It is also worth emphasizing that the CVR program is also intended to strengthen the legitimacy and effectiveness of state authorities and MINUSTAH more generally. Specifically, CVR was intended to create a positive interaction and engagement between local nodes of authority in poorer areas and law enforcement entities (including the Haitian National Police, UN peacekeepers and UN police). The CVR approach, then, was intended not just to reduce recruitment into gangs and armed groups and mitigate community violence, but also to create a

more positive dynamic between citizens and the state. This is not to suggest that CVR was intended to serve as a development program. Rather, that CVR was expected to enable more positive state-society bargaining so that security and development could proceed.

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Chapter 4: Theoretical Review

The questions posed in this dissertation touch on diverse bodies of literature from political science, social work, psychology, and the other social sciences. While a complete elucidation of each frame of research is beyond the scope of this dissertation, a review and synthesis of some of the relevant literature and theoretical work is provided here to contextualize the questions being posed, the way in which I am posing them, and the placement of these particular research findings within existing social science and social work knowledge. The theories reviewed in this chapter are frequently cited in the literature as explanatory when exploring the intersections of rehabilitation success with war-time experiences, political behaviors, engagement in crime, prosocial behavior, and attitudinal change. They are important because theoretical positions, both implicit and explicit, shape the decision to engage in DDR, the character of DDR interventions, the services offered, the populations targeted, and the assessment of program success.

I begin with a discussion of trauma. It is impossible to separate out the traumatic experiences of engaging in armed conflict from the rehabilitation process. I look at the impact that trauma has on perception, beliefs, thinking, and behavior. Then I move to a theoretical discussion of criminality and political behavior. I look at two loosely formed bodies of ideas: first, the idea people engage in crime and political behaviors because of who they are, and second, that people engage in crime and/or political behaviors because of the situation in which they find themselves. Embedded in this section is a discussion of sometimes overlapping theories and concepts which can be used to explain part, but not all, of the reasons why DDR participants

might succeed remaining crime-free during after reintegration. Relatedly I discuss the concepts of locus of control and self-efficacy, which may be used to help understand the impact that program interventions had on the individual participants.

The Common Experience of Trauma

It would be impossible to review literature related to the success or failure of a DDR intervention without discussing trauma. War is traumatic. Whether a person is engaged in combat or not, violence scars the psyche. Traumatic experiences reported by study participants included not only war-time events but they also included interpersonal relationship conflict, the natural and accidental deaths of family members and friends, hospitalizations, street violence, illness, vehicle accidents, and more.

Trauma influences an individual's current psychological, social, educational and vocational functioning. It also influences how they view their place within the DDR process, engagement or lack of engagement in the intervention, their beliefs about change and their own efficacy in making personal changes, and their political behavior. To retain participants, DDR programs must avoid re-traumatizing victims and must serve as an encouraging space for those wanting to move past traumatic experiences. Thus, the task- and skill-focused intervention form of the interventions included in this study provide a much needed opportunity for future-oriented rehabilitation.

In this section I review some of the theoretical concepts and how they are tied to trauma and political behavior. These theories help us understand the processes that undergird the process of identity formation. Ultimately, reviewing this literature helps us understand the mechanisms through which DDR programs can shift someone's outlook on life. Examining the links in the

literature between trauma and concepts measured in this study such as locus of control, self-efficacy, political behavior, and engagement in crime help contextualize some of the analysis conducted as part of this study.

Personality and Trauma.

The Big Five. One of the most helpful developments in recent years, vis-à-vis the relationship between personal experiences (such as trauma) and behavior (political and otherwise) is attention to the "Big Five" personality variables. These personality variables provide a useful metric for assessing those undergoing personality change and identity formation as a result of trauma. Though much of this literature, particularly the early research, focuses heavily on workplace applications of this construct there is an emerging attention to applications in the realm of political behavior. The big five include: 1) openness to new experiences, 2) conscientiousness, 3) extraversion, 4) agreeableness, and 5) emotional stability.

The Big Five – also known as the Five Factor Model (FFM) – have roots in the research of Goldberg (1990; 1993) and McCrae and Costa (2003; 2008). The FFM has been particularly useful in identifying common patterns in human behavior including reactions to significant events in ones' life and subsequent behaviors. And, rather than focusing exclusively on tolerance, ideological beliefs, or authoritarianism, the Big Five takes a holistic approach, recognizing that a person's personality – that which makes them unique – is shaped by (at least) all five factors and that all are important for understanding and predicting political behavior, predispositions, political attitudes, and participation. (Gerber, A, Doherty, & Dowling, 2011; Mondak, 2010)

Control & Perceived Control.

Locus of Control. Locus of Control, the sense that one is able to influence outcomes in their own personal life – was introduced by Rotter in the mid-1960s as a personality variable. It has since been used extensively to explain a host of phenomenon, including both post-traumatic growth and active political behaviors. The LOC construct views the traumatized individual as falling on a scale from internally to externally controlled (so, from feeling that one has total control over their life and what happens to them to the other extreme of thinking that everything is determined by God or fate and that they have little influence personally on the events in their life). (Bandura, 1982; 1989; 1990)

Self-efficacy as a cognitive aspect of perceived control. Closely related to the Locus of Control construct is the idea of self-efficacy which Bandura (1982; 1990) identified as one of the cognitive aspects of perceived control by an individual over their circumstances and events in their life. While having an internal locus of control may make people more likely to take an active role in their recovery from PTSD or to engage in political action, simply perceiving the source of control as internal may not be enough on its own to spur actions. Bandura argued that a person also needs to have a sense that their actions will be successful and to have confidence in their ability to act. (Bandura, 1990)

A person's sense of their self-efficacy influences behavior through four processes: cognitive, motivational, affective, and selection processes. The end result of these processes are individual beliefs that a person develops about the own competencies, the probability of their success, their sense of their own importance in the political process (or the process of recovering

from trauma) and the like. The beliefs the individual adopts in turn influences their levels of motivation, choice of behaviors and their actual efficacy at regulating themselves and their environment as they engage in personal or social change. Self-efficacy can work to determine what activities people engage in, how much effort they put forward to try to achieve their goals, and how long they continue to persevere in when faced with adversity (Bandura, 1982).

Like Bandura, psychologists Solomon and Mikulincer (1988) used Rotter's conceptualization as LOC to determine that not only was external control associated with increased post-traumatic symptomology, but also that internal LOC was associated with the identification, seeking out of, and use of supportive resources post-trauma (something that we usually associate with higher self-efficacy). Other studies have similar findings. (Bleich, Gelkopf, & Solomon, 2003; Brown, 2002; Cukor, Spitalnick, Difede, Rizzo, & Rothbaum, 2009; Kleiber, Veldman, & Menaker, 1973; Mikulincer & Solomon, 1988; Mikulincer, Solomon, & Benbenishty, 1988; Solomon, Benbenishty, & Mikulincer, 1988; Solomon, Mikulincer, & Avitzur, 1988; Solomon, Schwarzwald, Weisenberg, & Mikulincer, 1988)

The dual influence of LOC and self-efficacy as moderators can be seen as two related by parallel scales: 1) from internal to external locus of control; and 2) from low to high perception of self—efficacy. A model representing this conception as gleaned from existing research is below; though this theory of change is not clearly articulated in the literature, it appears to be the basis for much of the LOC and self-efficacy literature relating to political trauma and to the relationship between trauma and behavior. It is important to note that although self-efficacy and internal locus of control often appear to be related, there are some cultures where one may be more likely to have an external LOC but a high sense of self-efficacy (CIDA, 2006; de

Watteville, 2002). Although more research is needed in this area, preliminary studies indicate that for external LOC people with high self-efficacy, the process of meaning-making, whereby the person "fits" the traumatic experiences into his/her own cultural understanding of hardship, plays a role that is perhaps more significant than for other Western cultures in mediating the relationship between trauma recovery and political behavior.

Motivational aspects of perceived control. White (1959) describes a motivation aspect of perceived control, effectance motivation, which is the motivation a person has to master or control their environment after the basic human needs for food, shelter, etc. have been met. White argued since effectance motivation is driven by an inherent need to influence the environment, the behavior it prompts tends to be directed, selective, and persistent. By controlling their environment, a person is rewarded with a sense of confidence and satisfaction. The work of De Charms (1968) is based on the same basic model saying that just knowing you are an agent of change in your environment is inherently satisfying. This construct has been examined (though it is not very popular) in political science using a 20 question clinical measure developed by Burger and Cooper (1979). Research, though limited, supports the notion that victims of violence find satisfaction in both the process of controlling their environment and knowing the impact that they have on reducing social injustice and advocating for others. (Freedy, & Hobfoll, 2005; Veale, & Savrou, 2007)

Life course/individual development and socialization. Despite the presence of research in political science addressing the relationship of traumatic experiences and political socialization, there is still a lot discord regarding the paradigmatic assumptions of the rational choice political science literature and the findings of the political psychology community on

political socialization. Rational choice assumes that utility maximization determines individual behavior.

But as we see from everything else we have been looking at individuals have both limitations and things that help them have good outcomes. So, unlike that advocated by rational choice theorists, people do not always do what's in their long-term self-interest. Political scientists often refer to these limitations as contextual effects (situational theories) and cognitive orientations (dispositional theories). The concept of socialization is generally used to explain either coping with trauma or political behavior, but not usually both at the same time. Within political psychology this research tradition has its roots in Erikson's theoretical framework of identity and political socialization (Erikson, 1968). Socialization happens as a child interacts with the world, through education, parenting, peer relations and interactions with strangers.

Researchers tend to focus on late adolescence as the pivotal period during which political socialization occurs. However, traumatic experiences, particularly for children, are critical in shaping those whom DDR programs are trying to reach. Trauma, and in particular that associated with political events such as war or displacement, can also contribute to the process of political socialization. (Adams, 1985; Campbell, 2006; Erikson, 1968; Gallatin, 1986)

This is of particular interest – and concern – as adolescents have unique vulnerabilities regarding their reactions to traumatic events. Adolescents are developmentally and emotionally different from both children and adults; physically though some may appear to be adults, they may not have developed the cognitive capacity to fully process cope with the traumatic event. Indeed, impulsivity, risk taking and irritability are often found to be more common among adolescent survivors of violence and trauma than among adults, perhaps in part because the

neurological processes related to controlling behavior and thoughts are still developing in adolescent brains. Experiences of childhood and/or adolescent trauma have been reported as being more common among DDR participants than other community members in some small research studies. (AAPSS, 2005; Annan, Blattman, & Horton, 2006; Settle, Dawes, Christakis, & Fowler, 2010)

In conflict and post-conflict situations -- where trauma is systematic and pervasive -- adolescents may respond to political stimuli in very different ways than non-traumatized adolescents. For instance, in Uganda, teens who had been abducted and forced to fight during childhood were more politically involved and were stronger advocates for peace and the democratic process than theirs peers (Annan, et al, 2006). But as traumatic experiences can force young people to mature faster than peer or can otherwise alter their normal developmental course, they can also leave adolescents with a burden. Other research on the same adolescent group in Uganda revealed that many former-child soldiers felt compelled to avoid confrontation or to let themselves be victimized to demonstrate to the community that they were not a threat, even when defending oneself was justified (Veale & Stavrou, 2007).

Adolescents also differ in their reactions when compared to traumatized adults. Research has shown that adolescents exposed to political violence are more likely than adults to engage in risk-taking behaviors, embrace extreme political ideologies, engage in anti-social or addictive behaviors as a form of coping, and to choose passive rather than active political activity and to seek out information. While some of these aspects of difference with adolescents can be harnessed to create positive political change; they can also put young people at risk in situations

where certain political groups or activities are dangerous. (Dubow, Huesmann, & Boxer, 2009; Gallatin., 1986; Koopman, 1997; Laor, Wolmer, Alon, Siev, Samuel, & Toren, 2006)

Personal Change and DDR-based Trauma. Trauma can serve as a catalyst for personal changes, and can ultimately redefine who a person is. Furthermore, a DDR-intervention happening soon after an intervention can play a crucial role in further changing the personal characteristics of a person. The literatures on the Big Five, Locus of Control (LOC), self-efficacy, and perceived control all serve as useful metrics for assessing how someone changes during trauma. This study employs instruments on Locus of Control and self-efficacy, which both offer incredible insight into personality change and identity formation pre- and post-intervention. Further research is needed to understand how DDR-intervention participants experience personal change according to the other metrics discussed.

Using Theories on Criminality and Crime Reduction to Understand DDR

The literature on criminality and crime reduction, like the personal change literature, is essential to understanding how DDR-interventions impact the long-term prospects of participants. Members of armed groups who are participating in a DDR process are treated as exsoldiers by the international community. This is despite the fact that many of the behaviors these individuals engaged in during the period of the armed conflict were illegal or at the very least, deviant from the social norms of Haitian culture and society. The status of individuals DDR participants as criminals is complicated by a number of things; (1) lack of laws in the Haitian justice system prohibiting specific behaviors; (2) social acceptance of some illegal behaviors; and (3) the powerful hand of the international community which intervenes to re-label the behavior and the individuals as part of its peacemaking and peacekeeping missions.

In the context of crime research, deviance is used to describe behavior which violates social norms. Particularly serious social norms are codified in laws. Those who fail to comply with these serious social norms are considered criminals (Palmer, 2013). Societies respond to criminals by punishing them, rehabilitating them, or both. Societies further respond to the serious violation of social norms by establishing other social controls to prevent lawbreaking. This typical process is subverted when an individual's behavior is redefined as an act of war, even in cases like Haiti where a war was never declared and when the armed conflict between gangs and other paramilitary groups is not recognized by the international community as an act of war. A gang member shooting another gang member then becomes neither an act governed by the laws of war (as war was not declared) nor an act which is considered criminal under Haitian law (as the international community redefined the conflict to label gangs as insurgent groups to be targeted for DDR).

Despite this complication, the behaviors in which former members of armed groups have engaged are those most would consider to be criminal. They have engaged in trafficking of people, arms, drugs, and stolen or prohibited goods. They have raped, pillaged, threatened uninvolved bystanders with bodily harm, kidnapped, extorted money or goods, burned fields and orchards, killed livestock, tortured, and assaulted people. Some acts by individuals in Haiti's armed groups could be considered terrorism. Many activities, such as trafficking in prohibited merchandise (including Styrofoam take-out containers, which were banned by the government for environmental reasons) and burning the fields of wealthy families funding opposition groups or enemy gangs do not fit the typical definition of combat nor are they typically prosecuted as war crimes.

To understand criminality and the individuals propensity to crime is a complex task, this is due to the complication of getting to the root of what makes some criminals and others innocent. Criminality is the state of being a criminal while crime can be broadly defined as acts or omission forbidden by law and are subject to imprisonment or fine when done (Rothe, 2009). The complex part of humanity is what makes people behave differently more so as pertains to crime (Palmer, 2013).

Early Perspectives on Criminology

Classical school. Early ideas about crime were heavily influenced by the Classical School, a body of ideas put forth during the 18th century by social-contract philosophers, notably Jeremy Bentham and Cesare Beccaria. As utilitarian philosophers, Bentham and Beccaria argued that people are "calculating" (thinking) beings and that as man has free will, he can choose to not engage in crime. Therefore, they argued, punishment can be a deterrent form crime as long as it is proportional and prompt. Bentham posited the idea that people weigh the pros and cons of their actions before acting; if the individual expects the punishment for a crime to outweigh the gains, he will be deterred from committed the crime. In Bentham's rational system based on producing maximum social utility, punishments much match the crimes and not be vengeful (Bentham, Lafleur, 1948). Beccaria's 1764 work *Dei Delitti e Delle Pene* (On Crimes and Punishments) advocated for reforms in the criminal justice system to reduce harm caused to society by criminals (Beccaria, Thomas, Parze, 2008). Crime could be prevented, he argued, if the punishments for crime were proportional and clear to all citizens. His work led to the creation of the first sentencing guidelines and the codification of laws to assure swift trial.

A classical school approach provides a somewhat optimistic take on the prospects of DDR-intervention participants to reintegrate into society. If an individual chooses to commit a crime, then it is possible to change one's mind. However, this perspective would be critical of the fact that the DDR-approach fails to punish ex-combatants. Rather than punish offenders, DDR programs often provide positive incentives for participation. Therefore, the failure to provide punishments may undermine effectiveness.

Biological perspective. The biological perspective puts forth the idea that people engage in crime because of who they are. The biological theory of crime emerged from the work of Cesare Lombroso, a 19th century Italian physician and founder of the Italian School of Positivist Criminology who rejected the established classical school, which held that crime was a characteristic trait of human nature which could be reined in with laws and established rules. Instead, using concepts drawn from early eugenics, Lombroso argued that criminality was inherited, and that person who was born to be a criminal could be identified by physical defects. Lombroso's general theory suggested that criminals are distinguished from non-criminals by multiple physical anomalies. (Lombroso, & Horton, 1968)

In Lombroso's view, the person does not choose to do the crime, the crime chooses him. Lombroso's criminals were a step back to primitive impulse-driven man, a subhuman type of creature characterized by physical features reminiscent of lower primates, and that such people were simply unable to live in society without behaving as savages. Lombroso's conclusions were based on years of autopsies and physical examinations of criminals, people with mental illness, disabled people, and individuals with no known criminal history or disabilities. In addition to

physical abnormalities Lombroso also argued that criminals had less sensibility to pain and touch, better eyesight and hearing, and, interestingly, excessive tattooing.

Lombroso's theories were disapproved of throughout Europe, but not so much in the United States, where sociological studies of crime and the criminal predominated at the time. His research was eventually challenged and disproved by Charles Goring (DiLalla & Gottesman, 1989). However, Lombroso did not argue just for people being born as criminals. He also acknowledged the existence of "occasional criminals", those who were driven to crime by passion, poverty, cognitive disability, or other circumstances seemingly beyond their control. Though Lombroso's obsession with genetic predisposing factors was inaccurate and is offensive to our modern sensibilities, his acknowledgement of precipitating factors such as environment, opportunity, or poverty, was tied to a larger movement within criminology to recognize that simplistic understandings of cold logical choice based on fear of punishment were inadequate in understanding why people commit crimes.

The biological perspective provides a pessimistic view of the potential impacts of DDR on changing ex-combatant behavior. If people who commit deviant behaviors do so for inherent biological reasons, attempts to change them would be fruitless. An underlying assumption of all DDR programs is that it is possible to change ex-combatants for the better. Thus, the biological perspective is fundamentally incompatible with the logic of demobilizing, disarming, and reintegrating ex-combatants.

Positivism. Lombroso's contemporaries included Henry Mayhew, Émile Durkheim, and Lambert Adolphe Jacques Quetelet. Quetelet, in addition to the coming up with the concept of the body mass index, also argued that crime is tied to sociological factors including poverty,

gender, and education. (Quetlet, 1984) Meanwhile journalist/ethnographer Mayhew wrote detailed descriptions of an urban underclass forced to survive by any means necessary, whose members adopted criminal behaviors in response to their own needs to survive (Mayhew, 1968). Émile Durkheim posited that crime was an inevitable outcome of the unequal distribution of wealth in society. However, crime does have purpose, he argued. Reactions to deviance help us clarify moral boundaries while deviance itself promotes conformity and solidarity among the non-deviant members of society. Deviance has other functions as well such as promoting social change (e.g. through civil disobedience). Durkheim (1982)

According the positivist approach, DDR-programs would need to be cognizant of the sociological factors that influence the lives of participants. A DDR program would need to promote stable economic and social environment to effectively promote rehabilitation. Thus, DDR would need to incorporate some of the traditional goals of development, like poverty-reduction, in order to effectively rehabilitate ex-combatants.

Chicago School

In the early 20th century the work of urban sociologists at the University of Chicago created a dialogue regarding social structure and conflict of out which much of our contemporary understanding of criminality has emerged. Theories from the Chicago school underpin much of the current DDR work in Haiti. In particular, social strain theory lays the foundation for the TAU (intervention A) approach while the faith-based program (intervention B) is grounded in social control theory, and the education based program (intervention C) is guided by theories of social disorganization and social ecology. Though not stated as such, the concept of differential association is also embedded in the approach taken by interventions B and C, which hope to

decrease contact with crime involved peers and increase contact with law-abiding Christians (intervention B) and people who value education (intervention C).

Social strain theory. Robert Merton argued that in every society there are culturally defined goals and a socially approved means for reaching those goals. Though primarily referencing economic and class-based goals, these ideas could apply to other social goals as well such as prestige, power, and respect, among others (Thornberry, 2014). Merton – whose work was based on research in the United States, noted that American culture positions economic success at the apex of social desirability. The emphasis on the attainment of economic success is omnipresent. However, this goal is out of reach for some who are hindered by socioeconomic class structures, such as education, employment opportunities, limited legitimate means of achieving economic success, and social marginalization. This disconnect between goals ascribed by ones culture and the availability of legitimate, socially approved means to achieve those goals creates an imbalance Merton called anomie.

The weakening of social norms occurs as the person struggles to accept or reject culturally defined goals and socially approved means to reach those goals. Once anomie sets in, success is no longer guided by societal norms of right or wrong. While not all adaptations to anomie are deviant, Merton posited that deviant adaptations were most often adopted when anomie level is high and blocked opportunities are the greatest; that is, when the person accepts the culturally defined goals but has no way to reach them (Thornberry, 2014).

Differential association. This theory was developed by Edwin Sutherland who argued that deviance is learned the same way humans learn other things: by modeling, small group interaction, and intercommunication. He gave the suggestion that via interaction, people absorb

beliefs, views, motivations and techniques that facilitate the committing of crime. As the individual learns the techniques of deviance, they also absorb attitudes and motivations justifying their deviant behavior (Kornhauser, 1978).

Differential association refers to the differing amounts and types of involvement including different frequencies of interactions, intensity of interactions, and duration of interactions. Generally, he argued, longer lasting associations, associations early in life, and interactions with people who are held in higher esteem are more influential on learned deviance. Sutherland's notion of cultural deviance was based on research on socially disorganized, poverty stricken areas of Chicago formerly described as Transition zones. Nurture, not nature, he argued, was the determining factor of the likelihood of an individual being delinquent. Differential association theory answers some questions left by strain theory, such as why not all poor people turn to crime, but it does not explain how people who are not poor and do not come from a crime-involve background can become criminals.

Social ecology and disorganization. In social disorganization theory, place matters.

Crime is linked to ecological deficits in one's school, neighborhood, area, or zone. Where you live helps determine if you grow up to be a criminal; the characteristics of the place where you live are as important or perhaps more important than other factors such as ethnicity, religiosity, biology, and economic class. The adoption of attitudes and norms prohibiting or embracing criminal activity happens through acculturation. Young people from poor urban neighborhoods are part of subculture, this theory argues, which approves of delinquency and which introduces them to crimes and enables them to perfect and justify their engagement in crime. Crime is also linked to place because other socioeconomic factors such as concentrated high poverty rates,

poor schools, lack of employment opportunities, poor infrastructure and political and social marginalization are also linked to specific neighborhoods with a low socioeconomic status.

(Thomas, Znaniecki, & Zaretsky 1984). Park and Burgess (1969) expanded this theory to argue that growth of the urban environment and competition for scarce resources concentrates residents into distinct niches with other residents who experiences the same social pressures; during the early stages of this process there is social disorganization as the normative structure of the community is disrupted and reorganizes.

Social control theory. This theory suggests that bonds between individuals are compelling reasons for human action. The need to belong and be attached to others is a key human motivation that influences emotional, cognitive and behavioral processes. One can apply this theoretical perspective to the study of crime when asking why criminals commit crimes while other people do not. Social control theory uses the idea of social bonds to respond to this question. When the bonds of an individual to the society are strong, the bonds actually deter crime and other deviant behaviors. The probability of deviance is, however, increased when bonds are weak. Broken or weak bonds are not causes of delinquency but they rather they create conditions in which it can occur (Wiatrowski, Griswold & Roberts, 1981). There are four significant social bonds between people and society (Hirschi, 1969):

- Attachments Concern about the opinions of others makes people crime- and deviance- avoidant.
- Commitments When people commit time, energy, or other resources to something (like a career), they are less likely to engage in deviant behavior and risk losing the thing they invested in.

- 3. Involvements Energy and time spent on activities leaves less for deviant behavior.
- 4. Beliefs Socialization leads to the acceptance of a popular belief system and makes it less likely that an individual will behave in ways that counter prevailing views.

So, the strength of social bonds between an individual and other members of society lessens the propensity of deviant behavior or criminal. As the social bonds get to be internalized, they strengthen social control which prevents persons from engaging in unlawful acts.

Prospects of DDR according to the Chicago School. The Chicago school can offer a great deal of insight into the prospects for change of DDR participants. There are three strategies for re-socialization according to these theoretical perspectives. First, according to social strain theory, which holds that there are culturally defined goals and prescribed means to these goals, a DDR-participant may be re-socialized to conform to these society-wide aims. Second, differential association also implies the need for re-socialization, since deviant behaviors are learned. Prosocial behaviors can be learned through practice in DDR programs. Lastly, according to social control theory, DDR programs should foster bonds between ex-combatants and other members of society.

Social ecology theory argues that where one lives can have a very powerful impact on behavior. This idea poses a significant challenge to those who design DDR programs, since this is a factor that they have little control over. Proponents of social ecology theory may try to relocate program participants to more suitable environments through, for example, an internally displaced persons (IDP) camp resettlement program. They may also attempt to disrupt geographically-based social networks in DDR interventions.

Psychological Theories

While sociological theories tend to concentrate on environmental and cultural factors, psychological theories of crime emphasize personality, dispositions, cognition, and understanding of one's current and past experiences, emotions, and beliefs. While DDR programs frequently refer to psychological theories in their program plans, their formal response to the Request for Proposals (RFP) in which they apply for funding, and in other program documents, in practice their activities are more clearly embedded in the sociological literature on crime and deviance. However, it is still important to be familiar with the psychological theories of crime as they relate to some of the clinical measures used in this study. The decision of which clinical measures to use for baseline and follow up interviews was heavily influenced by program funding institutions, who have, in the past, favored psychological theories of crime over sociological ones.

Dispositional theory. In a nutshell, dispositional theories focus on the internal, individual mental process by which a person understands and copes with the world around them and by which they (later or simultaneously) choose to engage or not engage in various actions. While many earlier theorists (e.g., Rotter) focused on this internal predisposition that influences ones behavior, more recent theorists (e.g.: Stenner, Krampen, Osgood) have come to embrace dispositional theories as explaining some, but perhaps not all, aspects of coping and behavior.

Intuitively, there is an aspect of dispositional theories that makes a lot of sense. Human beings are not born as empty vessels shaped only by information they learn in school or the nurturing received from their parents. There is an aspect of what makes us individuals that comes from our nature, our genetic make-up, or some undefined other thing, which is inherent to who

we are as human beings and separates one person from another. Even twins, who share the same genetic origins, are often reported by their parents to have been "born" with different personalities. These differences (in personality, traits, temperament, and the like) shape us as people for many years before we are actively socialized into political beings or engage in the political world. (Hardy-Vallae, 2008; Robert, 2010; Smith, et al., 2012)

Dispositional theory stands in contrast to that posited by the Chicago School. This theory argues that if people are each uniquely different, experiencing the same situation will not always produce the same result. For instance, two children can grow up in the same apartment building, go to the same schools, have very similar life experiences, and then experience the same traumatic event. The reactions to this event can easily vary, as can their long term impact and the behavior and attitudes of these two friends years after the fact.

To take this analogy one big step further, two children, twins, can be born into the same family, be raised by the same parents and go to the same schools. One might react to living through a bombing very differently, by becoming withdrawn, disengaging in the political process and avoiding discussions of politics or news reports. The other twin may react oppositely, throwing themselves into activity as a way of coping with the event, joining community groups, marching for peace and actively engaging in conversations with people about political events and news. Indeed, many researchers have found studies of twin pairs to be a fruitful method for exploring the inherent differences in individual disposition that influence political behavior. (Hatemi, et al., 2007; Funk, Smith, Alford, Hibbing, Hatemi, & Hibbing, 2010)

According to dispositional theories, the process of developing meaning or understanding about the event and its place in one's life, (hereafter referred to as "processed" for the sake of

brevity) it both active and cognitive. Processing is influenced by beliefs about control (see, for instance, Rotter, 1966; Solomon, Mikulincer, & Avitzur, 1988), by one's sense of self-efficacy (see, for instance Bandura, 1990), cognitive appraisals (see for instance, Foa, Zinbarg, & Rothbaum, 1992), and by other specific personality traits.

One assumption of dispositional theorists is that attitudes and ideology influence behavior. Therefore, certain behaviors may be more, or less, tied to certain ideologies and vice versa. It is important to remember that the existing literature is rather myopic in focus, often addressing only single traits and their relationship to attitudes and behaviors. One assumption in research on individual personality variables is that a particular personality variable is related to how well one responds to life; that shapes their political attitudes, which leads to behaviors such as seeking out political information, becoming an insurgent, joining community associations, voting, protesting, engaging in torture during war, and the like. As Mondak and colleagues (2010, p.85) put it: "people's enduring psychological tendencies are always reflected in their traits," making the integration of trait structure necessary into any holistic model of human behavior.

Dispositional theory lends credence to the idea that some people are innately more disposed to criminal behavior than others. Thus, DDR programs are limited in the impact they can play in affecting personal change in ex-combatants. However, if a DDR program recognizes that some people have a disposition towards deviant behavior, perhaps it can provide individuals with alternative outlets. For example, if a participant is predisposed to risk-taking behavior, it may be useful to foster entrepreneurial skills as a potential avenue to channel this behavior.

Personality theory. The psychological aspect of personality has been explained as stable behavioral patterns, actions or thoughts which differentiate one person from the other (Eaves, Eysenck, & Martin, 1989). Researchers have linked violent behaviors to characteristics such as egoism, hostility, self-centeredness, jealousy, spitefulness and indifference. Some researchers have argued that there is a strong relationship between criminality and the lack of perseverance or ambition, an inability to control ones temper, poor impulse regulation (in general), and the adoption of unconventional beliefs. Personality characteristics can be assessed using measures such as the Minnesota Multiphasic Personality Inventory (MMPI) or the Multidimensional Personality Questionnaire (MPQ). Using these scales, those researching adolescents and young adults have found notable links such as the relationship between adolescent violence and irritability, anxiety and unfavorable social conditions, and the influence of stress on poor impulse control. Other adolescents who are subject to violence have a typical response of reacting to events that are frustrating with strong emotions that are negative. In many a times they feel stressed irritable and anxious before unfavorable social conditions. Criminality in this age group has also been linked through psychological testing to hostile attitudes, approval of aggressiveness, and paranoid ideation. (Brees, Mackey, Martinko, & Harvey, 2014; Boduszek, Shevlin, Adamson, & Hyland, 2013; Eichelsheim, Nieuwbeerta, Dirkzwager, Reef & De Cuyper, 2015; Eysenck, 2003).

Even though personality research was not historically concerned with criminal conduct, it can add to our understanding of criminal behavior. A short review concerning the historical development of this area's constructs as well as the varied methods in which it is quantified are crucial to situating its position in the criminology discourse. Research on personality began in

earnest in the 1930s with the research work of Henry Murray and Gordon Allport. Allport's (1937) 'Personality: A Psychological Interpretation,' provided a working definition and structure for the emerging field of personality research. Allport criticized a focus on generalized human behavior, which he argued, ignored the person's uniqueness, their thinking, and the personality with which they emerged in the situation. Allport rejected the idea that all behaviors are comprised of simple, inborn habits, arguing that personality plays a fundamental role in shaping our understandings, beliefs, and behaviors. Personality helps determine how an individual interacts with the social environment and that is it what drives behavior and behavior choices, including the decision to engage in socially deviant activities. (Eichelsheim, et al, 2015)

Allport determined that personality at early life stages is effected environmental aspects. According to Allport, personality starts taking shape from about four months of age, and grows progressively while simultaneously influencing behavior. Contrary to criminologists like Hirschi and Gottfredson (1990), Allport noted that personality at the age of four does not signify that personality is fixed in the first year of life. Rather, later interventions or circumstances may have a great impact. This idea is particularly relevant for those who go through the traumatic event of fighting in war, and is therefore relevant to DDR programs. If personality can shift as a result of war, DDR programs should account for these personality shifts as they determine which services are appropriate.

Allport's research was at this time paralleled by the work of Henry Murray. Murray (1938) agreed with Allport's fundamental conjecture and argued that individuals have been ignored by psychologists in their analyses. Murray advocated for the uncovering of determinants of the single behavioral events. He viewed an individual' experiences as an "infinitely

complicated series of the temporally associated activities which extend from birth to death."

Thus, Murray recognized that there is some static personality consistency while at the same time recognizing that personality is exposed to maturation. In other words, individuals do display a tendency to react consistently, although fluctuations in personality over time can occur.

(Eichelsheim, et al, 2015)

Measurement of personality trait. Personality study gained popularity throughout the 1930s and 1940s. However, the optimal measurement for personality traits measurement has lacked scholarly consensus. Strictly speaking, there exist no two individuals having an identical array of personality traits, but rather, personality attributes are manifested differently in every individual. Assuming that individual personality can be labeled, choosing labels is a complex endeavor. For instance, Allport (1937) identified 18,000 terms (which are chiefly adjectives) in English language designating behavior forms. With these groups of behavior, he theorized that some represent the major or cardinal traits as well as other secondary or minor traits.

The work of Cattell in 1950 set the platform for measuring and developing a taxonomy personality variables. He criticized past psychologists for failing to develop an objective framework for describing and also measuring personality attributes. Cattell believed psychologists depended on clinical guesswork in their attempts to identify the personality structure. Thus, he advocated for factor analysis as a method of developing personality taxonomy. The process entails presenting hundreds (and eventually thousands) of carefully selected items of large sets of psychologically normal persons. Every item is then correlated with every other item to determine which sets tend to occur together.

After the development of taxonomy, psychologists started constructing questionnaires. In addition, after the first and second world wars there was a sudden demand for mass standardized personality testing of soldiers. This led to the development and extensive usage of MMPI, which is a pencil and paper instrument comprising of 566 statements. This instrument became the basis for many future instruments.

Personality research based on measurements arose in the 1930s and is still used heavily in contemporary research. Even though the feasibility of personality measurement has been criticized in the past, the increasing development of reliable tools now offers support for the continuation of this research. In addition, factor analysis has proven to be a dependable tool for the construction of the personality scales. Now, most psychologists hold tempered views of personality. For example, the idea that people react to their surroundings but also they also make deliberate choices about their behaviors.

Eysenck's approach to personality and crime. Many personality and behavioral studies depend on a descriptive model comprised of traits and super factors. Personality traits are defined as the enduring characteristics in an individual that determine his/her conduct. On the other hand, a super factor or type is defined as a set of correlated traits. The term "type" is evident in the in the modern personality theory and is considered superordinate to that of a trait. One's personality type corresponds to what others, employing factor analysis, have called the second order types or super factors. Therefore, super factor determines personality type based on a constellation of individual personality traits. (Boduszek, Adamson, Shevlin & Hyland, 2012; Boduszek, Shevlin, Adamson, & Hyland, 2013)

The work of Eysenck arose from his exploration of personality traits amongst 700 male service patients in the year 1940s. Eysenck finished a large factorial study that came up with three main types including psychoticism, extroversion-introversion, and neuroticism. At a later time, Eysenck (1952) developed the Eysenck Personality Questionnaire (EPQ) which measured psychoticism. The traits associated with psychoticism are egocentrism, impersonal behavior, antisocial behavior, creativity, tough-mindedness, impulsiveness, aggression, unpathetic behavior, and cold behavior. Next, traits that create the type neuroticism entail: depression, anxiety, guilt feelings, tension, emotion, low self-esteem, shyness, irrationality, and moodiness. Lastly, traits associated with extraversion type are sociability, assertiveness, liveliness, sensation seeking behavior, dominant behavior, active behavior, carefree, and venturesome. Researchers have also noted that many a lot of people are characterized by equilibrium between the types. (Brees, Mackey, Martinko, & Harvey, 2014; Boduszek, Adamson, Shevlin & Hyland, 2012; Ireland & Power, 2013)

Eysenck also gives us insight on the personality-based causes of crime of crime. He maintained his original typology, comprising of neuroticism, psychoticism, and extraversion to describe crime. He further theorized that psychoticism was more often linked to crime, and that extroversion was associated with younger samples, and the neuroticism in the older samples. Thus, neuroticism is more important in older samples and adds to stronger antisocial habits in the adults. He viewed the personality study as containing two interlocking aspects of environment and genetics. These two aspects combined explain the dynamics of personality. (Boduszek & Hyland, 2012)

Eysenck's theory entails a line of factors that start with genetics and finishes with the criminal behavior. He theorized that an individual's unique genetic structure is the initial link in the causal chain. DNA is not responsible for conduct, but a person's DNA affects what Eysenck terms as biological intermediaries like cortical arousal and as a result condition ability and conscience. Cortical arousal is a brain state marked by being both alert and attentive. Low cortical arousal is linked with both extraversion and psychoticism. Particularly, he theorized that persons with low cortical arousal seek out arousing and often risky acts, sometimes engaging in criminal acts. (Boduszek, Adamson, Shevlin & Hyland, 2012; Boduszek & Hyland, 2012)

Eysenck also sought a description not only of antisocial conduct, but also why people behave in ways which are socially desirable. He argues that criminals can identify right from wrong, and that they prefer the wrong to the right. To be specific, he theorized that criminal behavior is not a matter of conscience, but rather, its causes are found in operant and also classical conditioning. For example, the child being punished repeatedly for an antisocial act does not develop the suitable response (that is, fear of repeated punishment) will not learn from the punishment. The possibility of developing moral conscience relies on several factors, entailing whether conditioning experiences are absent, whether the wrong experiences are emphasized, and whether an individual has low cortical arousal. Eysenck conceded that the process of learning, or the breakdown of this procedure, adds to the possibility of criminal behavior. The causal chain completes here with the possibility of criminal conduct being forecasted from the genetic make-up of the person. (Boduszek, Adamson, Shevlin & Hyland, 2012; Boduszek & Hyland, 2012; Ireland & Power, 2013)

The tie of personality to criminal behavior gets clearer as he describes that both psychoticism and extroversion are associated with low cortical arousal that has influence on condition ability, conscience, and lastly behavior. With regard to neurotics, anxiety can act as the motivation or drive for criminal behavior. In this scenario, emotions can override the reason resulting to aggressive and impulse behavior. In conclusion, according Eysenck (1983), the three personality traits are involved in antisocial behavior, and extroversion, emotional instability, and psychoticism are all risk factors (Boduszek & Hyland, 2012).

Situational perspectives. Central to theories of situated and social cognition is that attitudes and beliefs are shaped by events that individuals experience – the duration of the event, the level of trauma (if any), their evaluation of the event and how that fits with previously held beliefs, the ambiguity of the event, all of these shape the way in which the person processes the event, leading to attitudes, beliefs and behaviors. (Gallatin, 2006; Bar-Tal & Labin, 2001, Campbell, 2006; Wagner, Forstmeier & Maercker, 2007). This process of meaning-making and understanding traumatic events happens in a social context because people are social beings. Within political science this is often examined in the realm of political information.

Ex-combatants make meaning of their experiences in conjunction with their peers and their social surroundings. DDR programs have a unique opportunity to participate in the meaning-making process. By providing a supportive forum for ex-combatants to process events, DDR programs can facilitate positive personal change.

Political engagement & disengagement. Writing in the *Federalist Papers* about what motivates people to engage in political activities, James Madison argued that it was all about human discord and the desire to take a side, saying that "frivolous and fanciful distinctions have

been sufficient to kindle their unfriendly passions and excite their most violent conflicts" (Madison, n.d.). Those taking the situational perspective would argue that James Madison was certainly in the dispositional camp, especially since he had such a dim view of human nature arguing that individuals' predisposed drive for conflict and the need to compete to serve one's own interest are the primary motivating factor in political participation.

Modern proponents of the situational perspective would be more apt to embrace another political theorist, Tocqueville, who maintained that citizens are socialized into a sense of obligation to engage in the political process and this "duty" is what motivates them to act. Though his perspective is not all positive or benign (he argued that instilling political obligation was a useful social tool with which to control and influence citizens), he does discuss at length the role of socialization in shaping political behavior, writing "it is the duty as well as the interest of men to be useful to their fellow men... [by] working for the good of his fellow citizens, he in the end acquires a habit and taste for serving them" (2005, p. 318).

Socialization is often cited as a protective factor for guard against poor post-trauma outcomes; it both shapes a person's values and morals, but also can instill a drive to learn, change or improve oneself and the world. And, of course, socialization teaches adolescents which political behaviors are productive (voting, writing a letter to the editor) and which will get you arrested (rioting, terrorism). (Sears & Valentino, 1997)

Information seeking and use. Earlier I discussed the importance of information seeking in the political process. But simply having information does not mean that a person will accept it or act on it. The tendency of humans to face difficulties in engaging in rational political thought can be traced back to the time of Plato who proposes a metaphoric story of men in a cave. In the

story, prisoners are shackled to the wall of a cave. They pass their days watching the play of shadows on the wall of the cave, mistaking the shades for reality. The prisoners, when told that their reality is false, are unable to accept that a sunny world exists above the cave. Plato uses this to demonstrate that social context can have limiting effects on the ability of people to comprehend and integrate new information. The assent from the cave is something that requires the ability to break with learned social realities (Plato, 1974).

The existing research lends credence to this. To cope with trauma, some people turn away from information, avoid it, do not trust it, or reject it entirely. Since information seeking is a foundational aspect of political behavior, avoiding accurate information fosters hatred and "hardened" attitudes towards political opposition and facilitates political violence against ones real or perceived enemies. (Bar-Tal, 2001; Morrison & Ybarra, 2008; Gayer, Landman, Halperin, & Bar-Tal, 2009; Beber, Rossler, & Sacco, 2012)

One of the other risks for political violence is the lack of dense social networks and social cohesion. Social networks are a protective factor against engagement in abusive or unnecessarily violent acts against community members as they reinforce cultural norms and provide natural sanctions for norm-violators. If a person decides to hurt another person, everyone will know about it and will respond accordingly. However, in situations where violence is viewed as necessary or obligatory (such as a war of liberation, self-protection, etc.) dense social networks are associated with increased, rather than decreased involvement in the use of violence. (Allodi & Stiansy, 1990; Humphreys & Weinstein, 2007; Weinstein, 2007)

Situational approach and political behavior. Situational approaches focus on trauma survivors as social beings who are in a constant interaction with their environment; thus, the

primary influence on behavior and attitudes occurs through this interactive process, both historical experiences (e.g. what happened when they were a child) and current or ongoing experiences. (Sears, 1997; Sears & Valentino, 1997; Bourchard, Guillemette, & Lanry-Léger, 2004; AAPSS, 2005) As a person processes their experiences they do not do so in a vacuum, but rather are influenced by other people's interpretations of their experiences, expressed thoughts and behaviors as well as by their cultural, societal norms, and the like.

Situational approaches assume that one's political behavior emerges in reaction to their interaction with their environment; so, a person experiences oppression or violence differently based on how they were raised (values transmitted from parents and peers, etc.) and what their life situation is at the time and thus will react to that traumatic experience differently. This explains why some African-Americans in the South reacted to Jim Crow laws with rebellion and protest while others avoided the conflict or actively worked against the civil rights movement. (Sears, & Valentino, 1997; Jones, 2002)

Recognizing the importance of politics as an inherently social process and people as social beings, a repeated theme in the situational literature is the importance of social support. The lack of social support is often used as predictor variable for poor post-trauma outcomes (see table 3) and for political information seeking, engagement, attitudes and behaviors (see table 4). While it is usually used as predictor variable it is also (rarely) used as an outcome. For instance, (Boscarino, 1995) argues that when controlling for past combat experience in a study of Vietnam veterans, childhood delinquency, socioeconomic status and military adjustment could be used to predict poor social support and PTSD in later adulthood. Social support before and/or during the

trauma is protective as it seems to both help people cope and to normalize the trauma experience.

(Brune, Haasen, Krausz, Yagdiran, Bustos, & Eisenman, 2003; Marshall, et al., 2007)

Concluding Thoughts.

I began this chapter with a discussion of trauma, an important and often overlooked influence on behavior. The individuals who participate in DDR programs may have survived traumatic events in both their early years as well as during the armed conflict. As I noted in this chapter, the literature clearly demonstrates the link between trauma and poor individual outcomes. Based on the influence which trauma can have on behavior, attitudes, and development, it essential that a measure of trauma be included in an evaluation of individual-level DDR outcomes.

I reviewed Locus of Control and Self-Efficacy, key concepts in some of the clinical measures used in this dissertation research study. The literature on these concepts highlighted the importance of a sense of being able to influence or control one's future through engagement in efficacious activities as a key aspect of success in the process of personal change. These concepts may be used to help understand the impact that program interventions had on the individual participants. I also looked at the historical context for the development of ideas about crime and political behavior. The placement of strain theory (which underpins the efforts of intervention A), social control theory (adopted by intervention B) and theories of social ecology and disorganization (espoused by intervention C) within the social science literature were reviewed. The relationship and historic emergence of these theories was also discussed.

In the next section I turn to a discussion of DDR interventions. I review the literature related to successful intervention components and I discuss the three interventions examined in

this study. I discuss the theory of change employed by each program. And I discuss the intervention components as those components relate to both the existing research literature and the program's theory of change.

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Chapter 5: Rehabilitation Interventions

In this chapter I continue reviewing relevant literature to contextualize this dissertation research study. First, I discuss some of the research that has been done on interventions with crime-involved and post-conflict populations. I review intervention components whose success in the rehabilitation process has been empirically supported. Next, I discuss the three interventions examined in this study. I examine the theory of change employed by each program. And I discuss the intervention components as those components relate to both the existing research literature and the program's theory of change.

Role of education-based interventions in ex-offender rehabilitation

Education is one of the most popular types of rehabilitative programs for people preparing to re-enter society after criminal activities. This review of the literature demonstrates that education is not only a popular intervention in this setting, but also a generally effective one. Education-based interventions ex-offenders and at-risk individuals do more good than harm. (Vacca, 2008; Bhatti, 2010; Taylor, 2013) However, the literature is still in debate over *why* educational programs work in criminal rehabilitation. Education helps reshape ones self-image and makes an individual see themselves as a capable person. This section of the literature review is organized around describing prevailing theories related to education and identifying unanswered questions. I will examine specific components of education interventions related to rehabilitation of crime-involved individuals. This will lead into a discussion on perspectives about why education works.

Risk factors for criminal activity targeted by educational interventions. As intuition would suggest, those who are most marginalized in society tend to be the most vulnerable to crime. Early prevention program interventions can be helpful for positive childhood development, but there is no compelling evidence that they actually prevent the participants from participating in crime as adults (Deković, et al., 2011) Thus, some children are seemingly doomed to a life of crime due to environmental and social factors. Serin et al. (2013) indicate that risk factors for recidivism include: antisocial attitudes, antisocial beliefs, antisocial associations, antisocial personality, social support, and substance abuse.

As an added complication, there are risk factors that make offenders more vulnerable, including substance abuse, mental illness, and disability. First, offenders with substance abuse practices benefit less from programs targeted at risk and protective factors for recidivism than their non-substance abusing counterparts (van der Putt, Creemers, & Hoeve, 2014). Those who use substances tend to be most responsive to interventions that include substance rehabilitation services coupled with more traditional interventions (Krebs, Lattimore, Cowell, & Graham, 2010; Nissen, 2011).

Second, with respect to mental illness, Baron, Draine, & Salzer (2013) macro-level factors are the biggest impediment to employment of mentally ill individuals with jail industries. Educational programs both before and after incarceration were only minimally effective at improving employment prospects for this demographic. Reasons cited are: a lack of training on what steps to take, employer exclusion of ex-prisoners, and the lack of legal action to remove screening questions from applications. Another study shows that those with psychopathic personality traits are less achieve high reading achievement, which serves as a proxy for

educational success (Vaughn, et al., 2011). Lastly, people with disabilities tend to be disproportionately present in the justice system and are more likely to be repeat offenders (Zhang, Barrett, Katsiyannis, & Yoon, 2011).

The literature on gender differences in recidivism is underdeveloped and most of the conclusions made in research are based on samples of entirely male offenders. In a meta-analysis of fifty-seven articles that examine differential gender differences, Collins (2010) finds many homogeneous effects across gender, such as criminal history, substance use, and mental health. Interestingly, however, she finds that violent criminal history increases the chance of violent criminal recidivism in men but not women. Another observed gender effect is pro-social behavior was a key indicator of likability in female offenders, which suggests that harnessing this proclivity to gain favor in prison governance may be an effective strategy (Goldweber, Cauffman, & Cillessen, 2013). Better understanding potential gender effects may help service providers adapt the programs based on male-only research to better fit the needs of women.

Designing Impactful Interventions.

Though much of the reintegration literature focuses on those exiting prison, the lessons learned are applicable to DDR. The rehabilitation of ex-offenders is crucial for reducing recidivism and decreasing crime rates (Someda, 2009). The majority of offenders feel as if they will be integrated into the community after being released and that they do not expect to be stigmatized (Benson, Alarid, Burton, & Cullen, 2011). However, the needs of offenders upon reentry are complex. We can organize these needs into five main categories according to Anthony et al. (2010):

1. Social and community

- 2. Educational
- 3. Occupational
- 4. Independent living
- 5. Health (including substance abuse and mental health)

Though it would be ideal for programs to focus on all of these aspects, programs tend to either specialize in one category or to attempt to address all categories superficially.

Impactful interventions come in a variety of forms. For example, Tarolla, Wagner, Rabinowitz, & Tubman (2002) evaluates treatment approaches for juvenile offenders including: family/systems therapy, parent and social skills training, cognitive-behavioral treatment (CBT), peer group counseling, a therapeutic wilderness program, and boot camps. Each of these approaches have advantages and limitations, though the literature suggests that each of them tend to do more good than harm.

Reentry and aftercare programs generally reduce recidivism rates (James, Stams, Asscher, De Roo, & van der Laan, 2013). Two of the most popular intervention-based approaches tend to focus on employment as an end goal. The two types of employment are interventions: Supported Employment (SE)/Individual Placement and Support (SP) and traditional vocational rehabilitation programs. Both types of programs have elements of education, though the traditional vocational rehabilitation programs tend to be more education-focused. The literature suggests that SE/IPS tends to be most effective, though the implementation of such programs require considerably more funds than the traditional vocational rehabilitation ("Supported Employment", 2015).

Supported employment/individual placement support. There is evidence that employment-based interventions are effective, (Graffam, Shinkfield, & Lavelle, 2014) and also contradictory evidence that suggests employment-related service intervention does not have a significant impact (Farabee, Zhang, & Wright, 2014). However, the literature focuses on the merits on employment support programs and encourage their expansion and enhancement. The Individual Placement and Support (IPS) model is an evidence-based intervention typically targeted at those with severe mental illness and disabilities. The intervention is based on the following principles ("Supported Employment,"2015).

- 1. Zero-Exclusion Policy
- 2. Integration of both mental health and employment services
- 3. Participation in the competitive job market
- 4. Rapid job search
- 5. Systematic job development between employment professionals and employers
- 6. Time- Unlimited Support
- 7. Attention to the preferences of the individual seeking employment
- 8. Help with benefits planning

Researchers have demonstrated that this set of ISP factors have tended to perform better than other vocational programs. This model has been adapted to ex-offender vocational programs, but little is known about its true impact since research exists on ISP impacts on this population. Bond (2013) identifies several ways to improve the IPS model as it applied to people transitioning out of prison. First, IPS teams specializing in the needs of former prison populations should be formed since this population faces unique issues. Second, provide

treatment for people with dual disorders, particularly substance abuse. Third, follow the advice of employers who have decided to hire people with records in the past. Together, these recommendations can make the IPS model more responsive to the needs of the former prison populations.

The Reintegration of Ex-Offenders (RExO) is a grant program that fund initiatives that support employment-focused programs in high levels of ex-offender reentry. The communities with focus of the RExO programs focused on the core services of: case management, employment-related services, and mentoring. To incentivize participation, the program administrators would offer small incentives like bus tokens and gift cards. This model was found to be effective in reintegrating ex-offenders, though similar alternatives often proved to be effective or slightly less effective as well (Leshnick, Geckeler, Wiegand, Nicholson, & Foley, 2012).

Another example is the STRIVE program is very similar in structure to ISP and RExO, as it focuses on attitudinal and job readiness, skills training, support services, job placement, and follow-up. The program operates in over 20 communities and serves over 60,000 clients.

(Leshnick, et al., 2012) Ultimately, these large multi-faceted interventions warrant heavy scholarly attention since they have the potential to empower ex-offenders as the reintegrate into society.

Vocational educational programs. Education is an incredibly powerful intervention.

Simply managing to do something as simple as achieving basic literacy has the potential to reduce the probability of recidivism in offenders (Vacca, 2008). It serves as a turning point in the life of a young person, particularly a young person who has been involved in crime or violence

(Blomberg, Bales, Mann, Piquero, & Berk, 2011). The literature makes a distinction between the impact of traditional education and vocational education. In one study, individuals randomized into CRAFT (a construction-based vocational program) had better outcomes for employment and GED completion than those in traditional education programs. (Schaeffer, Henggeler, Ford, Mann, & Chapman, 2014)

Government institutions often face logistical struggle to provide appropriate education to those involved in crime (Geib, Chapman, D'Amaddio, & Grigorenko, 2011). Barriers to quality education include the lack of information provided from previous schools, lack of opportunities for practical training due institutional confinement, and too many interruptions to the young person's schooling for legal and disciplinary matters (Smeets, 2013). Researchers find that interventions for criminal offenders can have a somewhat positive impact on their future academic success and prospects. By correcting delinquent behavior early on, youthful offenders have a better chance of avoiding criminal charges as adults (Sander, Patall, Amoscato, Fisher, & Funk, 2012).

Adult education programs can act as powerful change agents for incarcerated participants, thus reducing the risk of recidivism. (Gordon & Weldon, 2003) Keena and Simmons (2014) discuss the impact the Ice House Entrepreneurship Program had on inmates in a maximum-security Mississippi prison. The 12-week program taught a curriculum that focuses on a book (Who Owns the Ice House?—Eight Life-Lessons from an Unlikely Entrepreneur) and the life lessons contained within. The lessons included in this program are focused on the idea developing entrepreneurial skills. The lessons included:

1. Everyone has the power of choice.

- 2. Recognizing problems and solutions is important for entrepreneurship.
- 3. Take action to change the things you can change.
- 4. Effort combined with knowledge is powerful.
- 5. Save and invest your money.
- 6. Build your brand.
- 7. Create community.
- 8. Be persistent.

Participants in this program tended to be better at identifying opportunities, communicating their abilities, utilizing mentors and advisors, and having a persistent attitude. This study give initial evidence that an educational program targeted at changing mindset and locus of control can have a positive impact. Based on this evidence, we can see that educational programs that promote pro-social behavior while focusing on improving post-training prospects have been well received by participants.

Ameen and Lee (2012) discuss the logic of social cognitive career theory (SCCT) as it relates to vocational training. According to SCCT, an individual's career self-efficacy is dependent on prior experiences and expectations. The role of a vocational training program is to evaluate an offender's career self-efficacy and to give them training and encouragement to improve their career ambitions. Life skills, in addition to vocational skills, are important for those reintegrating into society. Buston et al. (2012) suggest that parenting interventions along with vocational education interventions are effective and well-received by young fathers; though more research is needed to understand the long-term impacts their children.

The literature on education interventions for those involved in crime highlights the value that education can have on shaping attitudes and behavior. Some of the programs examined in this part of the literature review are targeting towards those involved in the criminal justice system. However, the studies examined offer important insights into what works. Vocational education is shown to improve post-intervention employment prospects. Non-vocational education improves outcomes as well; it is associated with increased self-esteem, improved employment outcomes, and a reduction in crime. This points to the impact that education can serve in the life of an individual who has been involved in crime and/or violence.

Another important aspect of this literature on education and recidivism among criminals is related to the role that auxiliary services play in supporting the individual to participate in education and to use their education during and after the intervention. Supported Employment, case management, vocational placement, and other services facilitated opportunities to use vocational or non-vocational employment skills and knowledge in the real world. Auxiliary services offered along with the educational intervention, such as parent training, social skills workshops, substance abuse treatment, mental health counseling, peer support groups and health services helped participants overcome barriers to participation in the programs and addressed risk factors which may have hindered post-program success.

The Role of Sports and Recreation in DDR.

Post-conflict societies grapple with the issue of how to transition people from armed insurgency to a life of normalcy. The Sport for Development and Peace (SDP) approach has gained a quite a bit of traction in the United Nations system and in the international community. (Right to Play, 2013; Cárdenas, 2013; United Nations, 2015) The litterature supporting the SDP

approach has argued that it is particularly well-suited for troubled or underdeveloped contect. Though unconventional, sport-based rehabilitation programs in post-conflict settings have proven to be a viable option. This is supported in the literature on youth programs (Andrews & Andrews, 2003; Naughton, 2011; Schrag, 2012).

SDP-based interventions purport to facilitate the process of Disarmament,
Demobilization, and Reintegration (DDR) (Dyck, 2011) and to promote resiliancy (Kvalsund,
2012). However, critics note that scholars should be careful not to overstate the power of sport
and avoid viewing the role of sport in development as a pancea. (Bellotti, 2012; Donnelly,
Atkinson, Boyle, & Szto, 2011; Kitchin, 2012)

United Nations Framework: Sport for Development and Peace.

The United Nations subsidiary bodies often provide a venue for innovation in development programs. The Sport for Development and Peace International Working Group (SDP IWG) was established to promote the achievement of the Millenium Development Goals (MDGs) and peace through sports (United Nations, 2015). The Sports Development and Peace approach has been adopted by many projects inside both the UN system, and the broader community of NGOs.

The SDP framework has five sub-areas:

- 1. Sport and Health
- 2. Sport and Child & Youth Development
- 3. Sport and Gender
- 4. Sport with Persons with Disabilities
- 5. Sport and Peace

Though there is often overlap between these categories, the sport and peace category is often most relevant to the Disarmament, Demobilization, and Reintegration (DDR) process. However, it is also the area in which it is most difficult to achieve and measure success according to Schrag (2012). He identifies two reasons for this. First, compared to the other categories, sport and peace do not go together easily. The precedent has been set for sport being a component of youth development, for example, and the concepts of sport and peace being tied together is relatively new. Second, the meaning of peace is not definitive, which poses project design, implantation, and evaluation challenges.

The Right to Play project organizes itself around the SDP framework. The project focuses on five factors of sport-based programs that promote behavior change. First, sport puts children in a supportive environment with role models, coaches, and peers. Second, the sport helps children learn essential live skills like stress management, decision making, and leadership. Third, play repetition allows children to practice new skills and change behavior gradually. Fourth, sport promotes healthy attitudes about self and society. Lastly, sport can be used as a vehicle for information, for example, HIV and AIDS risk reduction. (Right to Play, 2013)

Rehabilitation through SDP.

The SDP approach identifies features of sport that make sport a good fit development projects. First, sport is a universal concept that transcends cultural contexts. Second, sport can connect people with different viewpoints by proving a forum for interaction. Third, sport can inspire and motivate those who are otherwise lacking in self-esteem, or struggling with mental health. Fourth, sport can divert violent behavior by giving people a physical outlet for their

disagreements. Lastly, initial evidence suggests that sport can contribute to peace by strengthening society (Cárdenas, 2013).

These features make SDP a viable approach for sport in conflictual contexts. Galtung's proposes a 3R (reconstruction, reconciliation, and resolution) approach for understanding the power of this approach. Sport can play an integral role in accomplishing these goals, since it serves as a relatively neutral forum to work through and move past societal grievances. (as cited in Cárdenas, 1998) The 3R approach can be used to complement DDR as a popular intervention to both integrate former combatants into society and to prevent others who might be recruited from joining the insurgency. Sport was used in a DDR intervention with youth combatants in Sierra Leonne. The intervention had three phases. First, the combatants were registered, given medical support, and discharged from their combatant roles. Second, they were treated at interim care centers where they received psychological care and participated in educational programs. Lastly, the ex-combatants were relocated with family and community. Sport was used alongside the educational programs in phase two in an effort to channel wartime aggression. Furthermore, administrators believed it was a program was an opportunity to escape psychology wartime trauma, albeit in the short-term (Dyck, 2011).

Furthermore, Giulianotti and Armstrong (2014) suggest that there may be opportunities for the sport-based infrastructure of the SDP programs to be adapted by peacekeepers, thus keeping up their moral and professional engagement. They identify the International Council of Military Sports (*Conseil Internationale du Sport Militaire: CISM*), which is a competition between peacekeepers working in conflicted areas around the world that happens every four years. This offers a new strategy for building positive relationships with the population, by

creating a common group over love of sports. Given the dysfunctional relationship between peacekeepers and societies in most contexts, this common interest can be leveraged.

SDP Promoting Youth Recovery.

In post-disaster and post-conflict settings, the role sport should play is often quite tenuous and often up for debate, since there are often very immediate survival needs that may warrant more attention. Kvalsund (2012) argues that resilience is a skill that, when taught to children in a post-disaster setting, can help with short-term and long-term coping. (Kvalsund, 2012) This emphasis on resilience and the necessity of coping skills can be applied across social demographics. Three cases studies, in particular, illustrate the potential for sport to promote resilience and recovery in young people.

First, in qualitative participant-observation based study, researchers explored the strategy of sporting and recreation activity as a primary rehabilitative strategy for criminally delinquent youth. The researchers found that interviews often produced fairly static results, and that the kinesiology of sports required more casual conversation and activity in research. Through their interactions with the participants, they found evidence that suggests that sports are useful to many (but not all) residents. Furthermore, we must take a thoughtful approach to the types of sports we use in rehabilitative activities, though the research does not draw definitive prescriptive conclusions. (Andrews & Andrews, 2003)

Second, Naughton offers another in-depth case study as a piece of evidence for the success of SDP. He explores the role of football in both a short- and long-term context. He studies the Millennium Stars in Liberia, a football league that started as a reintegration program for child soldiers and has evolved into a program with the broader goal of helping vulnerable

children build self-esteem. Former participants are now leaders in the project and have lives as meaningful contributors to their communities (Naughton, 2011).

Third, an intervention focused on rehabilitating child sex offenders through a 12-step program called Fight with Insight (FWI). The South African program is sponsored by an organization called the Support Programme for Abuse Reactive Children (SPARC) which recognizes that abused children often lack positive adult role models for law-abiding behaviors. The program incorporates elements of cognitive behavioral therapy (CBT) into regular program. The FWI program also offers the option of participating in both a boxing program and CBT. Though researchers were hesitant to speak to the long-term impacts of the program, they found the impact of the boxing program to be generally positive and advocated for its expansion (Draper, Errington, & Makhita, 2013).

These case studies illustrate the potential sport has for youth rehabilitation. Sport is often unintimidating and offers an opportunity to connect with children on their level. The hybrid intervention FWI by SPARC married a traditional intervention with a sport-based intervention, a combination which makes traditional therapy more palatable. Ultimately, sport has the potential to introduce social work and social service interventions to those who would refuse them otherwise.

Critical approaches to SDP. Researchers have advocated for the improvement of research in sports. Kitchin (2012) suggests that concept of the "power of sport" must be coupled with independent evaluation, since those inside organizations tend to overestimate their own impact. To improve research, he suggests an ethnographic to program evaluation, where independent researchers immerse themselves in programs. Similarly, Donnelly et al. (2011) gives

advice on how to overcome challenges to those researching SDP from a public sociology perspective.

We should be careful to note that it is easy to be overly optimistic about the power of sports in development. Some authors take a critical approach to the rising SDP framework.

Colter suggests that researchers should be careful not to confuse micro-level individual outcomes with macro-level development goals, and cautions us of potential mission drift (Coalter, 2010).

Darnell and Black (2011) raise two important critical points sport on development goals quite effectively. First, we have the functionalist argument, where one thinks to simply "add sport and stir" to achieve their development goal in a given program (regardless of true impact). Under the functionalist view, an organization may lose sight of its original purpose and may become less responsive to its creators/funders. Second, though sport has the ability to empower vulnerable people, it also has the capacity marginalize people on the basis of race, gender, and geographic location (Darnell & Black, 2011).

Ultimately, there are more questions than answers on the true impact of sports. Though the intuition behind SDP is quite solid and organizations have been singing its praises for more than two decades, the question of efficient aid allocation remains. Some may ask if money spent on sport-related programs the best possible use of development funds and limited DDR-specific funding. While researchers have contributed dramatically to our understanding of the true impact of SDP, additional research is needed to help us understand of sport really can make meaningful strides towards development and DDR goals (Kidd, 2011).

Study Interventions

Three interventions were included in this research study. In this section, I review the components and background of each. I look at their theory of change and I discuss the integration of education (both vocational and non-vocational), sports, and auxiliary support services in their programming.

Intervention A: Treatment as Usual (TAU). The TAU intervention was comprised of a traditional, individually focused DDR intervention. Participants aged 18 and older had a non-residential intake period in which they completed paperwork, were assessed by a nurse or other medical professional, took an educational and vocational assessment examination, and met with project staff members. Men in this intervention were expected to attend group classes 4-7 hours per day, five days a week, for a minimum of 60 days and a maximum of 180 days. Classes were taught by Haitian educational professionals or project staff members which included both Haitian and foreign workers.

The primary focus of the intervention was on providing vocational education and training in work skills so that program completers could obtain gainful employment. The theory of change supported by the program was grounded in strain theory. According to this theory, strain occurs when people are exposed to cultural values and goals which they are unable to achieve through culturally-appropriate methods. In this case, program leaders argued that combatants had embraced values which emphasized the importance of material possessions as a tangible demonstration of economic security in a turbulent social and economically changing society. As one coordinator said, "they see wealth on TV and among those who work for the government, business owners, the elite, and they want to look rich with fancy shoes and a car, because those outward trappings of wealth communicate something to the community."

During armed conflict members of gangs and other armed groups were able to improve their social position by taking items of value from businesses and community members. These stolen goods gave combatants a sense of economic stability. Program leaders argued that lack of employment in the post-conflict era left former combatants with no option but crime to support themselves. They hoped that by providing vocational education and work skills courses the men would obtain lawful work and have no need to turn to crime to support themselves. Social work services provided by this intervention were limited but focused the goal of future employment; thus, they typically included case management, assistance finding housing, and help obtaining government documents needed for employment such as a NIF (social security number) or a birth certificate.

Program staff described participants in Intervention A as successful if they were employed or looking for employment after the program ended, if they had abstained from criminal behavior, and if they reduced or eliminated social contact with friends in armed groups. Post program employment was identified as a challenge by program staff and so the intervention had been modified several months before the study cohort entered to include additional workshops on entrepreneurship, soft work skills (e.g., being on time, managing conflict with a supervisor), and self-employment business management. Program participants were given several options for vocational training and work such as masonry, construction work, selling cell phone credit on the street, and making charcoal briquettes.

All men who applied to participate in this program and who met the qualifications of being a demobilizing member of a recognized armed group were given a place in the program. For this study, two thirds of the men in one cohort were randomly chosen to be interviewed and

participate in a longitudinal study as part of a program evaluation. It should be noted that the men were randomly chosen for the study but they were not randomly chosen for the intervention. Every man who entered the DDR program was given the option of doing intervention A. Those who did not decide to do this program were then given the option of participating in a lottery for the limited slots available in interventions B and C.

One challenge encountered by the research team at the time was the poor record keeping of the implementing partners, the funders (which included two UN agencies as well as several foreign government aid organizations), and the overseeing DDR agency. Of the 61 men from the TAU program who were randomly chosen to participate in the study, only 50 could be located. For the rest of the participants, it appeared that the records were either riddled with errors or included deliberate falsifications as the identification numbers and photocopied identification cards were tracked to people who did not participate in the program (and in some cases were the wrong age, combatant status, and/or geographic location for the program population). The 50 men who did participate in the invention were interviewed at baseline (within a week of applying to be in the program) and followed for the entire duration of the study.

Intervention B: Faith-Based Program. Intervention B was conducted by a faith-based NGO based in Port-au-Prince. The organization was founded in the 1990s and is directed by a leadership team comprised of both Haitian and foreign staff members. The organization has six main programs, two of which are focused on meeting the needs of at-risk youth and young adults. The DDR intervention began within one of these programs (the vocational training center) and was moved due to funding concerns to the other program which focuses on life skills and substance abuse treatment.

Funding and leadership was stable throughout the life of the intervention and follow up. The organization moved from seeking funding through foreign aid and international organization sources to a financial strategy that focused on cultivating church sponsorship, seeking large cash grants from Christian individuals and businesses in the United States and Canada, and other forms of unrestricted aid which would allow the organization to actively evangelize its program participants. Some intervention completers later participated in fundraising for the program with a handful traveling abroad to speak at Christian conferences and churches about the changes the program had helped them make in their lives.

The theory of change espoused by the implementing partner organization of Intervention B is predicated on Christian theological beliefs pertaining to the nature of sin. In short, according to their program mission statement, they believe that members of armed groups engage in conflict because they have failed to embrace a Christian lifestyle and have not come to a saving knowledge of Jesus Christ. However, on further examination of the intervention itself, and through discussion with staff, it is clear that the program's theory of individual change emerges from social control theory.

Social control theory focuses on the durability or strength of the commitments or bonds an individual has to other individuals, his or her family or group, and society in general. This theory focuses on the human need to belong as a key motivation influencing the individual's emotions, thinking, beliefs, and behavior. In the field of criminology, one foundational application of this theory is in answering the question: why do some people commit crimes while others abstain? Social control theorists answer this question by explaining that when social bonds are strong and the individual feels connected to society, deviant behaviors are limited. The

probability of deviance is however increased the moment the bonds are weak. Broken or weak bonds are not causes of delinquency, but they rather allow it to occur (Wiatrowski, Griswold & Roberts, 1981). The bonds which connect a person to society or a group include: (1) attachments (e.g., an expression of concern that that motivates the person to avoid or decrease crime to avoid frustrating a respected person or the group as a whole; (2) commitments (e.g., the investment of time, energy, or oneself which could be placed at risk by deviant behavior); (3) involvements (e.g., becoming so consumed by other activities that there is less time or energy for delinquent pastimes); and (4) beliefs (e.g. being socialized into and internalizing the value system of a group or society).

Services offered within Intervention B included six core components: spiritual growth; personal development; life skills; education foundations; professional exploration; training, and development; and community integration. Each of these components focus on aspects of introducing, promoting, teaching, internalizing, and strengthening beliefs and behaviors tied to social bonds, which ultimately creates a situation in which the program participant responds to social controls and refrains from criminal behaviors.

Sports and organized recreation were emphasized has a key part of facilitating community integration (through organized football play in neighborhood leagues as well as free play in participant's own neighborhood). Sports and organized recreation activities were used to teach life skills. In one activity participants went horseback riding and were coached on how to interact with the horse in a way that was respectful, calming, and which met the horse's needs to food, water, rest, and affection. Participants had to delay meeting their own needs until after caring for the horse and had to control their voices and actions to avoid startling the animal or

causing it anxiety. Sports were used as daily or every other day afternoon break during classes and meetings. They were frequently used in metaphors and analogies. Sports were even integrated into bible study lessons and math tutoring. Intervention C staff highlighted the usefulness of sports and recreational activities in venting aggression, teaching cooperation, promoting teamwork, and developing friendships with non-crime involved men.

Intervention C: Education Focused Intervention. Intervention C was a sustained effort by four NGOs to promote professional and classical education opportunities to violence-involved youth and young adults throughout Haiti. The initiative underwent a number of changes during its tenure with multiple administrators, erratic funding patterns, and frequent changes in service locations. Despite these challenges, during the duration of the period studied, as well as for several years before and since, the program was able to consistently provide educational, vocational, social work and medical services to more than a dozen participant cohorts.

Services provided as part of Intervention C can be roughly categorized into seven service areas: (1) Educational assessment, case management, and support including workshops and disability services; (2) Education provision including individual and small group tutoring, classical school, high school completion, vocational school, philo and post-secondary academic learning; (3) Direct services and coordination of services related to housing, medical/dental care, mental health care, obtaining documents, substance abuse treatment, accessing food aid, low-cost and free child care options, and transportation; (4) Life skills training; (5) pro-social political involvement opportunities and coaching including public advocacy, service learning and community service; (6) vocational skills and practical experience including workshops, internship placement and supervision, and vocational mentorship; and (7) sports and recreation.

Intervention C's theory of change emerged from the founding NGO's focus on social ecology and reduction of social disorganization. Social ecology emphasizes the importance of place. Crime is linked to deficits in the participant's neighborhood and it was these deficits that made participants more vulnerable to engaging in crime and joining armed groups. Recognizing that members of armed groups have been socialized into the adoption of values that embrace crime, Intervention C's leadership theorizes that group members can, through a process of education and resocialization, transform their values and adopt the values of those who participate in education (who are a distinct group within Haitian society). Participants thus move from being insurgents to being scholars.

Intervention C's theory of change takes this one step farther. Not only are participants changing their views and values through the process of resocialization into a new (educationally focused) community while at school (where they frequently lived in dormitory housing during the school week, an element of place-changing intentionally included in the intervention), when home in their communities participants were expected to engage in pro-social political organizing to change and challenge the marginalization experienced by their communities. In this way, participants can disrupt the normative structure of the own community to argue for and promote other values while also advocating for changes in social structures that belittle, marginalize and oppress residents of poor zones.

At the micro-level, staff emphasized how this works because, they argue, an individual's self-perceptions and identity can have a significant impact on their potential for success post-demobilization. Job readiness training increases the tenacity of participants or builds on tenacity that participants possess prior to the program, in spite of challenges. Furthermore, it can improve

an individuals' ability to cope with difficult life situations. Ultimately, these factors empower individuals and enable them to approach post-intervention life with more confidence. This is grounded in the literature which argues that though stigma and limitations on agency exist, empowerment through education or job skills training reduces a propensity towards recidivism (Jackson, 2013). Ellison (2012) offers support to this perspective of the role of education in the peacebuilding process. He offers five strong theoretical viewpoints. First, skills training provides opportunities for employment and make violence a less attractive option. Second, education protects participants by promoting disaster survival and preparedness skills. Third, education helps re-establish 'normality' for young people. Fourth, education helps make up lost ground and helps deter future violence. By raising the opportunity cost of going to war for a noweducated individual, people are less likely to take risks with violence. Lastly, education contributes to social transformation by infusing various social sectors with more human capital. Each of these aspects of education is touched on in the programmatic content of Intervention C's activities.

Intervention C's theory of change also takes into account the attitudes an individual holds which may have an impact on their propensity for crime. A pro-criminal attitude (PCAs) include such things as, guilt attribution, shame versus pride orientation, attitudes towards and plans to reoffend, attitudes toward the law, cognitive distortions, and pro-criminal orientation. Though the concept of PCA means different things in different studies, Banse et al. (2013) demonstrate that pro-criminal attitudes are generally significant in a person's likelihood of recidivism. However, they also find that we know little about how to curb pro-criminal attitudes and that more research is needed on effective interventions focused on this issue. Similarly, Addo (2014)

argue that work programs that are designed to improve the cognitive skills improve a prisoner's self-esteem and job prospects upon release. This study is limited by its small sample size (n=2), though it offers a deep and thoughtful case study of the situation of particular Ghanaian prisoners.

In the intervention C program, this attitudinal-based argument can be conceptualized through a theory of cognitive transformation. Group discussions and mentoring focused on an individual's perception of how life would be after program completion and the amount of control they felt over their lives. Social workers and program staff facilitated encouragement by family and friends and their involvement in planning, undertaking, and celebrating educational and vocational achievement as program staffers believe this both helped improve an individual's perception of control and as well as their self-efficacy in achieving crime-free self-sufficiency after program completion. These attitudes are found to be key in easing the transition from institutional care and decreasing the chance of future criminal involvement (Forste, Clarke, & Bahr, 2010).

Concluding Thoughts

This chapter completed a review of the relevant literature which contextualized this dissertation research study. I focused on education and sports related components of the rehabilitation process; both of which whose success has been empirically supported. Though much of the existing literature on these types of rehabilitation interventions has been outside of the DDR context, it highlights findings which are relevant to the population served by DDR. In particular, the need for auxiliary services to support educational programming was illuminated in the literature. Next, I reviewed the three interventions examined in this study, including their

theories of change and their intervention components. In the next chapter I research methods used for this study.

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Chapter 6: Research Methods

The research poses the question: which intervention is the most successful at reducing post-intervention criminal involvement of participants in three different types of DDR programs? To answer this larger question we must also determine how the three interventions differed from each other. What services did each provide? Was there fidelity in the way that the interventions were implemented or did some participants receive a different intervention than others within the same program? We also need to look at how we measure success for the men who participated in these interventions. And we need to examine the longitudinal data to see if there were any other factors related to the success or failure of the individual participants in the three DDR interventions.

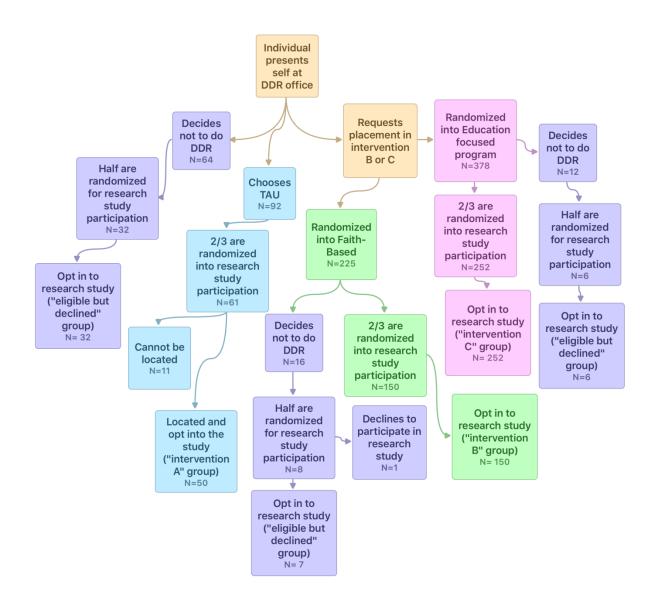
I begin this section by describing the study design. Next I turn to the data: what it includes and when it was collected as well as the storage, cleaning, and coding of the data. Lastly I will explain the particular clinical measures used and how they relate to the primary research question being posed in this dissertation.

The data set includes information on 741 men (aged 18-31 at baseline) in three treatment groups and two non-treatment groups. The treatment groups included: Intervention A, a traditional, "treatment as usual" approach, which included 50 men (6.7 percent of the study participants); Intervention B, a faith based intervention, which included 150 men (20.2 of the study participants); and Intervention C, an education focused program, which included 252 (34 percent of the study participants). The two non-treatment groups were comprised on men who were eligible and were offered the opportunity to participate but refused to do so (n=45; 6.1

percent of the study participants) and men who were eligible to participate but were not selected to do so (n=244; 32.9 percent of the study participants).

Figure 6.1

Individual Selection into Intervention Programs



Not all applicants for Intervention B and C were accepted into the program. Men interested in participating could apply, but they were subjected to a lottery and randomized into

either Intervention B or C, or not offered a spot in the program at all (those not offered a spot were placed in program A). There were limited places in the intervention B and C programs while intervention A accepted all who applied for the program. For this study, two thirds of the participants (n=252) were randomly chosen from among all intervention participants to be in the longitudinal program evaluation. See figure 6.1 for a visual representation of selection into the three interventions.

Study Design

This study compares two experimental conditions (intervention B and intervention C) with treatment as usual (intervention A), a group of individuals who were eligible to participate in DDR but chose not to participate, and a group ex-combatants randomly chosen from the general population who did not participate in DDR (all of whom were eligible, some of whom applied for DDR but did not get selected and some of whom did not apply for DDR programs). The three intervention groups included in the study are TAU (intervention A), the faith-based program (intervention B), and the education focused program (intervention C).

The three intervention groups were comprised of randomly chosen participants (2/3 from each program cohort) to be interviewed and participate in long series of follow up interviews. It should be noted that though the individuals were randomly chosen from the list of participants, they were not all randomized into the intervention in which they participated (see figure 6.1). All men who volunteered to participate in DDR were given the option of being in Intervention A. Of those who did, 2/3 were randomly chosen for this follow up study. Those who did not decide to do Intervention A were given the option of entering a lottery for Interventions B or C. Two thirds of those who participated in interventions B and C were selected from each of the two

interventions to participate in this follow up study. Selection and inclusion criteria for the remaining two study groups are discussed below. No incentives were offered for any participants.

Non-Treatment: "Eligible but declined" to participate in DDR. Not all men who were offered a place in one of the three interventions decided to participate. In total, 92 men who were offered a spot in one of three interventions decided to forgo the opportunity. Of these, 64 declined to participate in DDR during their initial screening interview when they were given the option of either doing the TAU (intervention A) program or participating in a lottery to get into one of the other two programs. Sixteen decided not to participate after being chosen by lottery for the faith-based program (intervention B). Another dozen decided not to participate in DDR after being offered a space through the lottery in the education-focused program (intervention C). Of these, half were randomly chosen using a Tisch number table and asked to participate in a longitudinal program evaluation. One declined, but 45 men agreed to participate in regular interviews about themselves on the same schedule as the intervention group participants, for the next eight years. This group comprised 6.1 percent of the research study participants.

Non-Treatment: "Eligible but not selected". A fifth group of men were included in study. These men were eligible to participate in DDR did not participated in any DDR program. Some never applied for DDR because they did not know it was an option, they did not know how to apply, they were not interested in applying, or they experienced some barrier(s) preventing application such as lack of transportation to the DDR office for the required application interview. Others applied but didn't apply on time or were not selected for a DDR program.

These men form a control group for this study. However, unlike a traditional control group in

which individualized are randomized into either treatment or control, this group includes 244 men (32.9 percent of the study participants) drawn from a national survey of the general population. Each man was between 18 and 31 years of age, was an active member of recognized armed group or had recently (within the last six months) been demobilized from an armed group, and was a Haitian citizen eligible to participate in DDR. Each man either did not apply for DDR or applied but was not given the option to participate (due to program size limitations, geographic distance to the program site, or another reason).

Sampling for general population comparison participant. A multistage process was used to sample communal sections, households, and respondents. The sample was drawn from all ten of Haiti's geographic departments with representation of both urban and rural areas. The most recent estimated population figures for Haiti nationally in 2007 (baseline) were based on projections from the national census and published IHSI (IHSI, 2007). These figures were used to calculate sample size. Each communal section was labeled as "very violent", "moderately violent", or "mildly violent" based on crime rates provided by the Haitian National Police. First, the sample size for each of Haiti's ten geographic departments was calculated. In calculating the sample size, a 1.96 level of confidence measure was assumed (for a 95% confidence interval); the value of the margin of error was set at 0.05, the baseline level of the indicators was assumed to be 0.5 (this was a conservative value as no previous data was available to estimate the percentage of men eligible for DDR at the communal section level), the design effect was 2.5, and the expected response rate was 90%.

The sample size was calculated using the formula $n = \frac{z^2[p(1-p)]}{e^2}$ where Z equals the level of confidence measure, P equals the baseline level of the indicators, and e equals the

margin of error ($n = \frac{3.8416 * [0.5(1-0.5)]}{0.05*0.05} = 384.16$). The initial calculation was 384.16. However this number must always be adjusted to account for the design effect of the sample design, the number of Communal Section types (in this case, three: *very violent, moderately violent*, and *mildly violent*), estimates to be reported, and the anticipated non-response. Finite population correction was unnecessary as the initial n calculated was 10% or more of the size of the majority of the communal section types. Next, the n was multiplied by the design effect and the number of population density types (n = 384.16*1.5(3) = 1728.72). Lastly, an adjustment was made for expected non-response ($n = \frac{1728.72}{0.9}$).

The next element in the sampling process was determining the number of households who would be selected from each department by communal section type. First a determination was made of the proportion of the target population present in each communal section type by department. The proportion was multiplied by the total sample size and rounded to the nearest whole number to determine the minimum number of individuals to be surveyed in each department by communal section type. This number was divided by 20 (the cluster size) and rounded up to the nearest whole number to determine the number of clusters per department.

The basic probability weight for each of the sampled clusters was calculated by multiplying the cluster population by the number of violent crimes recorded in the previous calendar year and by the number of clusters and then dividing by the total population to get the probability of each cluster being sampled (prob1). Next, the cluster population was divided by the number of individuals to be sampled in each cluster to get the probability of each individual being sampled in each cluster (prob2). The basic weight is the inverse of the probability of

selection: $bw = \frac{1}{prob1(prob2)}$. A weighted simple random sample of communal sections was generated in SPSS.

The second phase of sampling involved the random selection of houses within each communal section. Survey sampling in rural Haiti is challenging; there are few marked roads and most homes have no address or house number. There are no set lists of residents from which to draw a sample. The lack of roads or paved paths in rural areas inhibits the possibility of sampling roads and crossroads. Instead, RGCS (Random GPS Coordinate Sampling) was used to generate coordinates in the selected areas. Invalid coordinates (those landing on water or on impassible areas) were eliminated using satellite photographs and additional coordinates were generated to replace these.

A rectangular GPS strategy was used for RGCS. This method allows the researcher to restrict the points that are randomly generated to a rectangular area on the earth's surface that the researcher defines. To do this, the research team specified the latitudes for the north and south sides of the rectangle, and longitudes for the west and east sides of the rectangle. The rectangle covers the entire area being surveyed, including, in some cases, bodies of water and parts of the Dominican Republic. This first step in this process is to map the boundaries of the communal section or obtain the shape file of the communal section. The farthest northern, southern, eastern, and western borders were then marked by pinning in Google Earth. The longitude and latitude of each pin was converted from Google Earth to MatLab and a rectangle was created.

It should be noted that this is never a true rectangle because the earth is curved, so longitude lines also curve to converge at the north and south poles. In addition, the earth is almost spherical but not completely. There is a tiny equatorial bulge which makes the radius at

the equator approximately a third of 1% bigger than the radius at the north and south poles. The earth also has mountains and valleys which could be taken into account when generating a list of survey locations (adding a third dimension and perhaps giving large mountain ranges a greater probability of being selected than flat plains).

However for household surveys, in practice, researchers treat the earth as it appears on a two-dimensional map. Because household survey researchers are selecting people in homes that live on the surface of the earth (rather than, say, people living underground in caves which could be of varying depth or height from the surface in addition to varying in latitude and longitude), rectangles are a convenient way to define regions. And, for this purposes it provides a way to generate random coordinates on a somewhat spherical but mostly biaxial ellipsoid-shaped planet.

When calculating the random coordinates in a rectangle the fact that latitude lines vary in length was taken into account, with the understanding that the longest latitude is the equator and the other latitude lines diminish in length according to a trigonometric function until the poles are reached. The north and south poles have a zero length latitude line. The random longitude was more easily calculated; all longitudinal lines in a rectangular region had an equal probability of being chosen.

The steps for completing the calculations used for this study are listed below. Initial values are *northlimit* (northern latitude of the rectangle), *southlimit* (southern latitude of the rectangle), *westlimit* (western longitude of the rectangle), and *eastlimit* (eastern longitude of the rectangle) with *rand1* and *rand2* as unique random numbers between 0-1.

1. Convert the GPS coordinates to radians.

2. Compute a random latitude (*lat*) such that points on longer latitude lines in the rectangle are more likely to be chosen than points on shorter latitude lines.

$$lat = asin(rand1 * (sin(northlimit) - sin(southlimit))$$

- 3. Find the width of the rectangle. width = eastlimit westlimit
- 4. If width is less than 0, then width = width + 2π
- Compute the random longitude (long) between westlimit and eastlimit with all longitudes having equal probability of being chosen.

$$long = westlimit + width * rand2$$

6. Evaluate longitude.

$$long < -\pi \Longrightarrow long = long + 2\pi$$

$$long > \pi \Longrightarrow long = long - 2\pi$$

There were several additional steps which were taken after the initial list of GPS coordinates was created and plotted on the map. Each site was examined individually to assure that it is within the boundaries of the shapefile for the communal section. In some cases a point landed on or near a border and particular care needed to be taken to inform the enumerator and their supervisor about the situation so that they know how far to travel after spinning the pen before they hit the edge of the communal section.

Coordinates were evaluated individually by a human using Google Earth and ArcGIS in the order in which they were generated. Those falling outside the area were eliminated and the research assistant continued down the list until the maximum number of coordinates was reached. Because the rectangle covered a larger area than the communal section itself, no areas were excluded and each location had an equal probability of being selected for inclusion in the

study. For this reason rectangular GPS sampling was used during the survey; it was the best fit for the geographic boundaries of the surveyed areas and it reduced the possibility of bias of circular overlap presented by alternative methods.

During the next phase of sampling, the research team visited the GPS coordinate in person. After arriving at the coordinate, the direction in which to travel was chosen using the spin the pen method. Spin the pen is a standard approach adopted in multi-stage cluster sampling. It involves enumerators standing in the center of a given cluster and choosing a direction randomly, e.g. by spinning a pen. "All dwellings from the center to the edge of a given cluster in the chosen direction are counted, one is chosen at random and interviews are conducted. Additional houses are selected along the line away from the center." Shannon et al (2012). The enumerator then walked in that direction until he or she reaches the *n*th home (the number of households was randomly chosen using a Kish number table and provided to the enumerator). This method of selection overcomes some difficulties in sampling rural Haitian communities; it lacks the likelihood of circular overlap which can occur with a simple random sample of GPS coordinates weighted by the number of homes with x meters. See Shannon et al (2012) and Kondo (2014).

However, this method does not overcome another important limitation, the possibility that the boundary of the cluster may be reached before the number of homes being selected has been identified. Shannon et al (2012) recommends that if the cluster edge is reached before the sample size is achieved; the interviewers move clockwise to the next house and then go back towards the original GPS starting point, conducting interviews along the way. However this has not worked well in practice in Haiti as it necessitates that enumerators each having a GPS

locator, being familiar enough with its use to read it as it scrolls through a dynamic format listing locations (rather than the static single location when identifying the GPS starting point), and having enough battery power to use the locator throughout much of the day. Instead, the number of sampled households per cluster was reduced (and the number of clusters was correspondingly increased) to tighten the geographic area surveyed and thus lessen the possibility that a given enumerator may stray towards the border of a communal section.

Selected households were visited up to four times before the house was labeled a non-responder. An adult household member completed a short informed consent process and then answered a series of screening questions to determine if a DDR eligible individual lived in the household. In cases where more than one DDR eligible individual lived in the household, the eligible adult with the most recent birthday was the primary respondent and was invited to participate in the study. This was the final phase of sampling. In the event that the selected adult refused to participate, the home was labeled a "non-responder"; no other individual in the home was selected in that individual's place.

Of the 2912 households visited by the research team, 265 had a positive screener. In the end, 244 men agreed to participate in the study. The response rate of 92.0 percent, which may be high in other countries, is typical for household survey research in Haiti. All men in this group agreed to participate in regular interviews about themselves on the same schedule as the intervention group participants, for the next eight years.

Data Collection and Management

A comprehensive interview lasting several hours was conducted at each point of contact with the study participant (see Figure 6.2 for the interview schedules) . The interview included

clinical measures, surveys, assessment tests, and open-ended qualitative interview questions. In addition, each participant completed a medical examination and was tested for drugs and alcohol. Interviews were completed at a place of the participant's choosing including the program site, a school or workplace, home, a friend's home, a community location, or a clinic. Medical examinations and substance use tests were commonly conducted at the office of the implementing partner or a local clinic, though in some cases, particularly for non-intervention study participants, these occurred at the individual's home.

Figure 6.2

Interview Schedule by Cohort and Program

		A: TAU		B: Faith		<i>C</i> :	Not
						Education	Selected
				Cohort			
			One	Two	Three		
T1	Baseline	Sep. 2008	Jul. 2007	Dec. 2007	Sep. 2008	Dec. 2007	Jul. 2007
T2	6 Months	Feb. 2009	Dec. 2007	Jul. 2008	Feb. 2009	Jul. 2008	Dec. 2007
T3	12 Months	Feb. 2010	Jan. 2009	Aug. 2009	Feb. 2010	Aug. 2009	Jan. 2009
T4	24 Months	Feb. 2011	Feb. 2010	Aug. 2010	Feb. 2011	Aug. 2010	Feb. 2010
T5	36 Months	Mar. 2012	Mar. 2011	Aug. 2011	Mar. 2012	Aug. 2011	Mar. 2011
T6	48 Months	Mar. 2013	Feb. 2012	Aug. 2012	Mar. 2013	Aug. 2012	Feb. 2012
T7	60 Months	Mar. 2014	Jan. 2013	Aug. 2013	Mar. 2014	Aug. 2013	Jan. 2013
T8	72 Months	Mar. 2015	Jan. 2014	Aug. 2014	Mar. 2015	Aug. 2014	Jan. 2014

All interviews were conducted in Haitian Creole by trained, experienced researchers.

Most questions were asked orally and the information was recorded by the researcher using a paper and pencil or computer program. For non-clinical information, data was recorded on paper

and computer files and stored in the participant's dossier. This included observational data from program staff, family members, teachers, and work supervisors, as well as medical, vocational, educational, social, and psychological assessments. Also included in the dossier was a record of services received and the dates such services were delivered including the number of hours or person days of service, the provider, and the content of the services.

Figure 6.3

Percentage of study participants interviewed at each interaction by group

		A: TAU	B: Faith	C: Education	Not Selected for DDR	Declined DDR
T1	Baseline	100% (50)	100% (150)	100% (252)	100% (244)	100% (45)
T2	6 Months	86% (43)	99% (149)	97% (245)	99% (242)	100% (45)
T3	12 Months	86% (43)	99% (149)	94% (238)	98% (240)	100% (45)
T4	24 Months	86% (43)	99% (149)	91% (230)	97% (237)	100% (45)
T5	36 Months	86% (43)	99% (149)	89% (225)	97% (236)	97% (44)
T6	48 Months	86% (43)	98% (148)	89% (225)	96% (234)	100% (45)
T7	60 Months	86% (43)	98% (148)	88% (222)	95% (232)	100% (45)
T8	72 Months	84% (42)	96% (144)	87% (219)	94% (230)	97% (44)

For clinical measures, the respondent was given an answer sheet with clip art of neutral pictures and asked to circle or mark the one that corresponded with his or her response while the researcher read the question. For instance, when completing the Center for Epidemiological Studies Short Depression Scale (CES-D 10), the respondent was given a piece of paper with a code that corresponded to the item number of the measure. On the paper were four pictures: a purple circle, the ocean, a bayawonn tree, and a pile of furniture. The researcher read a prompt to the respondent: "The next item is: I had trouble keeping my mind on what I was doing. If that

was true for you rarely or none of the time, so a day or less, mark the purple circle. If that was true that you had trouble keeping your mind on what you were doing some or a little of the time, so one or two days, mark the picture of the ocean. If that was true occasionally or a moderate amount of time, so 3 or 4 days in the past week, mark the picture of the bayawonn tree. And if that was true for you all of the time, so 5, 6, or all of the last seven days, you'll see a picture of a pile of furniture with a bed and a table, go ahead and mark that picture. Remember, you can only mark one picture. Do you want me to read the options again?" Respondents marked the picture privately and then placed their response papers in an envelope that they sealed and which was returned to the researcher to be later opened and entered by a third party. This was done to reduce the possibility of response bias.

Data Cleaning, Coding and Storage.

Data for this study was obtained from the paper copies of the study materials in the program records or individual dossier as well as from the paper copies of the individual surveys and assessments. Information was entered into an excel spreadsheet in the field, translated into English if needed, and then double checked with a second data set of the same material to identify data entry errors. These were corrected. Some data was recorded. For instance, the final scores for some clinical measures such as the Levenson Locus of Control Scales were entered along with the interpretation of the score, rather than the responses for individual measures items. Demographic information was obtained from both forms and from narrative notes from intake and subsequent case management sessions and then was coded using common labels (for instance, years of education was converted to the highest level of education completed).

Clinical Measures

A number of clinical measures were included in the study. These included the McMaster Family Assessment Device, the Generalized Self-Efficacy (GSE) scale, and the Levenson Locus of Control (LOC) scale, among others. Each measure and its use will be explained in detail in this section. Figure 6.4 lists the measures used at each interaction.

Figure 6.4

Study Measures Used During Interviews

		Measures Used	
T1	Baseline	AUDIT, CCA, Crime questionnaire, Demographic and program questionnaire, CESD-10, Job Readiness Checklist, Employer/supervisor evaluation, GSE,	
T2	6 Months	Levenson LOC, McMaster FAD, MOAS, PCE, PCWO, PV, Short Hardiness Scale, SRRS	
T3	12 Months	AUDIT, CCA, Crime questionnaire, Demographic and program questionnaire,	
T4	24 Months	CESD-10, Employer/supervisor evaluation, GSE, Levenson LOC, McMaster FAD, MOAS, PCE, PCWO, PV, Short Hardiness Scale, SRRS	
T5	36 Months		
T6	48 Months	AUDIT, CCA, Crime questionnaire, Decision Making Skills, Demographic and program questionnaire, CESD-10, Employer/supervisor evaluation, GSE,	
T7	60 Months	Levenson LOC, McMaster FAD, MOAS, PCE, PCWO, PV, Short Hardiness Scale, SRRS	
T8	72 Months		

McMaster Model of Family Functioning (MMFF) Family Assessment Device (FAD).

The McMaster Family Assessment Device (FAD) is a questionnaire developed by Epstein,
Baldwin and Bishop in 1983 at a time when interest in family therapy and family systems was
rapidly growing (Epstein, Baldwin, & Bishop, 1983). Epstein et al. (1983) developed the FAD in

order to aid clinicians in the identification of problematic areas of family functioning that necessitate investigation at the biological, sociological, and psychological level. The FAD can also be used before and after an intervention in order to assess intervention efficacy ("Family Assessment Device", 2013).

According to Epstein et al. (1983) the FAD is to be distributed to each family member aged 12 and above because the differing perspectives offered by family members have the potential to yield vast amounts of clinically significant information. The FAD was created based on the responses of members of a group of 112 families, plus the responses of 209 individuals who were not interviewed together with their families. Of the family group, 93 families had an adult family member currently hospitalized as an inpatient on a psychiatric unit. Four families had a child in a psychiatric day program. Six families had a family member in a stroke rehabilitation unit, and nine families had a family member in an advanced psychology course. The 209 individuals who were interviewed without their families were students in an introductory college course in psychology. Practical considerations prevented their families from participating in the study (Epstein et al., 1983). Demographic details were not reported ("Family Assessment Device", 2013).

Research reveals an acceptable level of reliability for the FAD (test-retest alpha = 0.71, Chronbach's alpha = .78) ("Family Assessment Device", 2013). However, the FAD correlates poorly with social desirability ("Family Assessment Device", 2013). The FAD correlates moderately with other family functioning self-report assessment tools (Miller, Epstein, Bishop, & Keitner, 1985). Cut-off scores indicating healthy/unhealthy families show acceptable levels of sensitivity and specificity (Miller et al, 1985). The FAD contains 60 items and uses a 4-point

Likert scale ("Family Assessment Device, 2013). Possible responses are: Strongly agree, Agree, Disagree, and Strongly disagree. Higher scores indicate higher levels of family dysfunction ("Family Assessment Device", 2013).

The FAD is based on the McMaster Family Functioning Model (Epstein et al, 1983). The 60-question FAD includes around seven scales including general communication, affective responsiveness, problem solving, behavior control, affective involvement, roles, and family functioning (Family Assessment Device, 2013). The first 6 subscales correspond with the 6 dimensions of the McMaster Family Functioning Model. Subscales are scored by dividing the number of points associated with the responses selected by the number of items in each scale ("Family Assessment Device", 2013), with a clinical cut-off score of 2.0 (Miller et al., 1985). The descriptions of each of these scales are included in the figure below. (Stevenson-Hinde & Akister, 1995)

Figure 6.5
Family Assessment Device (FAD) Scales

Seven Scales of the FAD				
(adapted from Stevenson-Hinde & Akister, 1995)				
Communication	Clear/direct exchange of information			
Affective Responsiveness	Situationally appropriate expression of affect			
Problem Solving	Familial capacity to function while solving problems			
Behavior Control	Maintaining behavioral standards			
Affective Involvement	Caring about each other's activities and issues			
Roles	Patterns of behavior for addressing family needs			
General Family Functioning	General assessment of the other six FAD components			

Though use of the entire FAD would be ideal in assessing a family's functioning, often researchers opt to use the short-form General Family Functioning component of the FAD. This instrument has 12 questions that capture elements of all other components of the FAD. Research funding limitations, survey fatigue, and logistical constraints of research involving children/parents, all serve as legitimate reasons for not administering the entire FAD. The general family functioning portion of the scale has been highly effective in assessing the ability of a family to communicate and interact on a day-to-day basis, particularly in traumatic or crisisladen situations. It has been used and tested in numerous studies, demonstrating a high level of reliability and validity. Reliability refers to the replicability of results in repeated trials, while validity is the extent to which the instrument actually measures what it claims to measure. The 60-item questionnaire requires the research subject to self-report their agreement according to a four-point Likert scale. The scores can be disaggregated into the seven subcomponents, or can be looked at holistically. A low sore on the FAD-General Family Functioning demonstrates a healthy family environment, whereas a high score demonstrates a dysfunctional family environment. (Akister & Sevenson-Hinde, 1991; Epstein, Baldwin, & Bishop, 1983; Miller, 2003). The FAD-General Functioning Scale has been used across a number of different countries and cultural contexts including Australia (Renzaho, Kumanyika, Tucker, 2010), the UK (Goodyear, Nicol, Eavis, & Pollinger, 1982), the Netherlands (Wenniger, 1993), Jordan (Al-Krenawi, Graham, John R, & Al Gharaibeh, 2011), Croatia (Maršanić, Margetić, Jukić, Matko, & Grgic, 2013), China (Ma, Yao, & Zhao, 2013), and Haiti (Kolbe & Jean, 2014).

Levenson Multidimensional Locus of Control Scales. Since the introduction of the locus of control construct in the 1950s, it has been elaborated on and modified by researchers in

a variety of disciplines including psychology, sociology, political science, public health and social work (Lumpkin, 1985). The first two LOC measures to be widely used included Rotter's Internal-External (I-E) scale which consisted of 23 forced choice items and six filler items and Bailer's 23 question LOC scale that was designed for use with school aged children (Benham, 1995). In addition, several additional measures have been created and Rotter's I-E scale has been used in literally hundreds of research studies, some of which have also adapted the scale for specific contexts (Twenge, Zhang, & Im, 2004). In addition to Rotter's I-E scale, two other alternative clinical measures for LOC have been developed and widely used in research.

James developed an alternative LOC scale to that created by Rotter (his included five point Likert scale questions in contrast to Rotter's forced choice questions). This new scale was based on his model positing that there were two distinct expectancy shifts at process in human decision making which underlie LOC: 1) typical expectancy shifts in which believe that a success or failure will be followed by a similar outcome, and 2) atypical expectancy shifts in which one believes that a success or failure will be followed by a dissimilar outcome (Kundi, 2014). Subsequent research suggested that individual expectancy shifts were correlated with the decision to act or not, and the type of behavior in which an individual chooses to engage. As expectancy concerns beliefs about future events, it is critical to understanding LOC. Expectancy-value theory states that if an individual values a particular outcome and that individual believes that a specific action will produce that outcome then they are more likely to take that specific action (Eccles & Wigfield, 2002). While Rotter (1990) viewed LOC as unidimensional (from an internal to an external control), Levenson (1973) argued that LOC was actually multidimensional, encompassing three completely independent dimensions of internality, chance

and "powerful others." Levenson's model allows for measurement on each independent dimension, as some may exert a more powerful influence on particular types of behavior than other dimensions. Levenson argued that rather than being unidimensional, locus of control is multidimensional concept with internal beliefs being orthogonal to external beliefs about control. Levenson argued that researchers could understand and even predict future behavior by studying the chance and fate constructs separately from beliefs about external control by powerful others.

The Levenson Locus of Control scale was created with three subscales, each with eight items, to measure beliefs about internal control, powerful others, and chance. Together the scores measure a generalized locus of control (the subscale items are added together with 24 points added to each subscale to form the generalized locus of control score). This total or generalized LOC score has demonstrated initial evidence of discriminant validity. The subscales of powerful others and chance are moderately inter-correlated (r = .59) but are independent of scores on the internal LOC subscale. A higher score on the internal scale indicates greater internal locus of control while higher scores on the powerful others and chance subscales indicate a stronger belief that one's fate is controlled respectively by powerful outside forces, people, or organizations, or by chance.

General Self-Efficacy Scale (GSE). This questionnaire was developed in Germany by Schwartzer and Jerusalem (1995) for purposes of assessing self-efficacy. The GSE has been tested in a wide age range and in populations around the world. It is unidimensional. The scale is available in numerous languages. The GSE enjoys high stability, reliability, and construct validity and has been demonstrated to be configurally equivalent across culture. The scale contains 10 items. Possible responses and associated values for the English version of the GSE

are: Not at all true = 1; Hardly true = 2; Moderately true = 3; and Exactly true = 4. Higher scores indicate higher levels of self-efficacy. ("Generalized Self-Efficacy Scale", 1995; Schwartzer & Jerusalem, 1995).

Studies of cardiac patients have demonstrated a correlation between GSE scores presurgery and post-surgery recovery (Schwartzer & Luszczynska, 2007). The Dutch version of the GSE was employed as an assessment tool in a 2013 study that revealed a link between self-efficacy in chronically ill adolescents and their parents, and quality of life (Cramm, Strating, Roebroek, & Neiboer, 2013). Becker & Gable (2009) utilized an adapted version of the GSE in a study that found a positive correlation between self-efficacy and academic grades at an urban, for-profit career college. The GSE was used to assess self-efficacy in a 2010 Norwegian study examining interrelations between self-efficacy, life events, and psychosocial distress among substance abusers (Nordfjaern, Hole, & Rundmo, 2010). The study found self-efficacy to be associated with positive life events but not with substance abuse (Nordfjaern et al., 2010).

American Institutes for Research (AIR) Self-Determination Assessment. The AIR Self-Determination Assessment is a questionnaire aimed at measuring students' level of self-determination while identifying student strengths and weaknesses and bringing to light explicit educational goals for purposes of incorporation into educational planning ("Air Self-Determination Scales", 2013). The tool can also be used to assess progress when administered at varying intervals (Wolman, Campeau, DuBois, Mithaug, Stolarski, 1994). Developed in 1993 by the American Institutes for Research together with Columbia Teachers' College, the AIR Self-Determination Assessment is based on self-determined learning theory (Shogren, 2008).

The AIR Self-Determination Assessment includes subscales for capacity and opportunity (Shogren, 2008). There are three versions of the questionnaire. The first, aimed at students, contains 24 questions (12 questions relating to capacity and 12 questions on opportunity). The second version, for teachers, contains 30 questions (18 capacity-related questions and 12 opportunity-related questions). The third version, which is intended for parents, contains 18 questions (six related to capacity and twelve on opportunity) (Shogren, 2008). In all three versions, there are five possible responses to each question (Wolman et al., 1994). Possible responses and corresponding values are: Never (=1), Almost Never (=2), Sometimes (=3), Almost Always (=4), and Always (=5). The final score equals the sum of the total number of points associated with the responses selected by the respondent. The creators of the AIR Self-Determination Assessment do not offer explicit interpretation guidelines for scores; instead, they suggest that educators view scores as "springboards for discussion" (Wolman et al., 1994). Furthermore, educators can compare the scores of different students in order to receive an indication of where one student stands relative to the other. A 2012 study found that overall AIR scores predicted performance among adolescent students with emotional and behavioral disorders (Dempsey, M., 2012). During development, the AIR Self-Determination Assessment was tested on 450 students ranging from 6 to 25 years old. Of these, 72% came from economically disadvantaged backgrounds and 82% were enrolled in special education programs. An alternative items test of consistency revealed correlations of between .91 and .98. A split-half test for internal consistency yielded a correlation of .95. A 3-month test-retest revealed a correlation of .74. Validity was assessed by exploring the relationship between scores and the constructs of capacity-opportunity, home-school, and knowledge-ability-perception. Factor

analysis revealed results that were consistent with the conceptual nature of the scale (Wolman et al., 1994).

The Modified Overt Aggression Scale (MOAS). The MOAS is a modified version of the Overt Aggression Scale (OAS). The OAS, introduced in 1986, was designed to measure changes in levels of aggression among people with mental illness (Oliver, Crawford, Rao, Reece, & Tyrer, 2007). The OAS contains subscales for four types of aggression: verbal aggression, aggression directed towards objects, aggression directed towards self, and aggression directed towards others. The Modified Overt Aggression Scale is a retrospective, modified version of the OAS and contains the same content but posed in a retrospective framework (Oliver et al., 2007).

The MOAS was first tested in 2001 on chronic psychiatric patients during a multicenter drug trial relating to the treatment of aggression (Oliver et al., 2007). The study revealed good internal consistency and test-retest reliability (a= 0.75) and high inter-rater reliability (correlation coefficient = 0.96). A 1998 study involving patients in acute psychiatric wards revealed moderate inter-rater reliability. A 2006 study interviewed 23 carers of individuals with intellectual disabilities using the MOAS. The intellectually disabled individuals were being treated with neuroleptics at the time to control aggressive behavior. The study found the MOAS to be reliable in the measurement of verbal and physical aggression in individuals living in community settings (ICC for verbal aggression = 0.90., ICC for physical aggression = 0.90, ICC for overall MOAS = .93. According to Oliver et al. (2006), ICCs for other two sub scale were lower but still "acceptable"). The MOAS contains four items, valued at 0-4 (Kay, Wolkenfolf & Murril, 1998). There are five possible responses to each item, and multiple responses are

permitted. Item scores are multiplied by their designated weight and added together to obtain the final score (Sorgi et al. 1991). Higher scores indicate higher levels of aggression.

In this study the MOAS was used to measure violence and threats by participants, a problem which was frequently complained about by staff interacting with new participants. The measure was completed by the participant's school or program counselor based on information from staff and their own interactions. With non-participants, the instrument was completed by a teacher, head of the family, employer, village leader, or other authority figure with guidance from a social worker.

Center for Epidemiological Studies Short Depression Scale (CES-D 10). This ten item screener is a short version of the 20-item CES-D developed in the 1970s by NIH researcher Lenore Radloff. It is scored by summing the points for all questions. A score of ten or higher is considered to demonstrate the symptomology of depression and further evaluation is recommended. The CES-D-20 was developed by Radloff in 1977 for purposes of providing researchers in the field of depression epidemiology with a tool for assessing depression. Prior to its development, the only depression assessment tools available to researchers were oriented towards use in health care, rather than research, settings. Testing established the CES D-20 as a valid and reliable depression assessment tool (Radoff, 1997). Researchers however, discovered that many elderly found the questionnaire be confusing and time-consuming to fill out (Irwin, Artin, & Oxman, 1999). Using item-total correlations, a shorter and simpler version was developed as part of the Established Populations for Epidemiological Studies of the Elderly Project. Whereas the CES D-20 takes elderly respondents between 7-12 minutes to complete, the CES D-10 takes only an average of 2 minutes (Irwin et al, 1999).

The CES-10 has excellent internal consistency (Cronbach's alpha = 0.86) as well as excellent test-retest reliability (ICC = 0.85) (Irwin et al, 1999). Test-retest reliability for individual items is only poor to adequate (ICC = 0.36-0.68). Two studies, one involving middle-ages participants (n=40) and a second involving older adults (n=68), found high levels of specificity and sensitivity. Positive predictor value was 85% in the former group and 35% in the latter (Irwin et al., 1999).

The CES D-10 contains 10 items. Possible responses fall on a four point scale. Responses are divided into positive mood items (items 5 and 8) and negative mood items (items 1,2,3,4,6,7,9, and 10). Points are as follows: Rarely or none of the time (= 0), Some or a little of the time (= 1), Occasionally or a moderate amount of the time (=2), and Most or all of the time (= 3). Scores on positive items are reversed and final score reflects the sum of total item scores. Higher scores indicate greater number of depressive symptoms (Irwin et al., 1999).

Crime Questionnaire. The crime questionnaire was created taking the draft classification of crimes recently finalized by UNODC (2014). For each crime an explanation of the crime was provided. The respondent was then asked on a Likert scale to indicate if they thought the crime was acceptable. Next the respondent was asked if they themselves had ever (at baseline) committed the crime and how frequently. During follow up interviews the respondent was asked if they had committed the crime "since the last time we talked, on DATE" and how frequently since that date. The researcher read the question and directed the respondent to answer, rereading the questions as needed. The respondent marked their answers on a separate paper which was placed in an envelope and sealed by the respondent. It was opened and entered

into the data set by another researcher to reduce the possibility that respondents would shape their responses based on their interaction with the individual researcher conducting the interview.

The crime questionnaire has subscales for property crimes, trafficking, harm or the threat of harm against another (crimes against people), and crimes involving sex or relationships. One Haiti-specific question was included in the "crimes against people" subsection. This question was: "Sometimes people will also threaten another person with a curse or will actually put a curse on another person in the hopes that it brings them bad luck, illness, financial ruin, or other calamities. In your lifetime, how often have you done this?" Placing a voodoo curse on another person, or threatening to do so, is not against the law in Haiti, though police will often take a written complaint (*plent*) from a person who says they have been victimized in this way, in an effort to record the interpersonal conflict or assuage the complainant. This question was included to differentiate threats of voodoo curses from threats of violence or property damage; it was not included when calculating the final score of the instrument.

When asked about each crime "if this has happened to you, think about how your reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, neutral, or good?" respondents answered on a four point Likert scale with one being very bad and four being good. When asked about each crime "In your lifetime, how often have you done this?" or "Since the last time we talked on [date], how often have you done this?" possible responses were "never" (0 points), "once" (1 point), "twice" (2 points), and "three or more times" (3 points). Points were added for each subscale to create a subscale score for acceptability (how "okay" the person thought the crime was) and experience (the respondent's personal involvement in that crime during their lifetime or

since the last interaction for data collection). The experience subscales were added together to create a total crime score.

Alcohol Use Disorders Identification Test (AUDIT). This brief questionnaire was developed in 1982 by the World Health Organization (WHO) for purposes of early identification of excessive drinking or potentially dangerous drinking patterns (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). The AUDIT is designed for administration by health-care workers and is available in a variety of languages, including Hindi, Bulgarian, Spanish, Greek, Turkish, Italian, Portuguese, and Chinese. It is the only alcohol-screening test developed for crossnational use. Items are based on the responses of 2000 individuals living in health care facilities across six nations. Current drinkers comprised 64% of the sample. Of current drinkers, 25% had been diagnosed with alcohol dependency (Babor et al, 2001).

According to Babor et al. (2001), studies involving different population samples worldwide support validity ("At the recommended cut-off of 8, most studies have found very favorable sensitivity and usually lower, but still acceptable, specificity, for current ICD-10 alcohol use disorders as well as the risk of future harm"). A number of studies indicate high internal consistency, and a test-retest study involving cocaine abusers, alcoholics, and non-hazardous drinkers yielded a reliability level of .86 (Babor et al., 2001). The AUDIT contains 10 items, with values ranging from 0-4. Subscales exist for amount and frequency of drinking, problems relating to alcohol use, and alcohol dependence. Possible responses vary according to item. Points are added together to create the score. A score of 8 or above indicates hazardous and harmful use of alcohol. Barbor et al. (2001) suggests that health care workers respond to scores as follows: For scores between 8 and 15, health workers should offer respondent simple advice

regarding the dangers associated with excessive drinking. For scores between 16 and 19, health workers should recommend brief counseling as well as continued monitoring. For scores 20 and above, health workers should conduct further diagnostic evaluation for alcohol dependence (Barbor et al., 2001; Team, 2008).

Short Hardiness Scale (SHS). The SHS, also known as Dispositional Resilience Scale (DRS-15) measures ability to cope with stresses. Published in 1995, the SHS was developed by Bartone (1995) for the purpose of measuring personality hardiness. Bartone defines 'personality hardiness' as "having a high sense of life and work commitment, greater sense of control", being "open to change and challenges of life", and "interpret[ing] stressful and painful experiences as a normal part of life". According to Bartone, significant research has established personality hardiness as a stress/heath moderator variable. The SHS is based on a revised version of a hardiness scale developed in the early 1980's by researchers and students at the University of Chicago. Item and reliability analyses were conducted with mixed-gender military samples (Bartone, 1995).

The tool contains 15 items, 6 of which are negatively keyed, and includes subscales for commitment, control, and challenge (Bartone, 1995). Answers range from Completely True to Not At All True on a 4-pont Likert scale (Gilmore, 2014). Results fall within 1 of 5 scoring bands which are as follows: 39+ = Very High, 34-38 = High, 28-33 = Average, 22-27 = Low, and 22- = Very Low (Bartone, 2008). Research indicates high reliability- a study of 700 army reservists revealed an alpha coefficient of .83. Alpha coefficients for the subscales of commitment, control, and challenge were .77, .71, and .70, respectively (Bartone, 1995. According to Bartone, studies involving other samples have yielded comparable internal

consistency coefficients (Bartone, 1995). Three-week test-retest reliability is high, with a coefficient of .73, according to the results of a research project involving 104 West Point Freshmen that included the administration of the DRS-15 (Bartone, 2007). The same project revealed high three-week test-retest reliability with regards to the subscales of commitment (.75) and challenge (.81). Notably, reliability was much lower for control (.58) (Bartone, 1995). Studies involving several samples indicate high predictive and criterion-related validity with regards to health and ability to function in stressful situations (Bartone, 1995). The DRS-15 was recently used in a study aimed at identifying positive psychology variables predictive of hardiness among college-aged students (Gilmore, 2014). "Coping self-efficacy" was found to predict hardiness, as was wisdom and hope (Gilmore, 2014).

Social Readjustment Rating Scale (SRRS). The Social Readjustment Scale assesses susceptibility to illness or mental health issues as a result of stressful events. The scale was developed by Holmes and Rahe (1967), who had previously been involved in research demonstrating a positive correlation between stress events and illness (Hubbard & Workman, 1997). The scale contains a list of 43 events believed by Holmes and Rahe to require readjustment. Holmes and Rahe assigned each event a value based on the responses of 394 individuals who were asked to assign a weight, from 0-100, the extent to which 43 common events would require readjustment (Christie-Seely, 1983).

The scale requires respondents to indicate which of the events on the list have transpired in their lives during the previous 12 months (Holmes & Rahe, 1997). Results are obtained by adding the sum of the weights associated with the events indicated by the respondent. Scoring is as follows: a score of < 149 indicates a low susceptibility to mental and physical illness, a score

of 150-200 indicates mild susceptibility to mental and physical illness, a score of 200-299 suggests moderate susceptibility to mental and physical illness, and a score of >300 indicates major susceptibility to mental and physical illness (Holmes & Rahe, 1997). A number of studies indicate SSRS's predictive validity. According to Hubbard et al. (1997) researchers Rahe and Lind established a correlation between high SSRS scores and cardiac death while other researchers have demonstrated correlations between high SSRS scores and mental/physical illness among navy personnel. High coefficients of correlation between discrete groups in the sample—all are above .90 with the exception of what between Caucasian and African American respondents which was .82 (Center for Mental Health Services Research at Brown, n.d.).

Decision-Making Skills. This tool was included as a decision-making outcome measure in a survey employed in the longitudinal study "National Evaluation of Youth Corps: Findings at Follow-Up" (Price, Williams, Simpson, Jastrzab, & Markovitz, 2010). The instrument was specifically designed to be used in research with at-risk young adults aged 16-26 who were economically and educationally disadvantaged and/or had involvement in the criminal justice system or past gang membership. The purpose of the study was to evaluate Youth Corps' impact on corps members in terms of educational achievements, employment levels, life skills and civic engagement, and involvement in risky behavior (Price et al., 2010). Decision-Making Skills – defined as the "ability to make sound decisions and judgments"—was one of many life-skills measures include in the study. Fifty-one percent of sample members were male. Approximately 57% were between the ages of 18-24. Close to 30% were under the age of 18, and 13.5% were over age 24. Approximately 35% of participants were Caucasian, 33.7% were Hispanic, and 21.7% were African-American. The remaining participants were recorded as Asian/Pacific

Islander, Native American, or Multi-racial/Other. Fifty-nine percent of sample members lacked a high school diploma, 16.2% had graduated high school or possessed a GED certificate but had never attended college, 13.2% had some college, and 11.6% were college graduates.

Approximately 22% of sample members were currently receiving public assistance or had received public assistance in the past. Slightly more that 39% of sample members had a family income that was below federal poverty level. Eleven and a half percent of sample participants were currently involved in the court system or had been involved in the court system in the past. Almost 5% were currently involved in the foster care system or had been involved in the foster care system at a previous point. (Price et al., 2010)Both the experimental and the control groups were comprised of applicants and both groups made significant strides in the areas of education and employment (Price et al., 2010).

Grassroots Efficacy. This measure was included as a civic engagement outcome measure in a survey employed in the 2010 longitudinal study "National Evaluation of Youth Corps: Findings at Follow-Up", the same study which also used the Decision Making Skills measure (Price, Williams, Simpson, Jastrzab, & Markovitz, 2010). Price et al. define grassroots efficacy as "the respondent's opinion about the feasibility of starting a grassroots effort to meet a range of community needs, such as starting an after-school program or organizing a park clean-up campaign." (p.12).

Flanagan et al (2007) Civic Involvement Measures. Flanagan et al. (2007) combine use a set of self-assessed politics-based measures that are designed specifically for youth and young adults. The measures enabled researchers to organize results into fourteen categories: civic behaviors, elected officials and government, conventional civic engagement, alternative civic

engagements, political efficacy, equality and injustice, citizenship types, parents' civic engagement, political conversation with others, values, media consumption and perceptions, school climate, personal beliefs, and civic knowledge. The measures are based on a variety of pre-existing scales, including the California Civic Index, the Civic Engagement Questionnaire,

Of the fourteen aspects included in the Civic measurement model, each one give us traction on civic issues. Furthermore, the aspects are robust to validity tests. The Cronbach's alpha is in the acceptable range ($\alpha > .7$) for categories at T1 and T2, with the exception of civic accountability at T1 ($\alpha = .69$). Each of the categories are based on a different stem question and respondent can chose from a set of Likert-style options that are customized for each aspect.

Competence for Civic Action (CCA). This tool is a self-report questionnaire aimed at assessing adolescents' perceived competency in affecting social change (Flanagan, Syvertsen & Stout, 2007). The tool was tested on 1,924 social studies students aged 12-18 living in the Northeastern United States. Males and females were evenly represented. 85% of the participants self-identified as White, 5% as Black, 3% as Native American, 3% as Hispanic, 2% as Asian, and 2% as Other. The surveys were conducted twice, first in September-October 2004 (prior to the presidential election of that year), and second in mid-November and December 2004 (post-election) (Flanagan et al., 2007).

The CCA contains subscales for civic behaviors, opinions, knowledge, and dispositions. The tool is comprised of 9 items. Scoring on each item ranges from 1 - 5. Possible responses and associated scores are: I Definitely Can = 5, I Probably Can = 4, Maybe = 3, I Probably Can't = 2, and I Definitely Can't = 1. Higher scores indicate higher levels of perceived competence for civic action. The tool has a Cronbach's alpha coefficient of .92. Flanagan, Syvertsen and Stout

(2007) suggest that the tool be used prior to, and later during, participation in programs promoting civic engagement in order to gauge program effectiveness and/or participant progress.

Political Conversations with Others (PCWO). The Political Conversations with Others (PCWO) aspect is adapted from the California Civic Index (Kahne, et al., 2005). The stem question for this measure asks, "Here are some questions about your political discussions with others. Indicate how much you agree or disagree with each statement." The sub-questions in this measure focus on the communication that individuals have with their family members and the degree to which family members encourage political expression. In Haiti, where individual political beliefs and attitudes about the use of political violence are tied strongly to both family and community conversations about political issues, this is particularly relevant.

Prospective Civic Engagement (PCE). The Prospective Civic Engagement aspect is adapted from the California Civic Index (Khane et al., 2005), Civic Engagement Questionnaire (Keeter et al., 2002), and IEA Civic Education Study (Torney-Purta, et al., 2001). For this measure, the stem question is, "when you think about your life, how likely is it that you would do each of the following?" The respondents are asked how likely they are to vote on a regular basis, wear a campaign button to support a candidate or volunteer for a political party.

Political Voice (PV). The Political Voice aspect, adapted from the Civic Engagement Questionnaire (Ketter, 2002), asks, "When you think about your life, how likely is it that you would do each of the following?" The respondents are then asked about several specific aspects, including if they would, 1) contact or visit someone in the government who represents (their) community, 2) contact a newspaper, radio or TV talk show to expression your opinion on an issue, or 3) sign an e-mail or written petition.

Job Search Readiness Checklist. The job readiness checklist was adapted from existing job search tools and job training materials used by one of the programs. It includes 19 yes/no items in three sections: Motivation and Follow-Through; Job Search Preparation; and Interview Preparation. One of the implementing partner organizations used a checklist from the Jewish Vocational Services of Boston to create this measure; each of the "yes" responses is a point, a score of 15 or greater is considered to be "job search ready".

Supervisor Evaluation. The supervisor evaluation measures ten competencies on a four point Likert scale from "Poor (does not meet expectations) – 1 point" to "Excellent (always meets expectations) – 4 points". Competencies include: Attendance, Punctuality, Quality of work produced, Quantity of work produced, Professionalism, Initiative, Communication Skills, Teamwork, Problem Solving, and Response to supervision. The origin of this measure is unknown though it was used by two of the implementing partners before the program evaluation began. It was commonly used to rank participants. When a limited number of slots were available in a special program or project (such as the opportunity to work at the annual Karnaval event) participants were chosen based on their supervisory evaluation ranking with the top scorers chosen first in order of ranking.

Individual Protective Factors Index (IPFI). This tool is a self-report questionnaire that assesses conflict resolution ability of respondents by measuring levels of self-control and cooperation, two skills associated with conflict resolution ("Conflict Resolution: Individual Protective Factors", n. d.). The tool was created by Phillips and Springer (1992) as part of the Extended National Youth Sports Program 1991–92 Risk Assessment Study on behalf of the National Collegiate Athletic Association. The tool is intended for administration to children and

young adults; it is written at the 6th grade reading level in English and has been translated into several other languages, including Spanish, at a similar reading level for use in the United States.

The tool contains subscales for self-control and cooperation skills. Each subscale contains six items on a four point Likert scale ranging from strongly agree to strongly disagree. Items in the second subscale are reverse coded. A higher score indicates better self-control and cooperation. The tool has an internal consistency of .65 (Gabriel, 1994 in "Conflict Resolution: Individual Protective Factors", n. d.). Pierce and Shields (1998, in "Conflict Resolution", n. d.) reports alphas of .70 the first subscale and 68 for the second.

Beck Depression Inventory. The BDI was developed in 1961 by Beck as a 21-item, administer-assisted questionnaire aimed at assessing the presence and intensity of depression-related symptoms (Farinde, 2013). The development of the BDI was remarkable in that its focus on symptoms represented a dramatic shift away from the dominant psychodynamic conception of depression of the time. The BDI has undergone several revisions to reflect the DSM's changing diagnostic criteria for depression, with the most recent revision being the BDI-II (Farinde, 2013). Today the BDI-II is one of the most frequently-employed depression assessment tools in research and clinical settings (Grothe, et al., 2005). The BDI-II contains the same number of items as the original BDI but differs somewhat in item content (Farinde, 2013). Furthermore, the BDI-II is completely self-administered (Farinde, 2013). Norms was established based on a standardization sample comprised of 317 female outpatients and 183 male outpatients from urban and rural settings (Smith & Erford, 2001). Ages ranged from 13-86. Ninety-one percent of the outpatients in the sample were Caucasian. Four percent were African-American and 1% were Asian (Smith & Erford, 2001).

Research indicates that BDI-II scores correlates with those of other depression-assessment measures, such as the Hamilton Psychiatric Rating for Depression and the Scale for Suicidal Ideation (Smith & Erford, 2001). Reliability is high, with research yielding an alpha level of 0.92 for outpatients and 0.93 for college students. A study of 26 of 26 outpatients referred for depression revealed a one-week test-retest correlation of .96 (Smith & Erford, 2001). A 2005 study demonstrated the validity of the BDI as a depression assessment measure among African-Americans in a clinical setting (Grothe et al., 2005). A study of Caucasian and Mexican American students found no difference in reliability between the groups (Smith & Efdord, 2001). The BDI-II contains 21 items (Grothe et al., 2005). Each item has four possible responses. Each response corresponds with a number ranging from 0-3. Respondents are to circle the number associated with their chosen response. Scores are obtained by summing the numbers circled. Scores range between 0-63 (Grothe et al., 2005). Interpretation is as follows: 14-19 = mild, 20-28 = moderate, and 29-63 = severe (Beck, Steer, & Brown, 2005).

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Chapter 7: Analysis

In this chapter I begin presenting the analysis of the data I have described. I start with providing a picture of the study participants at baseline including their demographics and a description of their socioeconomic indicators at baseline. Next I present information regarding the services received by participants in each of the three interventions. As noted earlier, not all services were provided each intervention and the same amount of services may not have been received by each participant as some dropped out early, failed to completed parts of the intervention, or did not fully participate for other reasons. In the following section I present results for each of the clinical measures. In addition to providing descriptive statistics, I compare the means by program type and test for statistical significance as appropriate. Tables and analysis not found in this chapter, along with all ANOVA tables, can be found in the appendix.

Lastly, I test each of the four hypothesis for my study: (1) receiving education increases an ex-combatant's confidence in their own ability to make change as quantified by the participant's scores on the Generalized Self-Efficacy Scale and the internal locus of control score; (2) receiving education reduces the likelihood that the participant will engage in criminal or maladaptive behaviors including associating with armed peers, abusing alcohol, being violent, or engaging in crime; (3) participants who engaged in sports and recreation were less likely to revert to criminal behavior or interact with armed friends in the post-demobilization period; and (4) receiving education is associated with increased pro-social capacities and behaviors.

Data Analysis Plan

Analysis of the dataset began with a description of the study variables. Those of interest and which are relevant to contextualizing analysis of my hypotheses are presented in this chapter. Descriptive statistics allow us to see how the sample data is distributed over the sample as a whole as well as within groups. In examining the data I looked at measures of central tendency and dispersion. In addition to describing the data, I also compared baseline and descriptive data by group (intervention type and non-participants).

Dichotomous categorical variables were examined using a 2x2 table. A chi-square test was used to evaluate the association between the variables when the expected variables in each cell was greater than or equal to five in at least three cells. When the expected values were less than five in more than one cell I used a Fisher's exact test. To obtain the expected frequency I multiplied the total count of each group divided by the overall total count. A similar process was used for analysis of two polychromous categorical variables. I used a Pearson's chi-square test in cases where the expected frequency was greater than or equal to five in at least three quarters of the cells. In cases where this was not true, I used a Fisher's exact test.

To examine the association between categorical variables (e.g. program type) and quantitative ones (e.g. locus of control scores), I compared the means of the quantitative variable distributions in the different groups. In cases where the categorical variable had only two categories (e.g., DDR participant/non-participant) I compared the means and used a Student's t-test to examine the association. However, in most cases the categorical variable used was program type which has more than two categories. In cases like this, where the categorical variable has three or more categories, I did a comparison of means through analysis of variance (ANOVA). The requirements to for an ANOVA are: 1) each group must have a normal

distribution or have more than 30 cases; and 2) variances must be homogeneous in all of the groups. In cases where the variable doesn't have a normal distribution a non-parametric test was used; I used a Kruskal-Wallis test in these cases as I had more than two groups and thus, could not use a Mann-Whitney U test.

To assess where there was an association between two quantitative variables I used a correlation analysis. In cases where the distribution was normal I used a Pearson's correlation. When the distribution was not normal or there were extreme outliers, I used the Spearman's correlation. The values of these (the Pearson's correlation coefficient and the Spearman's rho) indicate how strong the relationship is between the variables with the sign (positive or negative) demonstrating the direction of the association.

My hypotheses included the following: (1) receiving education increases an excombatant's confidence in their own ability to make change as quantified by the participant's scores on the Generalized Self-Efficacy Scale and the internal locus of control score; (2) receiving education reduces the likelihood that the participant will engage in criminal or maladaptive behaviors including associating with armed peers, abusing alcohol, being violent, or engaging in crime; (3) participants who engaged in sports and recreation were less likely to revert to criminal behavior or interact with armed friends in the post-demobilization period; and (4) receiving education is associated with increased pro-social capacities and behaviors. In the analysis I present findings from the two experimental conditions (Interventions B and C), the treatment as usual (intervention A) condition, and the control group of those who qualified to be in the intervention but were not included.

To test my hypotheses I used a Linear Mixed Model (LMM) for much of my analysis because I assume that factors and covariates have a linear relationship to my dependent variables. The LMM was the best fit for several reasons. The LMM provides flexibility where the general linear model does not; in a LMM random effects and the error terms express correlated and nonconstant variability in their results. This was the best fit for my data because the model needed to be flexible and to model the covariance structure in addition to the response variable.

One of the challenges of working with this data set is that the planned intervention services did not occur as they were intended. The amount of education, social services, internship days, and other services varied greatly from both participant to participant and from program to program. Had all participants in a given intervention received the same amount of intervention services (e.g. number of hours of vocational education), the categorical variable of program type could have been used to examine differences between interventions and the impact of, for example, vocationally focused versus classical education focused education on the study participant's attitudes, behaviors, and accessed skills.

However the amount of services varied wildly within programs. Participants dropped out of parts of the intervention, skipped classes, missed group counseling sessions, failed to follow through on attending their internship, and rejected their program assigned mentor. Informal education hours, which were supposed to include ten hours of HIV risk reduction programming and eight hours of life skills workshops within the first three months for each of the three interventions were vastly different in practice than was intended. By reviewing sign in/sign out sheets, data was obtained on how many hours of informal education each participant actually got.

For interventions A (TAU), participants received a mean of 12.22 (SD:12.47) hours of informal education, all during months four and five, rather than the 18 hours they were supposed to receive. Intervention B (Faith Based) received more informal education than required with a mean of 23.04 (SD: 14.87) hours and with more than half of the participants retaking a half day of the same HIV workshop twice. While intervention B completed all informal education hours before the 90 day deadline; intervention C (Education-focused) did not begin informal education until the first week of month three and did not complete it until well into month five. Participants in Intervention C received a mean of 21.05 (SD: 15.510) hours of informal education (though the terms of reference for this program indicate that in addition to the other informal education they were also to include 25 hours of citizenship or civic responsibility workshops, which they included as informal education. Therefore their mean should have been significantly higher. It appears that most participants in this intervention did not receive HIV training).

The LMM allowed me to account for the fact that the intervention participants did not receive the same number of hours of education as others in their own group. As the hours of education varied greatly within groups, I was obligated to treat the hours of education as a covariate. In an LMM the covariance structures available allow for residual terms with a lot of diversity in variances and covariances. The covariance structure specifies the relationship between levels of repeated effects. Although I did not have a lot of categorical predictors in the analysis that I did for this dissertation, the LMM did allow me to select categorical variables as predictors as factors in the model. Each level of a factor has a different linear effect on the value of my dependent variable.

Lastly, the LMM offered flexibility in regards to both repeated and random effects. The LMM lets me take into account the repeated effects of having multiple observations of the same person. Adding repeated effects variables lets me relax the assumption of independence of the error terms. Introducing random effects helps me understand and explain excess variability in the dependent variable. Given the intervention fidelity issues encountered with the difference between planned and received units of services in all three interventions and the repeated observations with the same subjects, this was the best option for testing the hypotheses.

Figure 7.1

Selected Demographics of Study Participants by Group at Baseline

Program		<u>Age</u>	<u>Years of</u> <u>Education</u>	Family Size	<u>Years in</u> Orphanage
Intervention A: TAU	Mean N SD	23.90 50 3.388	6.58 50 4.036	5.60 50 1.536	9.40 5 5.273
Intervention B: Faith-Based	Mean N SD	24.23 150 3.586	7.33 150 4.280	5.01 150 2.641	5.60 5 4.722
Intervention C: Education Focused	Mean N SD	24.21 252 3.846	6.71 252 4.236	5.22 252 2.972	6.00 11 5.138
Eligible but not selected	Mean N SD	24.36 244 3.959	6.73 244 4.123	5.28 244 3.112	7.17 12 4.218

Individual Study Participants at Baseline

The dataset includes longitudinal quantitative data on 741 male individuals who participated in or qualified for participation in DDR programs in Haiti in 2007 and 2008. Study

participants were born between 1977 and 1990; they ranged in age from 18-31 years with a mean of 24 years (SD: 3.83 years) at baseline (figure 7.1). All study participants were born in Haiti and lived in Haiti for 80% or more of their years. Eighteen lived in the Dominican Republic, which borders Haiti to the east, for six months or more, all while they were between the ages of two and 15 years. All study participants were Creole-speaking Haitian citizens who were involved in armed groups including armed gangs for six months or longer between 2004 and 2007.

Since one area of this study looked at family relationship outcomes, it is important to understand the family and living situation of the study participants. Most participants were raised by a parent or relative caregiver (figure 7.1). Nearly half (47.6%, n=353) were parented by both their mother and their father but only lived with one parent. A third (33.3%, n=247) were raised by a relative caregiver such as a grandparent, aunt or uncle, or cousin. Only 12.3% (n=91) were raised with both their mother and father in the same home. The remaining study participants grew up in an orphanage (3.2%, n=24) or living with an unrelated adult (3.5%; n=26).

At baseline (T1), two thirds (66.7%; n=494) had two living parents and a bit less than a third (28.1%, n= 208) had one living parent, while 5.3% (n=39) were orphaned (figure 7.2). Five percent (n=37) individuals lived in a *crèche* (orphanage) at some point during their childhood; the mean number of years of living in a child care institution was 7.14 years (SD: 4.529 years). Participants in the two experimental conditions (interventions B and C) were had a lower mean number of years spend in a child care institution compared to participants in the TAU group.

Being an orphan did not necessarily lead to being placed in a *crèche*; in fact, most of those who were raised in orphanages had one or two living parents. When asked why they were placed in a residential institution, half (51.4%; n=19) said it was because their family was too

poor to care for them and needed assistance providing them with food, clothing or medical care. The second most common reason for being placed in an orphanage was living too far away from a primary school or the family not being able to pay for the child to attend school (37.8%; n=14). Other reasons for being placed included not having any relatives to care for the child (5.4%, n=2) and parental health problems (2.7%, n=1). One respondent did not know the reason he was placed in an orphanage.

At baseline, 82.2% (n=608) of study participants said their home was a house, apartment, or farming homestead owned or rented by a parent or another family member (figure 7.2). More than a tenth, 13.9%, (n=103) said they considered a friend's home to be their permanent place of residence. And the remaining 3.9% (n=29) didn't have a permanent or regular place to live. To understand socioeconomic status of the household, I looked at the number of rooms in the home, access to municipal services, and household income. Of those who said at baseline that they had permanent or regular housing at baseline, 16.9%, (n=120) lived in a home with only one room. 43.8%, (n=312) lived in homes with two rooms. Only 39.3% (n=280) lived in a home that had three or more rooms.

Of those who had a regular place to live at baseline, participants frequently lacked access to regular municipal services (figure 7.2). At baseline just less than half (48.9%, n=348) said their permanent home was not wired to receive electricity and 45.2%, (n=322) said their permanent home was in an area that received government provided electricity, but only some of the time. A minority 5.7% (n=42) supplemented government electricity (when it was on) with an inverter system (solar or generator powered) and/or with a generator.

Water was another municipal service that many housed study participants lacked with 30.8% (n=219) of those who had a regular or permeant home reporting that the house had no access to water on-site. Just over half (55.7%, n=396) of those with a regular home said the house received water from the government (CAMEP), from a spring or rainwater catchment system on site, or that the home had a private or shared cistern which could be filled by purchasing services from a water delivery truck. The remaining thirteen percent (13.5%, n=96) used a combination two or more of these water sources, most often, CAMEP supplemented with water delivered to the home's private or shared cistern by truck.

Figure 7.2

Descriptive Statistics for Study Participant Demographics

	A: TAU	B: Faith	C: Education	Control
	% within	% within	% within	% within
Grew up in two parent home	22.0%	4.7%	9.5%	17.2%
Grew up in single parent home	46.0%	54.7%	51.6%	40.6%
Raised by relative caregiver	20.0%	37.3%	33.7%	33.6%
Lived in orphanage as child	10.0%	3.3%	4.4%	4.9%
Currently an orphan	12.0%	2.7%	3.2%	7.8%
Currently lives in family home	84.0%	83.9%	82.5%	78.3%
Currently homeless	2.0%	3.4%	4.8%	4.1%
Home not wired for electric	49.0%	46.2%	51.2%	52.1%
Home has municipal rubbish collection	8.2%	7.6%	8.4%	11.5%
Home has no municipal water	20.4%	27.6%	30.1%	38.0%
Home shares toilet with others	28.6%	38.3%	38.9%	37.1%

Home has pit toilet	36.7%	44.1%	56.7%	44.9%
Household income <us\$1200< td=""><td>26.0%</td><td>30.0%</td><td>30.6%</td><td>27.0%</td></us\$1200<>	26.0%	30.0%	30.6%	27.0%

In the study participants' 'permanent homes, most (at baseline) had access to a toilet with only 2.5% (n=18) reporting that the home had no toilet facilities. Pit toilets (48.5%, n=345) and flush toilets which could be operated by dumping a bucket of water into the bowl (46.2%, n=329) were the most common. Only 2.8% (n=20) said that their permanent or regular home had a running water flush toilet. A third of those who said that their permanent home had any type of toilet also said that that toilet was shared with other households (36.7%, n=55). Municipal trash collection was also rare. Only 9.4% (n=67) respondents said they disposed of their trash on a neighborhood trash pile or in a dumpster that was then removed by the government or an NGO. 26.7% (n=190) of respondents paid a private individual to remove their household trash while the majority (63.9%, n=454) said no trash pick-up was available in their area so they disposed of household garbage by burning it, burying it, dumping it in the ocean, dumping in a ravine, or throwing it away on the street or an empty lot.

Living in a small home, lacking access to municipal resources, having a shared toilet, and lacking a flush toilet (of either type) is associated with familial poverty in Haiti. Poverty can also be measured by examining household income, though that is somewhat unreliable in Haiti, where employment is often informal and the exchange or barter of goods and services is quite common. Nearly all study participants (97.6%, n=722) were unemployed at baseline. But, from examining household income at baseline, it appears that most study participants came from households that were very low income inclusive of remittances from family and friends abroad;

more than half (28.9%, n=214) said their household lived off of USD \$1200 or less the previous year while a quarter (40.4%, n=299) said their household income was between USD \$1200-1400) and 23.3% (n=173) had an income between \$1601-2400 USD. Only 7.4% (n=55) reported a household income of more than \$2400 USD. A worker earning minimum wage at a full time job would earn roughly USD \$1400 a year which is enough for a family of five to rent a small home in a low-income area, eat two full meals a day with a source of animal protein three times a week, purchase treated water for drinking, pay for basic transportation, and cover the costs of public primary school or high school for two children. At baseline there was little statistically significant difference between the demographics of the treatment and non-treatment groups.

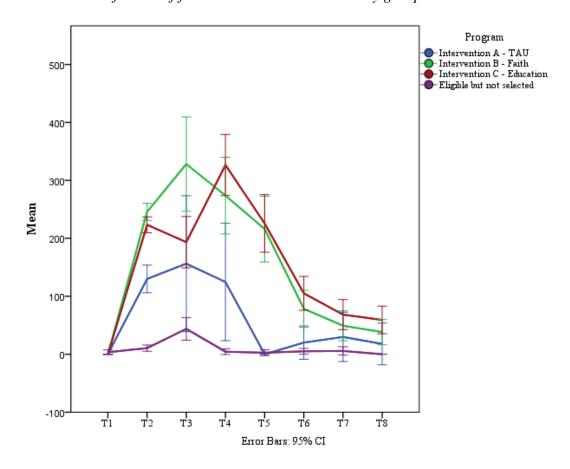
Program Services

The services offered by programs included (for some programs) vocational education, classical (high school or college) education, sports and organized recreational activities, social work services including case management, mentoring, community service opportunities, religious education, internship placement, job training and job readiness skills, and civic education. In addition to receiving these services at the program, some study participants receive the same or similar services from other agencies or school programs. To further complicate matters, there appear to have been fidelity issues with some of the intervention participants. Intervention A participants were supposed to receive four months of services including at least three months of vocational training. Figure 7.3 demonstrates that this did not happen for all participants. Intervention B and C modified their program content to fit the individual educational and vocational goals and background of each student, so, some students received more vocational education while others received more classical education.

Vocational Education and Mentorship. Vocational education programs included formal training in employable professions common in Haiti. These included classes in masonry, construction, plumbing, mechanics and other working class professions. In addition, some participants received specialized training in newly created industries such as making charcoal briquettes using recycled products for a program subsidized through foreign aid aimed at reducing the environmental impacts of traditional fuels in Haiti. Other participants were trained in businesses skills and entrepreneurship through a program where they created their own business selling phone credit (*papadap*) on the street.

Figure 7.3

Mean number of hours of formal vocational education by group



None of the intervention participants reported receiving vocational education in the six months prior to baseline. Among those who were eligible to participate in DDR but were not selected, three individuals indicated that they had attended vocational training programs. The mean number of hours of vocational training at baseline was 3.20 hours (SD: 29.109). At T2, T3, and T4, Intervention B had the highest mean number of hours of formal vocational education with a mean of 246.65 hours (SD: 91.176), 329.74 hours (SD: 492.88) and 285.54 hours (409.376) respectively. The relationship between group and hours of formal vocational training was statistically significant at each data collection point after baseline.

Mentorship referred to one-on-one coaching by an experienced professional in the area of work chosen by or assigned to the intervention participant. Mentees were coached on how to obtain work, professional soft skills, and how to maintain their job once they found one.

Mentorship was most commonly given to participants in interventions B and C. The relationship between mentorship and program group was statistically significant at all data collection times.

Classical Education. In Haiti, classical education refers to formal, non-vocational academic education offered in a classroom setting. Classical education is highly prized and is considered mark of prestige. Classical education is most commonly offered by private schools; approximately 90 percent of classical schools in Haiti are private. Classical education in Haiti occurs at the primary, secondary, and post-secondary levels. (Adelman & Holland, 2015; Lockheed, 2012; Sabates, Akyeampong, Westbrook & Hunt, 2011; Richardson, 2014)

The primary level begins with preschool, a non-compulsory but common program of preparatory education focusing on writing and reading skills, basic math, and social education

attended by students between the ages of three and five. Students frequently start education later than the recommended ages and experience breaks due to poverty, political instability, and a lack of available space in geographically proximate schools. Preschool is usually skipped by children who start their education later than the recommended age with only a fifth of children in this age group attending any preschool. (Bredl, 2011; Frankenberg, Sikoki, Sumantri, Suriastini, & Thomas, 2013; Sabates et al, 2011)

The next stage of primary school encompasses grades one through three; it is the first of the three cycles of fundamental education. Students must pass each year to advance to the next and must pass an exam at the end of each of the three fundament education cycles. It consists of 3 cycles of 3 years each, which altogether is called "fundamental education". When looking at the three intervention groups together with the control group, at baseline 3.5% (n=208) had attended only preschool or had not yet attended school at all. Nearly a quarter (22.4%; n=1328) left school during the 1st fundamental cycle (grades 1-3) and another quarter (25.4%; n=1504) left school during the 2nd fundamental cycle (grades 4-6). At the conclusion of the 6th grade the student takes a government regulated examination and is awarded the *Certificat d'Estudes Primaires* (CEP). (Bredl, 2011; Lockheed, 2012; Sabates et al, 2011)

Secondary school begins either with the 3rd fundamental cycle or with grade 10, depending on the school and its structure. Seventh grade is either technical (vocational) or general (classical academics). Eight grade focuses on humanities while ninth grade integrates humanities with social sciences, hard sciences, and math. At the end of the third fundamental cycle (grade 9) the student takes a government examination and is awarded the *Diplóme* d'Estudes Fondamentales or the *Baccalauréat 1e Partie* (depending on if the school uses the

traditional French system or the newer system that pairs the 3rd fundamental cycle with the rest of primary education). (Atasay & Delavan, 2012; Sabates et al, 2011)

At the conclusion of grade 9, the student must decide to either pursue an academic or technical (vocational) track. Grade 10, is called the *1é Année Seconde Clasique* if taken in an academic classical school or *Seconde Technique* if taken at a vocational high school. Grade 11 and/or 12 is known at *2é Année Rhetorique* (*rheto*) if taken at an academic classical school or *Premiére* when taken at a vocational school. And the 12th grade of secondary school is called *3é Année Philosophie* (*philo*) if taken at an academic classical school or *Terminale* when taken at a vocational school. Most students do two years of *philo* or *rheto* if attending classical school. During these last three or four years of school the student concentrates on either science and math, social sciences, arts and humanities, or vocational studies. The government examination taken after the 12th or 13th year is completed (sometimes months later), if passed, earns the student a *Baccalauréat 2e Partie*, the state issued high school diploma. (Atasay & Delavan, 2012; Gage, 2014; Zanotti, Stephenson & McGehee, 2015)

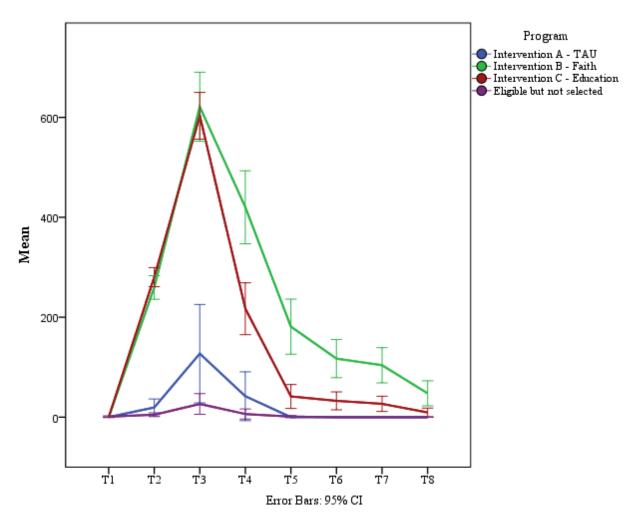
When looking at the three intervention groups together with the control group, at baseline 18.2% (n=1080) left school during the 3rd Fundamental Cycle, 17.5% (n=1040) left during the latter part of secondary school; and 13% (n=768) completed high school studies (but didn't necessarily pass the state examination for the diploma). After demobilization, study participants from all groups, including the control group of non-intervention participants, attended vocational and classical education programs (figures 5.4). Intervention B and C participants received the most classical education (figures 5.4) while intervention A participants received some limited classical education (even though this was not the focus of intervention A, during records review

it was found that some participants were sent to classical education in addition to or in place of vocational education and that classes were paid by the implementing partner; it is not known why this decision was made for some intervention participants and not others).

Intervention B and C had more participants who stayed involved in classical education after program completion when compared to other groups; for intervention A, no participants reported classical education after T4 and for the control group classical education was most

Figure 7.4

Mean Hours of Classical Education by Group



commonly reported in the year following demobilization; no members of this group were in classical education programs after T6 (figure 7.4). Having a greater number of hours of classical education was associated with Interventions B and C (see appendix for additional analysis results and tests of significance).

Internships. Completing an internship is a requirement for most career paths in Haiti. Young professionals and skilled workers typically complete an unpaid internship lasting 6 to 12 weeks at the conclusion of their vocational or academic training. For some careers, such as banking, medical professions, and electricians, the internship period can last up to six months or more. Internships are an opportunity for young people to build relationships and network within their field as well as their opportunity to prove their employability. Internships were most common during the intervention period for participants in Intervention A where they were intended to be an integral part of the intervention. Internships were optional but strongly encouraged for participants in the other two interventions. At T2, six months after baseline, the mean number of person days in an internship was 68.40 (SD: 52.639), 51.00 (SD: 39.726), and 47.61 (SD: 41.963) for interventions A, B and C respectively.

Informal Education. Opportunities for informal education included workshops, learning groups, and skill-specific training which occurred outside the formal classroom or vocational training program. This was most often focused on civic education and community organizing or advocacy though other content included learning about HIV prevention from a safer sex promotion dramatic presentation, participating in a community garden learning and serving event, and going to a conference on religious leadership. Informal education was most commonly reported by Intervention B and C and it was most common during the first six months

after baseline. The mean hours of informal education at T2 were 12.22 (SD: 12.466) for Intervention A, 23.04 (SD: 14.872) for Intervention B, and 21.05 (SD: 15.510) for intervention C (see appendix).

Community Service. Volunteerism through formal programs, community service and service learning are new concepts in Haitian culture. These types of activities have rarely been integrated into the Haitian educational structure and are viewed as foreign by many students. However, informal volunteerism is common in Haitian culture. Integration of volunteer opportunities into youth and education programming has become more common in foreign funded programs in Haiti over the past ten years; it is seen by many development professionals as an opportunity to build social and community bonds for participants of charity programs. (Brower, 2011; Carlile, Mauseth, Clark, Cruz & Thoburn, 2014; Pluim, 2012)

Figure 7.5

Program services and intervention components received in total by groups

	A: TAU	B: Faith	C: Education	Control
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Vocational education (hours)*	478.50	1229.35	1201.48	75.61
	(525.88)	(1013.94)	(1170.48)	(173.58)
Classical education (hours)*	188.40	1750.50	1210.51	39.45
	(442.48)	(1150.02)	(749.19)	(244.18)
Informal education (hours)*	14.21	23.18	25.54	1.30
	(12.34)	(14.82)	(16.13)	(5.87)
Vocational mentorship (hours)*	8.81	49.60	43.36	1.20
	(24.84)	(35.93)	(33.88)	(7.49)
Internship (days attended)*	82.55	194.11	119.95	3.30
	(50.68)	(174.82)	(141.17)	(19.02)

Community service (hours)*	.54	560.03	141.14	8.93
	(2.41)	(605.80)	(265.98)	(70.59)
Social work services (hours)*	4.02	60.59	60.84	.0331
	(6.71)	(18.25)	(22.11)	(.35)
Religious instruction (hours)*	168.95	489.69	48.42	41.85
	(370.34)	(608.24)	(241.12)	(200.19)
Sports/Rec (days engaged)*	73.55	94.29	117.79	69.13
	(62.36)	(46.29)	(71.12)	(74.43)

^{*} Statistically significant difference ($p \le .05$) when comparing means between groups

Volunteerism was most common among Intervention B participants with a mean number of volunteer hours of 96.53 (SD: 56.89) at T2. Study participants in this group volunteered more in every time period from T2 through T8. Volunteering was least common among the control group and Intervention A participants; it was not a formal part of Intervention A's program (see appendix for a comparison of means and ANOVA table).

Social Work Services. Participants entering the three DDR programs often came without having received any demobilization assistance in the weeks or months since they separated from the armed group; the men frequently lacked identification cards, clothing, a place to live, food, transportation, and spending money. Most were dependent on the armed group for their daily living needs before demobilization. Some had serious medical, dental, and psychological problems. At baseline only one respondent reported having a bank account and more than half lacked the government documentation including a birth certificate, social security number (NIF), and driver's license or government issued photo identification card needed to open a bank account. A quarter of the intervention participants were rural areas a full day or more of travel away from the program sites in capital area; of these, half had been separated from their families for 12 months or longer.

Social work services in all three interventions focused first on obtaining medical care for participants and resolving problems of documentation, identification, and taxes. These steps were seen as necessary to enable the participants to work legally, a desired outcome expressed by the leadership of all three intervention programs. Additional social work services were offered on asneeded and as-available basis. These included additional casemangement, assistance finding housing, help locating family members, counseling, social skills training or coaching, referral for psychiatric evaluation, psychological testing, general assessment, and linkage to community services. The provision of social work services varied greatly from program to program (figure 7.5). Intervention B participants received 55.09 hours of social work services (SD:18.295) on average in the six months after baseline while intervention A participants received 3.46 hours (SD: 6.370) on average and intervention C participants received a mean of 37.08 (SD:18.547 hours).

Religious Instruction. Not surprisingly, religious involvement was most common for intervention B participants who received a mean of 109.94 hours (SD: 56.05) of religious instruction during the first six months after baseline (figure 7.2) compared to Intervention A with 11.79 (SD: 34.45) hours and Intervention C with 5.48 hours (SD: 19.918 hours). Religious instruction was strongly related to group type at all points after T1 (see ANOVA table in appendix).

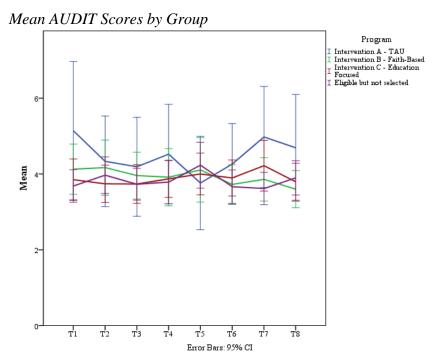
Sports and Recreation. Study participants engaged in organized sports and recreation activities (most commonly basketball) an average of 8.17 days (SD: 11.77) during the six months prior to the baseline interview This increased for intervention B and C participants at T2 and T3 when compared to the control group. There was no statistically significant difference in sports

and recreation activities at baseline based on group; however, the difference between groups was significant at all subsequent interview points (figure 7.2) (see tests for statistical significance in the appendix).

Clinical Measures

Criminal Behaviors. The first set of clinical measures examines criminal behaviors including alcohol use and abuse, associating with peers from armed groups, involvement in crime. There is not a lot of variation between groups or across time when looking at alcohol use (figure 7.5) This could be related to cultural concepts of alcohol use in Haiti; drinking alcohol, even when underage, is not considered deviant behavior and most Haitians consume alcoholic beverages, particularly beer, on a regular basis. The difference in means between groups was not statistically significant.

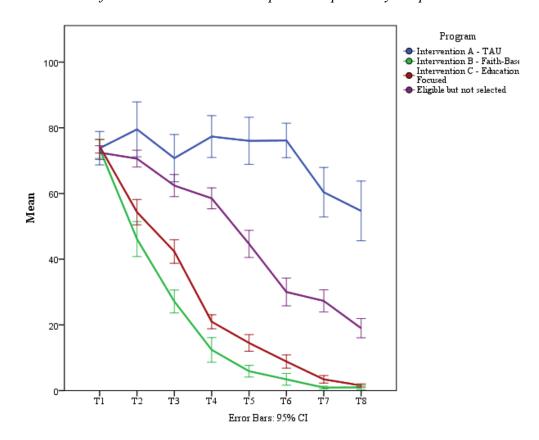
Figure 7.6



There was more variation when looking at other measures including the respondent's friends in armed groups. This score was derived by first asking the respondent to mark on a horizontal line from none to all to indicate the percentage of friends they have today who are members of armed groups. The respondent's mark was measured and converted into a 100 point scale (so, a mark halfway between the beginning and the end of the line would be equal to 50 and so on) to create the score. At baseline most of the groups were roughly the same with a mean of 73.20 (SD: 16.116) of the total.

Figure 7.7

Mean Score of "Friends in Armed Groups" as Reported by Respondent



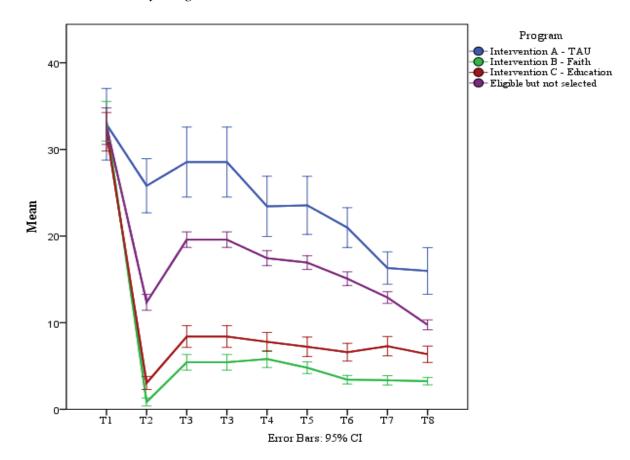
At T2, six months after baseline, there was a clear divergence with Intervention B and C dropping to 45.71 (SD: 31.651) and 54.39 (SD: 28.663) respectively, and intervention A increasing to 79.81 (SD: 26.543). At baseline the difference between groups was statistically insignificant (figure 7.7) but at T2 and all subsequent times, the difference was significant at the .05 level. The mean score for all groups declined at T3 and on subsequent contacts. However, interestingly, the mean score for Intervention A remained higher than the other two interventions and it remained higher than the control group throughout the life of the study. At T8 the mean score had dropped to 54.69 (SD: 29.147) for intervention A which was still higher than the mean score of 18.95 (SD: 22.413) for the control group. This indicates that intervention A had the opposite of its intended effect; rather than reducing the ex-combatant's peer associations with armed group members, it strengthened those relationships, enabling them to continue and to decline at a slower rate than normally occurred through the process of maturation as demonstrated by the control group.

Involvement in crime was measured by the Crime Questionnaire which included four subscales: property crimes, trafficking, crimes against persons, and crimes related to sex or relationships. There was no statistically significant relationship between the group and the total score or any of the subscale scores at baseline. However, the difference between groups was statistically significant at T2 and all later points. It should be noted that the score is based on crimes committed since the last interview; the score appears artificially low at T2 because only 6 months passed between T1 and T2, though 12 months passed between all other data collection times.

Similarly to the "friends in armed groups" score, the crime questionnaire was produced mean scores that were higher for Intervention a participants than the control group across time. Mean scores for the total crime score an all subscales were lower at T2 and subsequent data collection periods for Intervention B and C. This indicates that Interventions B and C were associated with a greater reduction in reported criminal behavior than Intervention A.

Figure 7.8

Mean Crime Scores by Program



Violence and other maladaptive behaviors. The second set of clinical measures examines other maladaptive behaviors including violence. At baseline, all three intervention groups and the control group were statistically similar on all measures of violence and other

maladaptive behaviors: the Crime Questionnaire and its subscales, as well as the MOAS. A clear difference between groups began at T2 and continued throughout the life of the study. The mean scores for interventions B and C were lower on the crime questionnaire (indicating less criminal involvement) and lower on the MOAS (indicating less frequently observed violent behavior) when compared to both the control group and the intervention A participants (figures 5.17)

In respect to these two measures, Intervention A participants were more crime involved and were observed more frequently being engaged in violence than the control group. While scores on the crime questionnaire did not increase respective to scores at baseline, they did not fall as far as those of the control group did; this indicates that rather than contributing to a reduction in crime, intervention A may have hampered the reduction in crime and violence which would have occurred had the participants not been in the intervention.

A similar picture emerges with regards to violence. On the MOAS, scores for intervention A participants increased after baseline, peaked at T3, and then decreased to below baseline by T5, after which the scores continued to decrease. This was markedly different than that control group, which decreased slowly between baseline and T4. Between T4 and T6 there was a very sharp drop in scores for the control group, and afterward T6 the scores continued to slowly decrease. Intervention B and C's mean scores look similar to each other; they both decreased sharply between baseline and T3, and then stayed low (at a lower mean than the other two groups) through the life of the study.

Psychological Factors. The third set of clinical measures examines psychological factors including locus of control, self-efficacy, hardiness, family functioning, recent exposure to stressful or traumatic events, and depression. Recent stressful events was measured using the

SRRS. Intervention A participants had a slightly higher mean (10.56, SD: 7.877) at baseline than the other groups (the mean for all participants was 8.39; SD:4.846 at baseline) indicating that they experienced more stressful and traumatic events in the previous six months; this difference between groups was statistically significant (figure 7.16). However, at all later points the differences between groups was not statistically significant, indicating that, overall all, all participants experienced stressful and traumatic events throughout the life of the study. Hardiness, which is related to an ability to cope with stressful events, was measured using the Short Hardiness Scale. None of the four groups maintained a higher mean score than another; variation in scores on this instrument were not statistically significant any data collection point.

A depression measure was included as depression has been tied to locus of control, traumatic and stressful experiences, self-efficacy, academic achievement, vocational performance, learning ability, poor emotional regulation, and involvement in criminal activity. Depression was measured using the Beck Depression Inventory. Depression was common with 60-70% of study population exceeding the symptomatic threshold for depression at any given time. There was a statistically significant relationship between intervention/control group and depression; a higher percentage of intervention A's participants were depressed at all points after T1 when compared to the other two intervention groups.

Self-Efficacy scores were also related to intervention type. Between T1 and T3, the mean GSE scores increased more for intervention B and C than for the other intervention and for the control group; the mean scores for these two groups stayed higher than the other two groups for the duration of the study. Intervention A participants had a higher score than the control group at all points post-baseline; this indicates that all three interventions were associated with an

increase in self-efficacy. The relationship between self-efficacy and program type was statistically significant at all points after baseline.

Figure 7.9

Mean Scores on the SHS by group over time

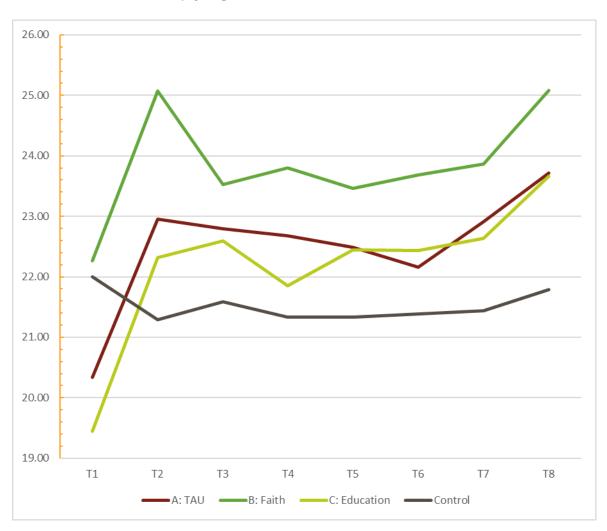


Figure 7.10

Mean Scores on the GSE by group over time

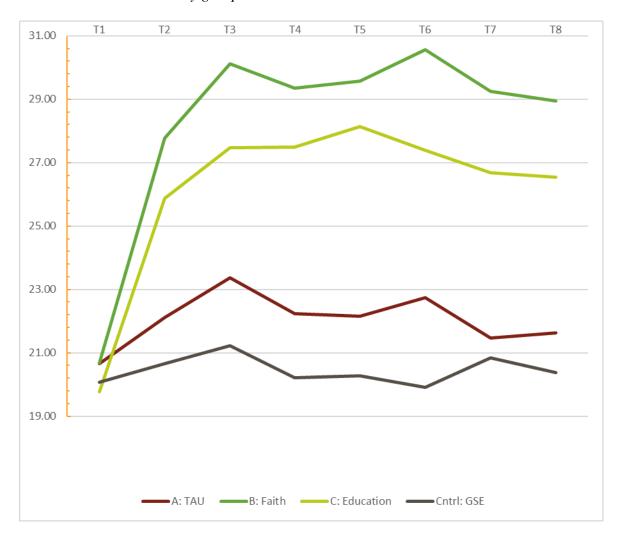
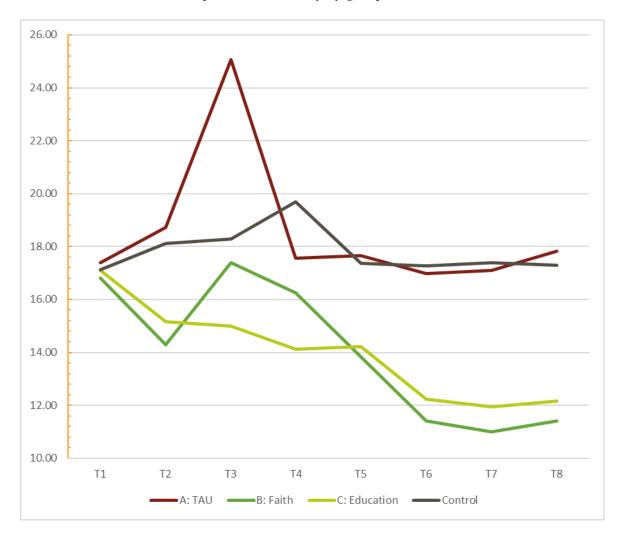


Figure 7.11

Mean Scores on the Beck Depression Inventory by group over time



The Levenson LOC scale included three subscales: internality, powerful others, and chance. When doing a nonparametric correlation, a negative relationship with internality was revealed for both the powerful others subscale (Spearman's rho: -.043) and chance (Spearman's rho: -.152) subscales. The correlation between chance and powerful others was not statistically significant. All four groups (the three interventions and the control) started out similarly at

baseline; there was no statistically significant difference by group at baseline. However, after baseline, interventions B and C had a higher mean internality score and lower mean score on the other two scales when compared with intervention A and the control group. This difference was statistically significant. So, intervention B and C were correlated with an increase in a sense of control over one's own destiny, as expressed by scores on the three scales, and a decrease in beliefs regarding chance or powerful outside forces controlling ones future.

Mean LOC scores on the Internality subscale by group and time

Figure 7.12

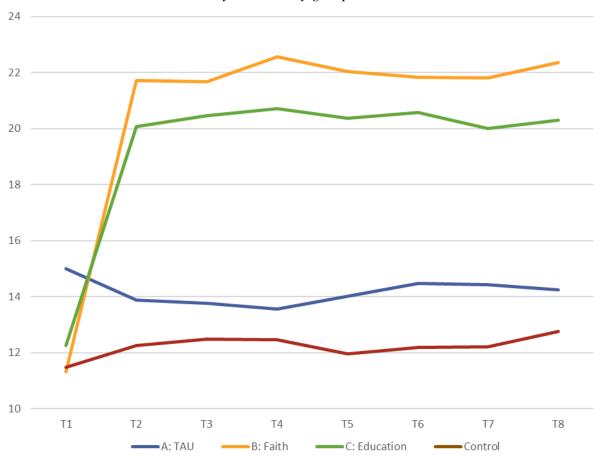


Figure 7.13

Mean LOC scores on the Powerful Others subscale by group and time

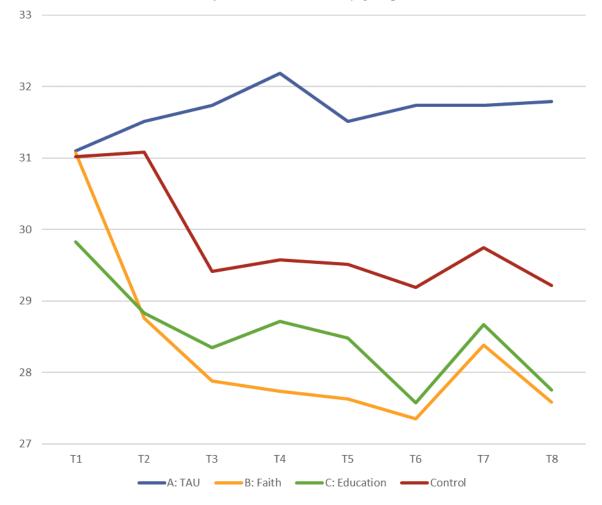
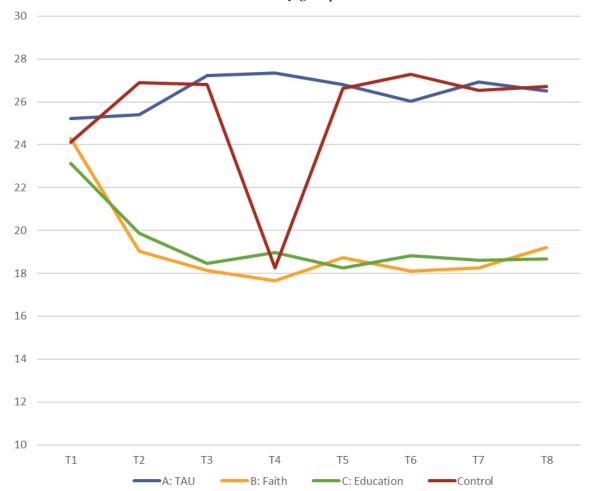


Figure 7.14

Mean LOC scores on the Chance subscale by group and time



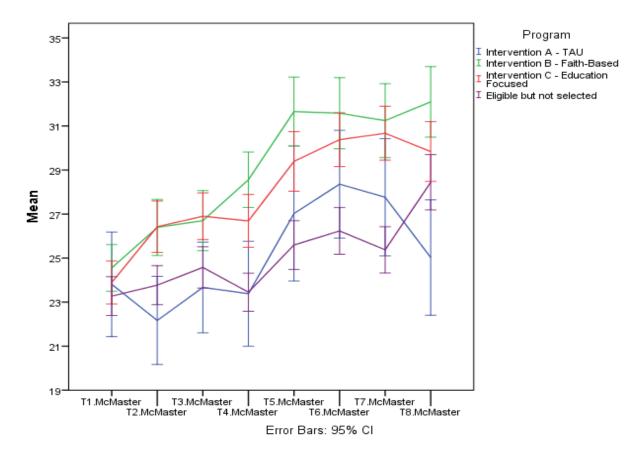
The McMaster Family Functioning score was also examined; at baseline there was no statistically significant difference between groups. At T2, Interventions B and C had increased their mean score (improved family functioning) while intervention A had decreased and the control group had risen, but not as much as that seen in interventions B and C groups.

Interventions B and C had similar scores at T2 and T3, but at T4 and subsequent observations,

intervention B demonstrated higher mean scores than all other groups (see ANOVA table in the appendix).

Figure 7.15

Mean Scores on the McMaster Family Functioning Devices across time by group



Hypothesis Testing

Hypothesis #1. Receiving education increases an ex-combatant's confidence in their own ability to make change as quantified by the participant's scores on the Generalized Self-Efficacy Scale and the internal locus of control score. This hypothesis emerged from both the research literature, which highlights the benefits of education in increasing self-efficacy and

other factors associated with the successful rehabilitation of crime-involved individuals, as well as from the prominent focus on education in the DDR interventions. In order to test this hypothesis, I looked at both vocational education and classical education. I set the alpha at .05 (a= 0.05); the results will only be significant if $p \le .05$. I transformed hours of education for both categories (vocational and classical) into half school days where 4 hours equaled one half day. First I looked at self-efficacy. My model is expressed as: $Y_{ij} = \beta_0 + \beta_1 X_{ij}^1 + \beta_2 X_{ij}^2 + R_i + E_{ij} \text{ where Y is the GES score, the first effect is class hours}$ and the second is vocational hours, R is the random effect and E is the error term. The number

of hours of classical education and the number of education of vocational education both had a

Figure 7.16

Hypothesis #1 Estimates of Fixed Effects

positive effect on the participant's GSE.

Estimate	SE	Sig.
22.178199	.120928	.000
.032242	.001754	.000
.033221	.001926	.000
14.659144	.138391	.000
.036930	.001950	.000
.033590	.002134	.000
	22.178199 .032242 .033221 14.659144 .036930	22.178199 .120928 .032242 .001754 .033221 .001926 14.659144 .138391 .036930 .001950

Because this was the first hypothesis I examined, I examined it first without accounting for repeated effects or modeling the covariance structure. The -2 Restricted Log Likelihood result was shockingly high. I adapted my model, incorporating the repeated effect into my model

and ran it again; the second time the -2 Restricted Log Likelihood result was much smaller, indicating a better model fit for the data. Adding the repeated effect also reduced the standard error of the estimate for both classical and vocational education units. In the end I saw that the number of hours of classical education and the number of education of vocational education both had a positive effect on the participant's GSE. These results were statistically significant. There was some variation at some time points when looking at the 8x8 table of estimates of covariance parameters, but this was small and did not impact interpretation of the model.

Next I looked at internal LOC as measured by the Levenson subscale. My model is expressed as: $Y_{ij} = \beta_0 + \beta_1 X_{ij}^1 + \beta_2 X_{ij}^2 + R_i + E_{ij}$ where Y is the Internal LOC score, the first effect is class half days, the second is vocational half days, R is the random effect and E is the error term. The number of half days of classical education and the number of half days of vocational education both had a positive effect on the participant's internal locus of control, indicating that those with more education developed a stronger internal locus of control. This relationship was statistically significant; when examining the results for the type III tests of fixed effects, the p value was .000, which matched the significance level of the parameters in the estimate of fixed effects.

The results of these tests indicate that the hypothesis is supported: receiving education increases an ex-combatant's confidence in their own ability to make change as quantified by the participant's scores on the Generalized Self-Efficacy Scale and the Levenson internal Locus of Control score.

Hypothesis #2. Receiving education reduces the likelihood that the participant will engage in criminal or maladaptive behaviors including associating with armed peers, abusing alcohol, being violent, or engaging in crime. This hypothesis is likewise grounded in the research literature reviewed in previous chapters which points to the beneficial impact that education has on decreasing crime, violence, and other maladaptive and anti-social behaviors. Though much of the research previously reviewed was conducted on other populations, it was hypothesized that education would also be beneficial in reducing the likelihood of such behaviors in the ex-combatant population.

To test this hypothesis I used the number of half days of education (both vocational and classical) and the scores on the crime questionnaire, the MOAS, the "do you have armed friends" variable and the AUDIT score. I tested each of these dependent variables separately. My model is expressed as: $Y_{ij} = \beta_0 + \beta_1 X_{ij}^1 + \beta_2 X_{ij}^2 + R_i + E_{ij}$ where Y is the outcome variable (MOAS score, AUDIT score, etc), the first effect is class half days, the second is vocational half days, R is the random effect and E is the error term. For this I also used a linear mixed model; this model was the best fit for my analysis as both the education variables and the dependent variables were continuous and the education variables had a large, unwieldy range.

Classical and vocational education both had a negative correlation with the overall crime score; that is, the overall crime score decreased with greater amounts of education indicating that those who had more education engaged in less crime. This was statistically significant (figure 7.18). Classical and vocational education also had a slight negative correlation with the property crime subscale; this was statistically significant. Similar findings were observed for the

trafficking subscale; the physical violence subscale; and the crimes related to sex and relationships subscales.

Violence was quantified using the Modified Overt Aggression Scale (MOAS) scores, both the overall score and the score specific to verbal threats of violence. Education of both types was associated with a very small drop in the verbal aggression subscale (--.000775 for classical education and -.000595 for vocational education). These negative correlations were statistically significant. In looking at the overall MOAS score, we see the same thing, a small negative correlation that is statistically significant.

Ex-members of armed groups continuing to socialize or interact with armed peers was a great concern expressed by the implementing partners of all three intervention. When examining the "armed friends" score, there was a negative correlation with both vocational and classical education and the engagement with armed friends. This was statistically significant at all time periods. This indicates that increased education is associated with having fewer friends from armed groups.

Hypothesis #2 Estimates of Fixed Effects

Figure 7.17

Parameters	Estimate	SE	Sig.
MOAS – Intercept	.791006	.014536	.000
MOAS – Vocational (half days)	001941	.000210	.000
MOAS – Classical (half days)	001892	.000221	.000
Crime Score – Intercept	11.108992	.133505	.000
Crime Score – Vocational (half days)	029810	.002049	.000
Crime Score – Classical (half days)	033011	.002115	.000

Armed Friends – Intercept	39.881012	39.881012	.000
Armed Friends – Vocational (half days)	051162	051162	.000
Armed Friends – Classical (half days)	079307	079307	.000
AUDIT – Intercept	3.940714	.058509	.000
AUDIT – Vocational (half days)	001472	.000820	.073
AUDIT – Classical (half days)	.000538	.000917	.557

Alcohol abuse was measured using the AUDIT which produced two variables: a continuous variable score and a nominal variable (a score over the benchmark for alcohol abuse). I used the same linear mixed model with the AUDIT score as the dependent variable and found that classical education was negatively correlated with the AUDIT score and that vocational education was positively correlated; however, neither was statistically significant and p values on the type III test of fixed effects did not support the hypothesis that receiving education reducing alcohol abuse.

To further examine this question I looked at the AUDIT benchmark scores which were used to create a nominal variable for healthy use of alcohol, harmful use of abuse and dependence on alcohol. Healthy use of alcohol was associated with a greater amount of both classical and vocational education. However, this was not statistically significant (p values: .106 and .972 respectively).

As previously mentioned, some participants received both vocational and classical education. I created a new variable combining the hours of both types of education. I grouped the participants into three groups using this variable so that I could examine differences between groups. The groups were: received no education; received less than the average (mean) number

of hours of education; and received education equal to the mean or higher than the mean. I examined mean AUDIT scores by group for each of the eight observations; however there was no statistically significant relationship between AUDIT scores and any of the three groups.

The analysis outlined above supports the hypothesis that education reduces the likelihood that the participant will engage in criminal or maladaptive behaviors including associating with armed peers, being violent, or engaging in crime. However, my original hypothesis is only partially supported. Education reduces engagement in some criminal and maladaptive behaviors but the hypothesis that education reduces alcohol abuse was not supported.

Hypothesis #3. Participants who engaged in sports and recreation were less likely to revert to criminal behavior or interact with armed friends in the post-demobilization period. As discussed in the previous chapter, sports are widely used in development and peacekeeping operations. They are integrated into many DDR programs and are quite popular among funders. However, the empirical research on their efficacy in contributing to the rehabilitation of members of armed groups is limited. This hypothesis tests the common assumption about sports and organization recreational programs made by policymakers, development professionals, and funders which guides the funding focus on sports as a component of DDR programming.

Figure 7.18

Hypothesis #3 Estimates of Fixed Effects

Parameters	Estimate	SE Sig.
Crime Score – Intercept	10.943978	.140174 .000
Crime Score – Sports & Recreation (days engaged)	082202	.004737 .000
Armed Friends – Intercept	37.546316	.521430 .000

Again I used a mixed linear model as both the dependent and the independent variables were continuous. My model is expressed as: $Y_{ij} = \beta_0 + \beta_1 X_{ij} + R_i + E_{ij}$ where Y is the dependent variable (crime score), days engaging in sports or recreation is the covariate, R is the random effect and E is the error term. Engaging in sports or recreation had a slight negative correlation (-.082202; 95% CI: -.091489 – -.072914) with the total crime score. A type III test of fixed effects demonstrated that this was statically significant. Similar but very small, statistically significant results were found with the subscales. One subscales stands out: physical crimes against persons. Engaging in sports or recreation was negatively correlated with physically violent crimes against persons (-.26213; 95% CI: -.029837 – -.022589). The results of this analysis indicate that the hypothesis is supported: Participants who engaged in sports and recreation were less likely to revert to criminal behavior in the post-demobilization period.

Hypothesis #4. Receiving education is associated with increased pro-social capacities and behaviors. As noted in chapters two and three, DDR occurs within a larger peacekeeping mission which has the goal of stabilizing the country and creating the conditions for peaceful expression of political activities. DDR programs are seen as an essential tool in part because they are purported by policymakers to reshape the political behaviors of participants from that which is violent to peaceful means of participation. However, this is rarely empirically tested. To test this hypothesis I quantified the increase in pro-social capacities and behaviors as hours spend volunteering, scores on the McMaster Family Functioning Device, the Decision Making Skills Survey, the Political Conversations with Others questionnaire, the Competence for Civic Action

survey, and the Political Voice measure. Some of these instruments measure both capacities and behaviors while others measure just behaviors, a self-assessment of skills, or beliefs about one's own capacities.

First I looked at family functioning. My model is expressed as:

 $Y_{ij} = \beta_0 + \beta_1 X_{ij}^1 + \beta_2 X_{ij}^2 + R_i + E_{ij}$ where Y is the McMaster FAD score, the first effect is

classical education units and the second is vocational education units, R is the random effect and E is the error term. Both classical and vocational education were associated with an increase in family functioning as expressed through the McMaster Family Functioning Assessment Device score; this was slightly higher for classical education than for vocational education. Next I looked at the scores on the decision making, political voice, and civic action scales. Each was associated with a small, statistically significant increase based on both educational and vocational education.

Hypothesis #4 Estimates of Fixed Effects

Figure 7.19

Parameters	Estimate	SE	Sig.
McMaster – Intercept	25.916513	.130970	.000
McMaster - Vocational (half days)	.006494	.001747	.000
McMaster - Classical (half days)	.010764	.001963	.000
Decision Making – Intercept	16.941783	.192054	.000
Decision Making – Vocational (half days)	.063737	.004975	.000
Decision Making – Classical (half days)	.053671	.003636	.000
Civic Action – Intercept	16.774998	.101781	.000
Civic Action – Vocational (half days)	.028822	.001474	.000
Civic Action – Classical (half days)	.024860	.001623	.000
PCWO – Intercept	36.869984	.212196	.000

PCWO – Vocational (half days)	1.002247E-5	.002993	.997	
PCWO – Classical (half days)	001752	.003262	.591	
Political Voice – Intercept	7.573724	.048623	.000	
Political Voice – Vocational (half days)	.003243	.000713	.000	
Political Voice – Classical (half days)	.003929	.000778	.000	
Volunteering (hours) – Intercept	.202953	.114889	.078	
Volunteering (hours) – Vocational (half days)	.200177	.013023	.000	
Volunteering (hours) – Classical (half days)	.178114	.012584	.000	

Next I examined the Political Conversations with Others (PCWO) scale; there was some association present (negative for classical education, positive for vocational education) but it was not statistically significant. Lastly I examined hours spent volunteering. To do this I excluded volunteering which was required by the intervention program. There was a notable positive relationship between both vocational education and classical education on volunteering hours. This was statistically significant.

The results of this analysis partially support the hypothesis that ex-combatants receiving education is associated with increased pro-social capacities and behaviors. Vocational and classical education had a positive impact on family functioning, decision making skills, engagement in civic action, having a political voice, and volunteering hours. However, the hypothesis is only partially supported as neither form of education had a statistically significant effect on engagement in political conversations with others.

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Chapter 8: Discussion

While DDR programs may have country- and conflict-specific goals, the thrust of all DDR programs is to successfully rehabilitate and reintegrate members of armed groups into society such that individual are economically productive, law-abiding citizens who engage in political expression and action only using socially approved, non-violent methods. Programmatic success of DDR efforts (typically defined as whether the activities occurred and intervention services were delivered as planned at all three phases of the program) is often causally linked by policymakers and IO actors with the success of peacekeeping efforts. Today, DDR programs are viewed as essential in preventing war-recurrence in post-conflict situations involving civil, internal, or insurgent conflict. DDR programs have been moved to the forefront of peacemaking and peacekeeping programs, they are the extolled as a key part of current international aid practices in post-conflict areas, and are described in the policy literature as indispensable to peacekeeping efforts in many situations. However, to date there has been little research to establish how DDR actually works on the individual level and what aspects of DDR, in any, are actually working to accomplish the lofty goals set out for this intervention program. This study was an effort to begin to test some of the assumptions on which DDR efforts are based.

This dissertation examined three types of DDR interventions which were based on different theoretical underpinnings: strain theory, social control theory, and theories of social ecology and social disorganization. The longitudinal data collected on participants in these programs, as well as eligible but non participating community members, was examined to begin to shed light on exactly what it is within the DDR effort that changes individual attitudes and

behaviors which may lead to changes in group level behavior (and perhaps eventually lead to state-level effects such as peace). The limited scope of this study was focused on individuals and their behavior as it related to specific changes including a reduction of crime and other maladaptive behaviors and an increase in pro-social behaviors. No effort was made to link this individual-level change to larger conclusions about the success or failure of DDR efforts in post-coup Haiti or in post-conflict societies in general on a mezzo or macro level. The individual factors examined in this study cannot be isolated as the only, or even the most, important aspects of what makes DDR work; they are simply a part of the larger picture of DDR success.

This dissertation study looked at several key aspects to individual success in behavior change: developing a sense of self-efficacy and the sense that ones' actions influence their future; reducing interactions with and behaviors related to armed peer groups; increasing prosocial attitudes and behaviors; and decreasing maladaptive and violent behaviors. A review of the literature emphasized the importance of attitude and beliefs in behavioral change; locus of control and self-efficacy were specifically highlighted for their importance in adopting new ways of interacting with society including choosing non-violent methods for political expression, becoming economically self-reliant, and succeeding in educational and self-improvement efforts. Engagement in sports was also studied, as it has been widely used both in DDR and in post-conflict peace efforts. And lastly, education, which the research literature posits as having a tremendous impact on the rehabilitation of people engaged in crime was also examined, particularly since the large body of research on this type of intervention suggests its potential for reshaping identities and beliefs, a core aspect of individual-level DDR interventions.

What I do determines my future

One attitudinal change linked to many of the desired outcomes for DDR (educational success, financial stability, etc.) is the development of belief that one's actions matter, that the individual has the ability to influence their own life and that they can be effective in adopting a new way of working, living, or relating to the government and the community. The idea that "what I do determines my future" is linked to both self-efficacy and to having an internal locus of control. While self-efficacy is frequently seen in the literature as something which can be fostered or increased in intervention participants, locus of control has historically been treated as a static variable with the assumption that LOC is related to aspects of personality that are unchanged throughout a person's lifetime. However, recently that notion has been challenged and LOC is beginning to be seen as something both tied to self-efficacy, and something that is changeable (Green, & Kavas, 2014; Cobb-Clark, D. A., & Schurer, 2013; Ryon, & Gleason, 2014; Worell, & Tumilty, 2013). This study treated LOC as a dependent variable, one that could be shaped by the amount and type of services received.

My first hypothesis was that receiving education increases an ex-combatant's confidence in their own ability to make change. I quantified this by using the participant's scores on the Generalized Self-Efficacy Scale and the Levenson's Internal LOC score. I found that for both types of education (vocational and classical) individuals gained a greater sense in their ability to make change and to control their own future when they had more education. This finding is particularly important because all DDR program to date have included an educational component. Usually this component is vocational in nature and is presented as giving former

combatants an alternative career path so they don't engage in crime to support themselves. While this pragmatic approach to vocational education is understandable, there is a greater importance to this finding. If we can shape and increase self-efficacy and LOC through education, this may contribute to the larger, often unarticulated, goal of identity change (from armed combatant to peaceful civilian).

Education

Related to this idea of identity change through education is the transformation of individual behavior. More research, perhaps qualitative in nature, is needed to elucidate exactly how and why this process happens. From the quantitative lens of this study we can see that education didn't just increase self-efficacy and a sense of one's control of their own future, but it also reduces the likelihood that the participant will engage in criminal or maladaptive behaviors including associating with armed peers, being violent, or engaging in crime. The more education participants received, the less they socialized with armed peers. It is not possible to determine if a reduction in socializing with armed peers is what made these educated individuals less violent and less involved in crime, but there is a clear relationship between education and these positive outcomes of violence reduction, less engagement in crime and a reduction in socializing with armed peers.

Classical education is rarely emphasized in DDR efforts. In Haiti, the inclusion of this type of education was intentional. Classical education is highly valued in Haitian society; to complete secondary school is considered a major accomplishment which brings honor to one's entire family. The inclusion of classical school as an option for DDR participants was made with the idea that classical education could help reshape the identities of individuals sot that they

identified as scholars or educated people rather than as gang members, as *chimere* (a derogatory term for unemployed young men from urban slums), or as members of a particular armed group.

Ebaugh (1988) gives a theoretical framework for understanding the process of role exit. She identifies four stages in role-exit: having doubt, seeking alternatives, reaching a turning point, and creating an ex-role. First, at the doubt stage an individual begins to question his or her role. These doubts can happen due to a major external stimulus (for example, job loss) or through a gradual process of self-reflection. Second, a person will research potential alternatives and begin considering what life would be like in a different role. Third, the turning point serves three basic functions: reducing cognitive dissonance, serving as opportunity to announce the new role to others, and gathering resources needed to facilitate an exit. Lastly, the creation of an ex-role is the process by which the individual forms, embodies, and communicates a new identity.

This process of identity formation applies to those undergoing the transition from role of armed group member to former armed group member. As previously mentioned, the theories of change embraced by Intervention C, ecological and social disorganization, put forth the idea that the place in which young people are raised and the disorganization and negative influences in that place socializes them into deviance by shaping a personal identity and set of beliefs which approve of or advocate for illegal or violent behavior. Similarly, the theory of change embraced by Intervention A, strain theory, also emphasizes the importance of identity and personal beliefs and the role that the conflict between society's values and one's sense of their own ability to achieve success as measured by those values plays in the choice to engage in crime. Armed groups are incredibly pervasive in the lives of their participants. An armed group will propagate itself by relying on the unrelenting loyalty and subordination of individuality of its members.

Thus, reaching the first stage Ebaugh's framework is incredibly challenging. The post-conflict environment serves as a major stimulus and helps cast doubt on participation in armed groups, since the groups may no longer be socially tolerated. However, there are two major challenges faced by those attempting to rehabilitate ex-members of armed groups. First, identity is derived from the individual, and thus an identity cannot be imposed externally (though, as noted previously, place, friendships, and community are important influences on identity). Even the most successful interventions are not able to impose a new identity on participants without their consent. Second, group identities are deeply entrenched and a short-term program is unlikely to reshape identity entirely.

If the incentive structure for group participation changes in the post-conflict setting, the opportunity for the doubt phase may present itself. If this happens a former armed group member may begin to consider alterative options for their future plans. In the case of education-based interventions, participants were presented with attractive alternative options. Participants in the interventions could envision themselves in new careers or as educated people, which helped speed up the process of role transition. Another aspect which may support this process is the friendships which are developed within the DDR program among participants. These were intentionally cultivated within Intervention B (faith based) and may have occurred naturally in other interventions as well.

The third component of role transition, turning point, can really only be identified by the participants themselves. However, of the three subcomponents of the tipping point phase, the intervention helps the participants gather resources to make an exit most successfully. With the

classical education and/or vocational training courses, participants have greater prospects for successfully shifting roles.

Lastly, encouraging adopting and embodying a new role is ultimately the aim of DDR interventions. Labels are important when discussing the role of identity formation and change. To look at it from a Foucauldian perspective: the identity of the individual is defined by a continuing discourse and a shifting communication and identification of oneself to others. The externally imposed labels of ex-combatant, gang member, criminal, etc. can be adopted by the individual and internalized or they can be rejected; when education facilitates the individual adopting a new identity of being a student or scholar and engaging with that concept of themselves in the community, it can help create the type of identity change being sought by DDR interventions. In cultures, such as in Haiti, where classical education is high prized, choosing to include classical in additional to or in place of vocational education may be advisable to aid this internal shift in identity.

Engagement in Sports

Sports are frequently cited as an effective way to build peace and facilitate the climate for development efforts in less hospitable cultures because they are seen as building friendly bridges or relationships between somewhat hostile actors. In DDR sports are also promoted as a way of ex-combatants letting off steam or getting their aggressions out, with the assumption that individual-level anger, stress, or aggression contribute to non-rehabilitative behaviors. Testing these assumptions was not the focus of this study. But this study did find evidence to support the assertion that DDR participants who engage in organized sports and recreational activities are

less likely to engage in criminal behavior or socialize with people win armed groups. The causal relationships within this process are unclear and would be a fruitful project for future research.

Pro-Social Political Behaviors and Competencies

One hypothesis that this dissertation examined was that receiving education is associated with increased pro-social capacities and behaviors. This was partially supported; the results of this analysis partially support the hypothesis that ex-combatants receiving education is associated with increased pro-social capacities and behaviors. Vocational and classical education had a positive impact on family functioning, decision making skills, engagement in civic action, having a political voice, and volunteering hours. However, the hypothesis was only partially supported as neither form of education had a statistically significant effect on engagement in political conversations with others.

Within Haitian culture, political discussions are commonplace; politically themed call in shows dominate the radio waves every evening and it is difficult to find a Haitian adult who doesn't have a political opinion to share. This could be the reason that the PCWO scale wasn't impacted by education; individuals in the study seemed to engage in political conversations frequently, despite their impact of the intervention.

However the other measures which were included in testing this hypothesis illuminate some areas for increased intervention and support. In particular, community service, engaging in civic actions (such as voting), and expressing one's political voice non-violently are all behaviors which are in concert with the goals and objectives of DDR. These outcomes were not the result of intensive interventions; in fact, only Intervention C (Education-Focused) had specific workshops on non-violent political expression and activities. In the other two interventions the

importance of these behavioral changes were implicit. A possible future adaptation to DDR programming would be to include, explicitly, the goals of non-violent political participation through community organizing, voting, peaceful protest, lobbying, having political discussions with others, community service, etc. through workshops or group activities to teach and practice these skills. The social work services provided by the three interventions, which did include assisting participants in obtaining a voter registration card, could be tied to this; but the findings also indicate a fruitful area for increased programming within the intervention aimed at explicitly promoting forms of non-violent, pro-social political participation.

Intervention Fidelity

Intervention fidelity is the degree to which an intervention does what it set out to do.

(Gearing, et al., 2011) Interventions in two different contexts may be identical on paper, but in practice they almost always take on different forms. This is because there are confounding factors that make it impossible to replicate an intervention exactly. Things like cultural variation, differences in competencies, viewpoints of key staff, access to equipment, and countless other factors shape the intervention.

Fidelity is an important aspect of accountability. Measuring fidelity is one of the ways that interventions are assessed by funding agencies, thus holding the implementing organization accountable for meeting expectations (Berger & Grossman, 2007). In the absence of fidelity measures, organizations may ignore the evidence base in lieu of more convenient or popular approaches. Fidelity can be measured across program-specific dimensions. For example, the evaluation of a mental health program focused on organization, staffing and service (McGrew,

Bond, Dietzen, & Salyers, 1994). Gearing et al. (2011) identifies four generic components of intervention fidelity and helps us understand how to evaluate each component:

- 1. Intervention design and protocols
- 2. Intervention training
- 3. Monitoring of intervention delivery
- 4. Monitoring of intervention receipt

According to the authors, all four of these components are integral to the functioning of a program and the fidelity of each can be measured by evaluating protocols, execution, maintenance, feedback, and threats. Protocols are the frameworks and measures for fidelity assessment. Execution covers how the fidelity measurement process will actually take place. Maintenance is an assessment of ongoing training and adherence to plans. Feedback looks at corrective feedback procedures for addressing deviation from the program plan. Lastly, threats looks at the potential obstacles that can undermine fidelity.

Carroll et al. (2007) take a similar approach and identify four aspects of intervention fidelity at the adherence stage of program implementation: details of content, coverage, frequency, and duration. These factors can have an impact on the delivery process (educational program vs. distribution program) and the quality of delivery. The intervention may change to meet the needs of the participants if it is found that the participants respond to some intervention aspects better than others. Furthermore, the responsiveness of participants can play a role. If participants do not buy in to the intervention, additional time or modifications will be needed. Also, there will be variation in participation, where some participants do all intervention-related activities and others either participate partially or drop out.

There are many potential sources of infidelity, and some of them may actually be permissible depending on the standpoint of the organization and funder. There is a strong justification for adjusting to better serve the needs of the population. There is a tradeoff between implementation fidelity and program adaptation, and some level of adaptation is often needed when a program is being implemented in a new cultural context (Castro, Barrera, & Martinez, 2004). Thus, sometimes an intervention can lack fidelity because it has been changes for the better.

There are three principal ways that an intervention can be improved by compromising fidelity: cultural sensitivity, utilization of local strengths, and meeting community needs. First, programs must be modified to be culturally appropriate. For example, a healthcare intervention in Haiti may need to account for voodoo-based approaches in addition to traditional medicine and western medicine in order to increase participation rates. Second, an intervention may make use of local strengths, such as community or religious leaders. If there is an existing network or technology that can facilitate community outreach, such as a local clinic, a program may be adapted to reach the target population as effectively as possible. Lastly, the intervention can be modified to meet the needs of the community. For example, an agency may come in to the community to run a nutritional education program. However, if people in the community lack the resources to buy food, they may divert resources to food distribution. Thus, there is mission drift if an intervention is struggling to be relevant.

Interventions may lose fidelity in ways that compromise their efforts negatively. There are several ways in which this can happen. First, corruption can sap a program of the resources it needs to accomplish its intervention goals. Diverting funds is only one type of corruption.

Individuals may also fraudulently claim to be working on the project or hire unqualified friends to work on the intervention. Secondly, limited human capital undermines the fidelity of a program. An absence of experts and trained individuals is particularly noticeable in developing world contexts. Thus, an intervention may not accomplish everything it set out to accomplish, simply because it lacks the appropriate manpower to do so. Lastly, limitations like a dearth of resources can result in an intervention that falls short of expectations. If a program is underfunded, or if necessary equipment is unavailable, low fidelity can occur.

The issue of intervention fidelity undercuts the ability of a program to assess success and recommend future action. Researchers have a difficult time discerning what works and what doesn't work, and thus, generalizations are difficult to make. This is particularly true for international organizations that operate in many countries. For example, if an organization is doing an intervention in over one hundred countries, evaluating the intervention will be incredibly challenging. This is because, in most cases, the interventions from one country to the next are wildly different from each other. This is certainly the case for DDR programs, which is why researchers must be cautious about accepting the results from one iteration of the intervention.

Of these issues, the biggest obstacles faced in this dissertation are 1) adherence and competence of intervention practitioners and 2) varying levels of participation by intervention participants. Breitenstein et al. (2010) discuss the concepts of adherence and competence of intervention practitioners. Adherence is a measure of how closely intervention practitioners follow intervention protocol. Competence looks at how skillfully an intervention is executed. It is incredibly difficult to account for these measures empirically, since researchers must often rely

on self-reported measures. Self-reported measures are problematic because practitioners have an incentive to make themselves appear to be adherent and competent than they actually are.

Independent evaluations are one way to address this issue, like the work in this dissertation project. However, interventions only happen in fixed points of time and often don't capture adherence and competence over time. Thus, a common limitation of program evaluations is that they don't get much traction on organizational obstacles to executing an intervention.

Assessing levels of participation is particularly difficult because implementing agencies have an incentive to present the most attractive data on their programs. For example, an agency may say that they had 200 people participate in an intervention, when in reality only 100 people participated in the intervention and the rest dropped out along the way. The issue of intervention fidelity also has empirical implications. First, it is difficult to compare interventions across time and geographic location. What works in one country may not work in another country. This poses major challenges to transnational and international organizations, since they must incur costs every time they begin a project trying to develop appropriate modifications to an intervention.

One clear difficulty with evaluating the three different approaches included in this study was one of intervention fidelity. Each of the three programs was funded at one time or another by at least three different funding agencies including internal DPKO and UN funding sources, foreign governments, other IOs, and NGOs. Each funder had explicit demands for what services should be offered and these requirements were outlined in a series of program documents including project proposals, responses to requests for proposals (RFP), MOUs, and contracts.

The services outlined in these documents should have, for the most part, matched the services received by each of the participants. They did not.

Interventions B and C both gave minimum levels of services they would provide in the areas specified by the funders; for the most part both programs complied with this. There were some individuals who dropped out, refused to attend classes, or were uncooperative in other ways and thus received fewer services than was intended. These cases were clearly documented and were easily identified.

Both B (Faith Based) and C (Education) interventions used an individualized assessment and planning process where each participant was assessed, tested for educational skills, and then participated in a planning meeting where they choose a vocational or classical educational program (or both) and in which other services or requirements (such as visiting ones children each week or opening a bank account) were included in their plan. This meant that interventions B and C sometimes often provided more services than the minimum in some areas. However, it appears the inclusion of additional services, though challenging from an evaluation perspective, was done to improve the services to meet the unique needs of the participants.

Intervention A, on the other hand, had other, more problematic fidelity issues. In addition to poor record keeping (which could have been related to administration, a lack of skills on the part of the local staff, or simply, not valuing the need to keep detailed accurate records) meant that some individuals assigned to the program simply disappeared in their first few days of contact, before baseline assessments could be taken. There were 22 people listed on the program records who could not be located at all and who did not receive services, though it appears that some services were (erroneous) billed on behalf of these participants.

Although all participants in Intervention A were supposed to receive the same number of days of vocational training and the same number of days in internship placement, this did not occur and staff members were unable to account for the reason for the change in services for all of the participants. Some drop outs were listed in program records as deceased but were later located by research team members doing follow up interviews. This confusion made it difficult to determine who actually got what service. To reconcile this issue empirically, I decided not to use a categorical variable of participation versus non-participation. Rather, I looked at participation in terms of number of hours logged. Each service was billed and the billing records corresponded to a sign in/sign out sheet or other documentation of service contact. When using this to determine the services it was clear that some participants in Intervention A did get the vocational training and internship placement that was intended. However, the variation was so great that I was not able to compare intervention approaches by program as intended. Rather, I compared by the amount of education and the amount of sports programming. This allowed me to make more nuanced observations about the intervention types associated with aspects of successful reintegration.

Ultimately, a policy implication of the potential lack of intervention fidelity is that program evaluations must gain a level of nuance that goes beyond a determining if a program was completed. Forcing a binary results in overlooking what really happened in the day-to-day program. Service practitioners need to ask about what happens after participants arrive for a day of program participation: Does the individual actually participate? Or, does he hang out in the yard drinking beer with his buddies? Is the program exaggerating the level of participation to bring in more aid dollars? Or, are participants actually sitting in the classroom and participating

in the training the entire time? These are questions that those administering DDR programs have an imperative to ask.

Implications for Social Work Practice

There is a rich literature on interventions for those involved in crimes who are exiting prison settings, however we know less about how to respond appropriately to ex-members of armed groups in community settings. Many of the options available for the punitive response to crime typically seen in conflict prone and developing countries are simply not feasible in a post-conflict setting. First, this is because post-conflict reconstruction brings with it a set of international norms in which crimes committed in the course of war are treated differently than those committed during non-conflict times. Even when the laws of war are broken, there are high levels of leniency because there is a strong interest in reconciling society. Participants in both legitimate and illegitimate armed groups are not typically imprisoned, except in some cases where they committed crimes against humanity. Third, often concessions are made in peace settlements that ban punitive actions against ex-combatants. Lastly, post-conflict institutions are often damaged and lack the capacity to respond by incarcerating or otherwise punishing ex-combatants.

This opens the door for social work interventions which might not otherwise have been possible. The state is constrained in how it can respond to former members of armed groups. While criminals receive a combination of carrot (rehabilitation) and stick (prison) responses, meaningful punitive responses often are not options for ex-offenders. This means that rehabilitative programs are often voluntary for ex-members of armed groups. The implication is that the rehabilitative program must be inherently valuable to compel ex-members of armed

groups to participate. This can be done by providing ex-offenders with side benefits, like food or payment, or by providing direct benefits like providing the participant with a usable skill.

This provides an opportunity for evidence based social work practices to be implemented into existing DDR interventions in an effort to enhance the programs services and empower the participants to actively engage in the DDR process and the process of creating a new life for themselves. Rather than being a minor side component, social work services should be integrated into early engagement with members of armed groups and the communities to which they are relocating, the planning and creation of program content, the implementation of the interventions, and evaluation and follow up with the participants.

This seems obvious, since DDR programs are essentially, at the individual level, a social work intervention. However, in practice, the social worker is often an afterthought, if they are included at all, and DDR programs themselves are typically managed and led by administrators with a military or a UN bureaucrat background. The two programs whose participants were most likely to have positive outcomes and least likely to continue to be engaged in crime or socialize with armed peers were both led by social workers. While a causal connection is not established by this research, the social work emphasis on integrating evidence based practices including intentionally including education and volunteering in the intervention programs was clearly helpful in achieving positive outcomes.

This research suggests that in addition to receiving education itself, there is also value in the fact that one has become an educated person. From an empowerment perspective, the fact that gang members and insurgents view themselves as part of a particular community is important to consider when facilitating their exit from that community. The individual is most

successful when adopting a new identity that fills that which was satisfied by role the armed group played in their previous life. Education programs give ex-members of armed groups a new self-identity. Though education can influence identity formation of any person involved in crime, members of armed groups are particularly vulnerable and often come from marginalized socioeconomic communities; to promote education as an opportunity for identity reformation, is then, particularly important.

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Appendix A: Study Measures

Levenson Multidimensional Locus of Control Scales

Instructions. For each of the following statements, indicate the extent to which you agree or disagree by writing in the appropriate number.

- -3 = strongly disagree
- -2 = disagree somewhat
- -1 =slightly disagree
- +1 =slightly agree
- +2 = agree somewhat
- +3 = strongly agree

Questionnaire.

- 1. Whether or not I get to be a leader depends mostly on my ability.
- 2. To a great extent my life is controlled by accidental happenings.
- 3. I feel like what happens in my life is mostly determined by powerful people.
- 4. Whether or not I get into a car accident depends mostly on how good a driver I am.
- 5. When I make plans, I am almost certain to make them work.
- 6. Often there is no chance of protecting my personal interests from bad luck.
- 7. When I get what I want, it's usually because I'm lucky.
- 8. Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.
- 9. How many friends I have depends on how nice a person I am.
- 10. I have often found that what is going to happen will happen.
- 11. My life is chiefly controlled by powerful others.

- 12. Whether or not I get into a car accident is mostly a matter of luck.
- 13. People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.
- 14. It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.
- 15. Getting what I want requires pleasing those people above me.
- 16. Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.
- 17. If important people were to decide they didn't like me, I probably wouldn't make many friends.
- 18. I can pretty much determine what will happen in my life.
- 19. I am usually able to protect my personal interests.
- 20. Whether or not I get into a car accident depends mostly on the other driver.
- 21. When I get what I want, it's usually because I worked hard for it.
- 22. In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.
- 23. My life is determined by my own actions.
- 24. It's chiefly a matter of fate whether or not I have a few friends or many friends.

Scoring. Total your responses for the items listed for each of the three parts of the scale; add +24 to each of your three totals. Internal Locus of Control: Total your responses for items 1, 4, 5, 9, 18, 19, 21, and 23; then add +24. Powerful Others: Total your responses for items 3, 8,

11, 13, 15, 17, 20, and 22; then add +24. Chance: Total your responses for items 2, 6, 7, 10, 12, 14, 16, and 24; then add +24.

CES D-10

Instructions. This is a list of some of the things you may have felt or ways you may have behaved. Please indicate how often you have felt this way during the past week.

		Rarely or none	Some or a	Occasionally	All of the
		of the time	little of the	or a moderate	time
		(less than 1	time	amount of time	(5-7 days)
		day)	(1-2 days)	(3-4 days)	
1	I was bothered by things	beach	blue line	door opening	family
	that usually don't bother me.			into a room	photograph
2	I had trouble keeping my mind on what I was doing.	purple circle	ocean	bayawonn· tree	furniture
3	I felt depressed.	wet floor	trousers	sun	park
4	I felt that everything I did	river	woman on	fan	child
	was an effort.		roof		studying
5	I felt hopeful about the future.	yellow square	hill	men's underwear	door
6	I felt fearful.	hamburger	two red	dining room	snake
			lines		
7	My sleep was restless.	desk	porch	forest	brown cross
8	I was happy.	camera	orange	kitchen hut	boy
			turtle		
9	I felt lonely.	mountain	lock and	curtain	fork
			key		
10	I could not "get going."	oil lamp	couch	patat	desert

Scoring instructions: For items five and eight, use reserve scoring. For the rest, "rarely or none" is 0, "some or a little" is 1, "occasionally or a moderate amount" is 2, and "all of the time" is 3.

McMaster Family Functioning Scale

Instructions. This assessment contains a number of statements about families. Read each statement carefully, and decide how well it describes your own family. You should answer according to how you see your family. For each statement are four (4) possible responses:

- 1. Strongly agree (SA): Choose SA if you feel that the statement describes your family very accurately.
- 2. Agree (A): Choose A if you feel that the statement describes your family for the most part.
- 3. Disagree (D): Choose D if you feel that the statement does not describe your family for the most part.
- 4. Strongly disagree (SD): Choose SD if you feel that the statement does not describe your family at all.

Try not to spend too much time thinking about each statement, but respond as quickly and as honestly as you can. If you have difficulty, answer with your first reaction. As I read the question, choose the picture that matches your answer.

	SA	A	D	SD
1. Planning family activities is difficult because	red	broccoli	camel	tongue
we misunderstand each other.	triangle			
2. We resolve most everyday problems around	teeth	orange	cat	Jesus
the house.				
3. When someone is upset the others know	C-clamp	nose	cabbage	wolf
why.				
4. When you ask someone to do something, you	propane	cheetah	green	smile
have to check that they did it.	tank		circle	
5. If someone is in trouble, the others become	blue line	stomach	CD	pants
too involved.			player	
6. In times of crisis we can turn to each other	alarm	purple	chisel	door

for support.	clock	umbrella		handle
7. We don't know what to do when an	moon	electric	chicken	Black
emergency comes up.	moon	drill	Cincken	truck
8. We sometimes run out of things that we	pajamas	shoulders	cow	carrot
need.	pagamas	Shoulders	2011	Currot
9. We are reluctant to show our affection for	finishing	yellow	chimp	jigsaw
each other.	sander	backpack	Cimip	puzzle
10. We make sure members meet their family	hacksaw	suitcase	green	raincoat
responsibilities.			pepper	
11. We cannot talk to each other about the	people	rainbow	scarf	desert
sadness we feel.	swimming			
12. We usually act on our decisions regarding	cannon	rubber	diamond	pupil
problems.		bands	ring	
13. You only get the interest of others when	paint	sweet	bow and	cub
something is important to them.	brush	pepper	arrow	
14. You can't tell how a person is feeling from	paper	pipe	lion	stone
what they are saying.		clamp		
15. Family tasks don't get spread around	vise	celery	crocodile	hurricane
enough.				
16. Individuals are accepted for what they are.	cress	dog	toe	ice
17. You can easily get away with breaking the	dolphin	old car	saw	school
rules.				boy
18. People come right out and say things	musical	herb	pipe	coffee
instead of hinting at them.	notes		wrench	cup
19. Some of us just don't respond emotionally.	pliers	duck	fire	corn
20. We know what to do in an emergency.	doctor	jeans	cucumber	plane
21. We avoid discussing our fears and	dress	eggplant	eagle	lightning
concerns.				
22. It is difficult to talk to each other about	elephant	school	barge	roof
tender feelings.		uniform		
23. We have trouble meeting our financial	doll	squirrel	propane	whale
obligations.			torch	
24. After our family tries to solve a problem,	bat	putty	school	fan
we usually discuss whether it worked or not.		knife	girl	
25. We are too self-centered.	knife	fish	neck	ATV
26. We can express feelings to each other.	nurse	tractor	fly	rowboat
27. We have no clear expectations about toilet	sharpening	glass	dog	dad with
habits.	stone			baby
28. We do not show our love for each other.	bath	mouth	fox	hammer
29. We talk to people directly rather than	duster	hamster	forest	soldering
through go-betweens.				gun
30. Each of us has particular duties and	feet	jar	tiger	kite
responsibilities.				

21 There are lets of had feelings in the femily	girl	stanlar	flood	jacket
31. There are lots of bad feelings in the family.	drill	stapler		Jacket
32. We have rules about hitting people.		truck	frog	and deals
33. We get involved with each other only when	man	wire	restaurant	goldfish
something interests us.	1.11.	brush		11-
34. There is little time to explore personal	bicycle	giraffe	money	dock
interests.	1			1 4 1
35. We often don't say what we mean.	bow	taptap	goat	hotel
36. We feel accepted for what we are.	lips	hat	rain	boat
37. We show interest in each other when we	map	mom &	pie	rat
can get something out of it personally.		baby		
38. We resolve most emotional upsets that	bus	sun	pan	men
come up.				
39. Tenderness takes second place to other	son	pot	toe	pig
things in our family.				
40. We discuss who are responsible for	bike	apple	tub	security
household jobs.				guard
41. Making decisions is a problem for our	car	gloves	locust	banana
family.				
42. Our family shows interest in each other	emery	bar of	van	arm
only when they can get something out of it.	board	soap		
43. We are frank (direct, straightforward) with	zipper	hallway	bird	book
each other.				
44. We don't hold to any rules or standards.	helicopter	dress	cyclone	ferry
45. If people are asked to do something, they	Bwa Pie	chin	flag	staple
need reminding.	tree			gun
46. We are able to make decisions about how to	clover	nail brush	billboard	clam
solve problems.				
47. If the rules are broken, we don't know what	taxi ribbon	classroom	fangs	plunger
to expect.				
48. Anything goes in our family.	wrench	ship	horse	crib
49. We express tenderness.	file	legs	peas	coat
50. We confront problems involving feelings.	bus	clouds	rope	club
51. We don't get along well together.	women	torch		scooter
52. We don't talk to each other when we are	can	yellow	nail	fang
angry.		car	clippers	
53. We are generally dissatisfied with the	hen	safety	boy	ladder
family duties assigned to us.		pins		
54. Even though we mean well, we intrude too	cow	flower	road	hat
much into each other's lives.			grader	
1 1110011 11100 00011 001101 0 11 1 00.				
	crown	odometer	_	corn
55. There are rules in our family about dangerous situations.	crown	odometer	book	corn

57. We cry openly.	tank	hill	game	scissors
58. We don't have reasonable transport.	cat	tweezers	knees	freighter
59. When we don't like what someone has	crow	car	shaving	cap
done, we tell them.			brush	
60. We try to think of different ways to solve	combine	crowd	crayon	cake
problems.	harvester			

Scoring Instructions: The FAD is scored by adding the responses (1-4) for each scale (negatively worded statements are reversed) and dividing by the number of items in each scale. Higher scores indicate worse levels of family functioning. (Miller et al., 2000).

Subscales.

Problem Solving.1. We usually act on our decisions regarding problems. 2. After our family tries to solve a problem, we usually discuss whether it worked or not. 3. We resolve most emotional upsets that come up. 4. We confront problems involving feelings. 5. We try to think of different ways to solve problems.

Communication. 1. When someone is upset the others know why. 2. You can't tell how a person is feeling from what they are saying. 3. People come right out and say things instead of hinting at them. 4. We are frank with each other. 5. We don't talk to each other when we are angry. 6. When we don't like what someone has done, we tell them.

Roles. 1. When you ask someone to do something, you have to check that they did it. 2. We make sure members meet their family responsibilities. 3. Family tasks don't get spread around enough. 4. We have trouble meeting our bills. 5. There's little time to explore personal interests. 6. We discuss who is to do household jobs. 7. If people are asked to do something, then need reminding. 8. We are generally dissatisfied with the family duties assigned to us.

Affective Responsiveness. 1. We are reluctant to show our affection for each other. 2. Some of us just don't respond emotionally. 3. We don't show our love for each other. 4. Tenderness takes second place to other things in our family. 5. We express tenderness. 6. We cry openly.

Affective Involvement. 1. If someone is in trouble, the others become too involved. 2. You only get the interest of others when something is important to them. 3. We are too self-centered. 4. We get involved with each other only when something interests us. 5. We show interest in each other only when they can get something out of it personally. 6. Our family shows interest in each other only when they can get something out of it. 7. Even though we mean well, we intrude too much into each other's lives.

Behavior Control. 1. We don't know what to do when an emergency comes up. 2. You can easily get away with breaking the rules. 3. We know what to do in an emergency. 4. We have no clear expectations about toilet habits. 5. We have rules about hitting people. 6. We don't hold any rules or standards. 7. If the rules are broken, we don't know what to expect. 8. Anything goes in our family. 9. There are rules about dangerous situations.

General Functioning. 1. Planning family activities is difficult because we misunderstand each other. 2. In time of crisis we can turn to each other for support. 3. We cannot talk to each other about sadness we feel. 4. Individuals are accepted for what they are. 5. We avoid discussing our fears and concerns. 6. We can express feelings to each other. 7. There are lots of bad feelings in the family. 8. We feel accepted for what we are. 9. Making decisions is a problem for our family. 10. We are able to make decisions about how to solve problems. 11. We don't get along well together. 12. We confide in each other.

General Self-Effecacy Scale

Instructions. Choose the best response for each item.

		Not at all true (1)	Hardly true (2)	Moderately true (3)	Exactly true (4)
1	I can always manage to solve difficult problems if I try hard enough.	bowl	couch	drill	taxi
2	If someone opposes me, I can find the means and ways to get what I want.	pepper	horse	glass	scissors
3	It is easy for me to stick to my aims and accomplish my goals.	truck	blanket	nurse	flower
4	I am confident that I could deal efficiently with unexpected events.	black line	manioc	bath tub	fork
5	Thanks to my resourcefulness, I know how to handle unforeseen situations.	donkey	bed	red star	crying baby
6	I can solve most problems if I invest the necessary effort.	dish	bag of millet	football	notebook
7	I can remain calm when facing difficulties because I can rely on my coping abilities.	mangrove tree	wrench	shirt	plow
8	When I am confronted with a problem, I can usually find several solutions.	motorcycle	chin	macaroni	field
9	If I am in trouble, I can usually think of a solution.	Eucalyptus	waterfall	cactus	ship
10	I can usually handle whatever comes my way.	elbow	vise	bathroom	cup

The Modified Overt Aggression Scale (MOAS)

Instructions. Rate the patient's aggressive behavior over the past week. Select as many items as are appropriate.

Scoring. 1. Add items within each category. 2. In the scoring summary, multiply sum by weight and add all the weighted sums for total weighted score. Use this score to track changes in level of aggression over time.

MOAS Items.

Verbal Aggression. Verbal hostility, statements or invectives that seek to inflict psychological harm on another through devaluation/degradation, and threats of physical attack.

- 0. No verbal aggression
- 1. Shouts angrily, curses mildly, or makes personal insults
- 2. Curses viciously, is severely insulting, has temper outbursts
- 3. Impulsively threatens violence toward others or self
- 4. Threatens violence toward others or self repeatedly or deliberately (e.g., to gain money or sex)

Aggression Against Property. Wanton and reckless destruction of ward paraphernalia or other's possessions.

- 0. No aggression against property
- 1. Slams door angrily, rips clothing, urinates on floor
- 2. Throws objects down, kicks furniture, defaces walls
- 3. Breaks objects, smashes windows
- 4. Sets fires, throws objects dangerously

Autoaggression. Physical injury toward oneself, self-mutilation, or suicide attempt.

0. No autoaggression

- 1. Picks or scratches skin, pulls hair out, hits self (without injury)
- 2. Bangs head, hits fists into walls, throws self on floor
- 3. Inflicts minor cuts, bruises, burns or welts on self
- 4. Inflicts major injury on self or makes a suicide attempt

Physical Aggression. Violent action intended to inflict pain, bodily harm, or death upon another.

- 0. No physical aggression
- 1. Makes menacing gestures, swings at people, grabs at clothing
- 2. Strikes, pushes, scratches, pulls hair of others (without injury)
- 3. Attacks others, causing mild injury (bruises, sprains, welts, etc.)
- 4. Attacks others, causing serious injury (fracture, loss of teeth, deep cuts, loss of consciousness, etc.)

Crime Questionaire

Instructions. I am going to read you some questions. You have a paper on which you will write your answers. I can't see your answers. They are private. Afterwards you will put them in an evelope and you will seal the envelope. Your answers will be put in a file, but it will be seperated from your name and any information that could identify you. This is to protect your privacy. Your name will never go on this paper and we will not report your name and what you say you've done to anyone, including the police, the people who lead this program, the government, and your family.

Let's practice filling out the form. See this example. On the paper there are numbers next to a box. On the box you see a picture. So let's practice. I'm going to read you a question. If the

answer is yes, please make a mark in the box here, where you see the picture of a mango. If the answer is no, make a mark here, where you see the picture of a car. If you don't want to answer the question, please make a mark here, where you see the picture of a boy. The question is "Have you ever gone to the beach?" If yes, make a mark here on the box with the mango. If no, mark the box with the car. If you don't want to answer this question, mark the box with the boy.

Okay now that you're comfortable filling this out, let's start!

	First, I'd like to ask you about crimes involving property.	Very bad (1)	A little bad (2)	Nuetral (3)	Good (4)	No response
1	Theft is the removal of property without the property owner's consent. "Theft" excludes burglary and housebreaking as well as theft of a motor vehicle. If this has happened to you, think about how your reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Carrot	Girl	Angel	Moto	Plantain
2	"Burglary" may be understood to mean unlawful entry into someone else's premises with the intention to commit a crime. If anyone ever broke into your house or business to steal from you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Goat	Clond	Chair	Truck	Pencil
3	"Automobile theft" may be understood to mean the removal of a motor vehicle such as a car, moto, or truck without the consent of the owner of the vehicle. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Peanut	Horse	Pink circle	Book	Hat
4	"Fraud" may be understood to mean the acquisition of another person's property by deception. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Thumb	Flag	Eyeglasses	Tomato	Donkey

5	"Embezzlement" may be understood to mean the wrongful appropriation of another person's property that is already in the possession of the person doing the appropriating. So this is if you have access to someone else's property or money and you take it from them. So if you worked for a business and the owner put you in charge of the business while he was away and you took the money that customers paid for the services of the business and you kept it for yourself and then lied to the boss and said the money was never paid or that it was put in the bank or that it was lost. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Baby	Ball	Blackboard eraser	Flower	Dog
6	"Robbery" may be understood to mean the theft of property from a person, overcoming resistance by force or threat of force. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Tree	Cat	Eyebrows	Taptap	Onion
	Now I'd like to ask you about your own experiences with property crimes.		1	2	3 +	N R
7	Theft is the removal of property without the property owner's consent. "Theft" excludes burglary and housebreaking as well as theft of a motor vehicle. In your lifetime, how often have you done this?	Spoon	Hammer	Rat	Man	Tractor
8	"Burglary" may be understood to mean unlawful entry into someone else's premises with the intention to commit a crime. In your lifetime, how often have you done this?	Cow	Table	Fly	Oil can	Church
9	"Automobile theft" may be understood to mean the removal of a motor vehicle such as a car, moto, or truck without the consent of the owner of the vehicle. In your lifetime, how often have you done this?	Fire	Doctor	Hair	Spinach	Bank
10	"Fraud" may be understood to mean the acquisition of another person's property by deception. In your lifetime, how often have you done this?	Card	Fish	X	Teeth	Fork
11	"Embezzlement" may be understood to mean the wrongful appropriation of another person's property that is already in the possession of the person doing the appropriating. In your lifetime, how often have you done this?	Phone	Water Bottle	Nose	Cooking pot	Leaf

12	"Robbery" may be understood to mean the theft of property from a person, overcoming resistance by force or threat of force. In your lifetime, how often have you done this?	Building	Boat	Legs	Woman	Ring
Oka	ay, now let's talk about crimes that involve trafficking.	Very bad (1)	A little bad (2)	Nuetral (3)	Good (4)	No response
13	Drug trafficking is the illegal cultivation, manufacture, distribution and sale of substances which are subject to drug prohibition laws. In Haiti this includes drugs such as marijuana and cocaine but does not include alcohol, tobacco products, or the hallucinaginic herbs used for medicinal purposes. If you know someone who did this, would you think this is very bad, a little bit bad, or good?	Airplane	Schoolchild	Gas station	Balloon	Donkey
14	Weapons trafficking is the illegal trafficking or smuggling of guns, other weapons, or ammunition. This does not include the buying or selling of small arms and light weapons through an authorized business by an individual with a current gun permit from the government. If you know someone who did this, would you think this is very bad, a little bit bad, or good?	Bus	Hand	Building	Nurse	Matches
15	Human trafficking is the trade of people, most commonly for the purpose of sexual slavery, forced labor or commercial sexual exploitation. This can include selling a child to someone as a worker, transporting a child illegally or selling them for adoption, forcing a person to work under threat of harm such as forced labor of Haitian migrants in the Dominican sugar fields, or any other act where a person it made into a slave. If you know someone who did this, would you think this is very bad, a little bit bad, or good?	Paper	Clock	Barber shop	Globe	Trash can
16	Trafficking in stolen goods occurs when a person knowingly buys, sells, or assists in the sale of things that have been stolen. For instance, if a person steals a box of clothes from the factory where they work, the people who buy or sell the clothing would be involved in trafficking; so would the person who removes the labels from the clothing so they cannot be identifed or who transports the clothes he knows were stolen to another city where they can be sold more easily. If you know someone who did this, would you think this is very bad, a little bit bad, or good?	Hospital	Windshield wiper	Child with goat	Men's underpants	Toungue

17	Trafficking of prohibited or restricted products occures when something that hasn't be stolen, but is illegal or prohibited is produced, transported, sold, exchanged, or purchased. For example, when the Haitian government outlawed the eggs and salami from the Dominican Republic, people who snuck those things into the country or who knowingly sold them at the market were engaging in this type of trafficking. If you know someone who did this, would you think this is very bad, a little bit bad, or good?	Shoe	Kitten	Green House	Saw	DVD
Nov	v let's talk about your own experiences with trafficking.	0	1	2	3 +	N R
18	Drug trafficking is the illegal cultivation, manufacture, distribution and sale of substances which are subject to drug prohibition laws. In Haiti this includes drugs such as marijuana and cocaine but does not include alcohol, tobacco products, or the hallucinaginic herbs used for medicinal purposes. In your lifetime, how often have you done this?	Hook	Teacher	Supermarket	Suitcase	Sheep
19	Weapons trafficking is the illegal trafficking or smuggling of guns, other weapons, or ammunition. This does not include the buying or selling of small arms and light weapons through an authorized business by an individual with a current gun permit from the government. In your lifetime, how often have you done this?	Fishing nets	Banana	Market seller	Star	Sachet
20	Human trafficking is the trade of people, most commonly for the purpose of sexual slavery, forced labor or commercial sexual exploitation. This can include selling a child to someone as a worker, transporting a child illegally or selling them for adoption, forcing a person to work under threat of harm such as forced labor of Haitian migrants in the Dominican sugar fields, or any other act where a person it made into a slave. In your lifetime, how often have you done this?	Melon	Garden trowel	Restaurant	Rabbit	Desk
21	Trafficking in stolen goods occurs when a person knowingly buys, sells, or assists in the sale of things that have been stolen. For instance, if a person steals a box of clothes from the factory where they work, the people who buy or sell the clothing would be involved in trafficking; so would the person who removes the labels from the clothing so they cannot be identifed or who transports the clothes he knows were stolen to another city where they can be sold more easily. In your lifetime, how often have you done this?	Wheel	Laundry line	Bulletin board	Baby diaper	Lambi shell

22	Trafficking of prohibited or restricted products occures when something that hasn't be stolen, but is illegal or prohibited is produced, transported, sold, exchanged, or purchased. For example, when the Haitian government outlawed the eggs and salami from the Dominican Republic, people who snuck those things into the country or who knowingly sold them at the market were engaging in this type of trafficking. In your lifetime, how often have you done this?	Battery	Football field	Graphetti	Pencil sharpener	Guava plant
	y, now let's talk about crimes that involve harm or the threat of m against another.	Very bad (1)	A little bad (2)	Nuetral (3)	Good (4)	No response
23	Menancing is any intentional act that causes another person to fear that she is about to suffer physical harm. This includes threatening someone with rape or unwanted sexual contact against their will, but it doesn not include threatening someone with a voodoo curse. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Coins	Spider	Fence	Dessalines	Helmet
24	Sometimes people will also threaten another person with a curse or will acutally put a curse on another person in the hopes that it brings them bad luck, illness, financial ruin, or other calamities. If anyone ever did this to you or threatened to put on a curse on you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Ears	Blinker	Park	Blackboard	Clock
24	Attempted assault is when a person tries to hurt another person phsycially but is stopped before they are able to do so. For example, if a person ran towards someone with a machete, intending to cut them, but was stopped by other people or was shot before he could hurt the victim, that person would be guilty of attempted assault. This does not include attempted sexual assaults. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Map	Calendar	Passionfruit	Scorpion	Car bumper

25	Simple assault is when a person knowingly or recklessly causes bodily injury to another person such as by punching them or kicking them. Simple assualt doesn't usually involve a weapon. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Sweater	License plate	Soursop fruit	Dirty feet	Octopus
26	Aggrevated assault causes serious or lasting injury and is usually done using a weapon such as gun or knife. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Headlight	Socks	Neck	Turtle	Maroon
27	Physical child abuse is assault, with or without a weapon, against a child by an adult. Physical child abuse can damage a child psychologically as well as physically. It can include beating a child with an object like a stick or whip, throwing a child against a wall, or any other act that causes harm to the child's body. This doesn't include sexual abuse of a child. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Mirror	Moon	Pharmacy	Beach	Napkin
28	Kidnapping is when a person is abdupted by force, threat of force or coersion. A person might be held for ransom or may be held for other reasons against their will. This does not include the legal detention of a person by police but it does include the illegal detention of a person by any group or individual including armed political groups. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Saw	Men's underwear	Rug	Key	Door to hallway
29	Homicide is the deliberate killing of one person by another. If anyone ever did this someone you loved, think about how you reacted. If this hasn't happened to you, imagine someone did this to a loved one or a member of your household. Would you think this is very bad, a little bit bad, or good?	Closet	Lettuce	Alligator	Toes	Cicada
Now	let's talk about your own experiences with crimes against people.	0	1	2	3 +	N R
30	Menancing is any intentional act that causes another person to fear that she is about to suffer physical harm. This includes threatening someone with rape or unwanted sexual contact against their will, but it doesn not include threatening someone with a voodoo curse. In your lifetime, how often have you done this?	Snail	Bird	Screw	Onion	Monkey

31	Sometimes people will also threaten another person with a curse or will acutally put a curse on another person in the hopes that it brings them bad luck, illness, financial ruin, or other calamities. In your lifetime, how often have you done this?	Moth	Trousers	Potato	Octopus	Ashtray
32	Attempted assault is when a person tries to hurt another person phsycially but is stopped before they are able to do so. For example, if a person ran towards someone with a machete, intending to cut them, but was stopped by other people or was shot before he could hurt the victim, that person would be guilty of attempted assault. This does not include attempted sexual assaults. In your lifetime, how often have you done this?	Owl	Lipstick	Kerosene can	Lobster	Man's waist
33	Simple assault is when a person knowingly or recklessly causes bodily injury to another person such as by punching them or kicking them. Simple assualt doesn't usually involve a weapon. In your lifetime, how often have you done this?	Shipyard		Thimble	T-shirt	Panda
34	Aggrevated assault causes serious or lasting injury and is usually done using a weapon such as gun or knife. In your lifetime, how often have you done this?	Pig	Belt	Tooth	Cap	Tie
35	Physical child abuse is assault, with or without a weapon, against a child by an adult. Physical child abuse can damage a child psychologically as well as physically. It can include beating a child with an object like a stick or whip, throwing a child against a wall, or any other act that causes harm to the child's body. This doesn't include sexual abuse of a child. In your lifetime, how often have you done this?	Puppy	Sweatshirt	Mosquito	Powder puff	Tow truck
36	Kidnapping is when a person is abdupted by force, threat of force or coersion. A person might be held for ransom or may be held for other reasons against their will. This does not include the legal detention of a person by police but it does include the illegal detention of a person by any group or individual including armed political groups. In your lifetime, how often have you done this?	Rabbit	Underclothes	Strainer	Ladybug	Welder
37	Homicide is the deliberate killing of one person by another. In your lifetime, how often have you done this?	Ice	Yam	Hat	Rat	Bull
Okay	v, now let's talk about crimes that involve sex and relationships.	Very bad (1)	A little bad (2)	Nuetral (3)	Good (4)	No response

38	Sexual harassment is when a person in a position of power such as a your professor, a police officer, or your supervisor at work tries to pressure a person to have sex or go on a date, or talks about sex in a way that makes the person uncomfortable when the person has no power to make them stop. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Hands	Goalie	Zebra	Turnip	Sweater
39	A zokiki is a girl who is not yet an adult who has sex with an adult man in exchange for gifts such as clothing, shoes, or papadap. If you ever had a zokiki, think about how you felt about it. If you haven't, imagine someone a member of your household was a zokiki. Would you think this is very bad, a little bit bad, or good?	Rain	Ant	Head	Suit	Dragonfly
40	Child sexual abuse is when an adult has sex with a child or does sexual things to a child or in front of a child such as showing the child pornography or touching the child's private areas or asking the child to touch his private areas. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Pin cushion	Cement mixer	Brushing hair	Tomato	Cricket
41	Sexual exploitation is when a child or vulnerable adult exchanges sex for something they need such as food, a place to sleep, medicine, or a job. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Football socks	Litter basket	Spinach	Cutting ribbon	Magnet
42	Prositituation is when a person pays another person money for sex. If you have been involved in this, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Slippers	Bear	Rebar	Buttons	Wharf
43	Date rape is when two people go a date or have a romantic relationship and one person does not want to have sex but the other person forces them to do so; this happens between two people who know each other and are already interacting socially. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Slacks	Radish	Scorpion	Passport	Ambulance

44	Domestic violence includes the physical or sexual abuse of a spouse or partner such as a man forcing his wife to have sex when she refuses or when a person gets angry and hits their spouse. This can include a range of behaivors including hitting, pinching, burning, threatening with a weapon, humilating, and threatening or hurting pets or children to frighten or control the other person. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Pumpkin	Bee	Foot	Apartment building	Gasoline level gauge
45	Molestation is when a person forces or coerces a person to do sexual things – other than intercourse – which the person doesn't want to do. This includes acts done while the victim is unable to give consent, such as fondling the breasts of a women while she is sleeping, or waiting until someone is drunk to have sex with them, without knowing if they had given permission to have sex while they were still able to think clearly. This can also include touching or rubbing against people in public places, such as on a tapap, showing sexual things to someone without their consent, or using a threat or force to make a person touch you sexually or allow themselves to be touched sexually. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Fingers	Shoeshine boy	Caterpillar	Two children running	Hens eating cockroaches
46	Statatory rape is when a person has sex with a younger person who is not old enough to consent to sex. This is usually when an adult has sex with someone who is under the age of 18. Generally it is not considered a crime if the adult is just a year or two older than the child (for example, when two seconardy school students date and decide to have sex with each other). Stacatory rape can also happen when a person is not able to consent because they are a cognitive disability. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Whistle	Brown eyes	Construction workers	Grasshopper	Garbage can
47	Rape is when a person is forced or coerced to have sex including sexual intercourse, oral sex, anal sex, or the penetration of the vagina or anus with any object including the fingers. The victim can be forced by using threats, a weapon, or by another means of creating fear in the victim. If anyone ever did this to you, think about how you reacted. If this hasn't happened to you, imagine someone did this to you or a member of your household. Would you think this is very bad, a little bit bad, or good?	Feet	Centipede	Broken down car	Newspaper seller	Football game

	let's talk about your own experiences with crimes that involve sex relationships.	0	1	2	3 +	N R
48	Sexual harassment is when a person in a position of power such as a your professor, a police officer, or your supervisor at work tries to pressure a person to have sex or go on a date, or talks about sex in a way that makes the person uncomfortable when the person has no power to make them stop. In your lifetime, how often have you done this?	Gearshift	Boots	Forehead	Pigeon	Needles
49	A zokiki is a girl who is not yet an adult who has sex with an adult man in exchange for gifts such as clothing, shoes, or papadap. In your lifetime, how often have you had a zokiki?	Duck	Door	Egg	Pick	Shoe
50	Child sexual abuse is when an adult has sex with a child or does sexual things to a child or in front of a child such as showing the child pornography or touching the child's private areas or asking the child to touch his private areas. In your lifetime, how often have you done this to someone else?	Sheep	Corn	Hand	Bucket	Clock
51	Sexual exploitation is when a child or vulnerable adult exchanges sex for something they need such as food, a place to sleep, medicine, or a job. In your lifetime, how often have you done this to someone else?	Mango	Chicken	Window	Truck	Watch
52	Prositituation is when a person pays another person money for sex. In your lifetime, how often have you paid someone else for sex?	Car	Hill	Pig	Fish	Seed
53	Date rape is when two people go a date or have a romantic relationship and one person does not want to have sex but the other person forces them to do so; this happens between two people who know each other and are already interacting socially. In your lifetime, how often have you done this to someone else?	Box	Boat	Cat	Chair	Lamp
54	Domestic violence includes the physical or sexual abuse of a spouse or partner such as a man forcing his wife to have sex when she refuses or when a person gets angry and hits their spouse. This can include a range of behaivors including hitting, pinching, burning, threatening with a weapon, humilating, and threatening or hurting pets or children to frighten or control the other person. In your lifetime, how often have you done this to someone else?	Rain storm	Christmas tree	School desks	Blue book	Concrete blocks

55	Molestation is when a person forces or coerces a person to do sexual things – other than intercourse – which the person doesn't want to do. This includes acts done while the victim is unable to give consent, such as fondling the breasts of a women while she is sleeping, or waiting until someone is drunk to have sex with them, without knowing if they had given permission to have sex while they were still able to think clearly. This can also include touching or rubbing against people in public places, such as on a tapap, showing sexual things to someone without their consent, or using a threat or force to make a person touch you sexually or allow themselves to be touched sexually. In your lifetime, how often have you done this to someone else?	Bird	Birthday Cake	Rabbits	Street market	Trees
56	Statatory rape is when a person has sex with a younger person who is not old enough to consent to sex. This is usually when an adult has sex with someone who is under the age of 18. Generally it is not considered a crime if the adult is just a year or two older than the child (for example, when two seconardy school students date and decide to have sex with each other). Stacatory rape can also happen when a person is not able to consent because they are a cognitive disability. In your lifetime, how often have you done this to someone else?	Bear	Bell	Fire	Feet	Eye
57	Rape is when a person is forced or coerced to have sex including sexual intercourse, oral sex, anal sex, or the penetration of the vagina or anus with any object including the fingers. The victim can be forced by using threats, a weapon, or by another means of creating fear in the victim. In your lifetime, how often have you done this to someone else?	Ball	Apple	geT	Axe	unS

AUDIT

Instructions. Because alcohol use can affect your health, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential so please be honest. Please select the response that best describes your answer to each question.

	•				
1. How often do you have a drink containing alcohol?	0 = Never	1 = Monthly or less	2 = Two to four times a month	3 = Two to three times per week	4 = Four or more times a week
	Cow	Bread	Hair bow	Hotel	Bike
2. How many drinks containing alcohol do	0 = 1 or 2	1 = 3 or 4	2 = 5 or 6	3 = 7 to 9	4 = 10 or more
you have on a typical day when you are drinking?	Shoe	Wall	Peanut	Wick	Sky
3. How often do you have six or more drinks on one	0 = Never	1 = Monthly or less	2 = Two to four times a month	3 = Two to three times per week	4 = Four or more times a week
occasion?	Spider	Pineapple	Mountain	Sorcerer	Baby
4. How often during the last year have you found that you were	0 = Never	1 = Monthly or less	2 = Two to four times a month	3 = Two to three times per week	4 = Four or more times a week
not able to stop drinking once you had started?	Plantain tree	Bike accident	Dominos	Eye	Hog
5. How often during the last year have you failed to do what was	0 = Never	1 = Monthly or less	2 = Two to four times a month	3 = Two to three times per week	4 = Four or more times a week
normally expected from you because of drinking?	Card game	Wrench	Flying kite	Cereal	Tire
6. How often during the last year have you needed a first drink in	0 = Never	1 = Monthly or less	2 = Two to four times a month	3 = Two to three times per week	4 = Four or more times a week
the morning to get yourself going after a heavy drinking session?	Key	Pink house	Heart	Rain clouds	Twins
7. How often during the last year have you had a feeling of guilt	0 = Never	1 = Monthly or less	2 = Two to four times a month	3 = Two to three times per week	4 = Four or more times a week

or remorse after drinking?	Bottle opener	Monkey	Vodou princess	Old woman	Hot pepper
8. How often during the last year have you been unable to	0 = Never	1 = Monthly or less	2 = Two to four times a month	3 = Two to three times per week	4 = Four or more times a week
remember what happened the night before because you had been drinking?	Clothing on line	Bean plant	Old man	Flat tire	Bird on tree branch
9. Have you or someone else been injured as a result	9. Have you or someone else been $0 = \text{No}$ $2 = \text{Yes}$, but not in			last year	4 = Yes, during the last year
of your drinking?	Razor		Generator		
10. Has a relative or friend, or a doctor or other health worker	0 = No	2 = Ye	2 = Yes, but not in the last year		
been concerned about your drinking or suggested you cut down?	Thermos	Toothpaste on toothbrush			Painting a wall

Scoring. Scores for each question range from 0 to 4, with the first response for each question (e.g. never) scoring 0, the second (eg less than monthly) scoring 1, the third (e.g. monthly) scoring 2, the fourth (eg weekly) scoring 3, and the last response (eg. Daily or almost daily) scoring 4. For questions 9 and 10, which only have three responses, the scoring is 0, 2 and 4 (from left to right). A score of 8 or more is associated with harmful or hazardous drinking, a score of 13 or more in women, and 15 or more in men, is likely to indicate alcohol dependence.

Short Hardiness Scale (SHS)

Instructions. Below are statements about life that people often feel differently about. Please show how much you think each one is true. Give your honest opinions. There are no right or wrong answers.

	0 = not at all true	1 = a little true	2 = quite true	3 = completely true
1. Most of my life gets spent doing things that are worthwhile.	Crook	Goose	Crackers	Straw
2. Planning ahead can help avoid most future problems.	Gate	Grasses	Fish hook	Stove
3. I don't like to make changes in my everyday schedule.	Walking trail	Star	Jail	Kitten
4. Working hard doesn't matter, since only the bosses profit by it.	Ball of string	Kissing a baby	Lightbulb	Bread loaf
5. Changes in routine are interesting to me.	Traffic jam	Doctor	Zebra	Sewing
6. By working hard you can always achieve your goals.	Downtown	Airplane	Frog	Army
7. I really look forward to my work.	Horse	Mother and child	Helicopter	Paint brush
8. If I'm working on a difficult task, I know when to seek help.	Owl	Pail	Butter	Broken leg
9. Most of the time, people listen carefully to what I say.	Park	Tray of cakes	Rabbit	Vase of flowers
10. Trying your best at work really pays off in the end.	Garden plot	Water fountain	Wheel	Airport
11. It bothers me when my daily routine gets interrupted.	Rake	Red bird	Sack of potatoes	Sailboat
12. Most days, life is really interesting and exciting for me.	Green onions	Bar of soap	Spark plug	Yard
13. I enjoy the challenge when I have to do more than one thing at a time.	Spoon	Dirty boys	Musical notes	Planet earth
14. I like having a daily schedule that doesn't change very much.	Scales of justice	Gasket	Broken window	Cherries
15. When I make plans, I'm certain I can make them work.	Cave	Spider web	Coil	Egg

Social Readjustment Rating Scale (SRRS)

Instructions. Please indicate which of the following events have happened to you during the past 12 months.

	1 Yes	0 No
1. Death of spouse	Glove	Wood
2. Divorce	Ball	Glue
3. Menopause	Apple	Nail
4. Separation from living partner	Cobweb	Beetroot
5. Jail term or probation	Crow	Elbow
6. Death of close family member other than spouse	Badge	Basket
7. Serious personal injury or illness	Face	Beetle
8. Marriage or establishing life partnership	Bubble	Cannon
9. Fired at work	Pill	Fish
10. Marital or relationship reconciliation	Bandage	Cloth
11. Retirement	Gate	Coach
12. Change in health of immediate family member	Crate	Hair
13. Work more than 40 hours per week	Donkey	Brain
14. Pregnancy or causing pregnancy	Hot pan	Branch
15. Sex difficulties	Bucket	Cattle
16. Gain of new family member	Celery	Jellyfish
17. Business or work role change	Finger	Guitar
18. Change in financial state	Dominos	Ladybug
19. Death of a close friend (not a family member)	Goose	Singer
20. Change in number of arguments with spouse or life partner	Ghost	Circle
21. Mortgage or loan for a major purpose	Giraffe	Box
22. Foreclosure of mortgage or loan	Honey	Freezer
23. Sleep less than 8 hours per night	Oatmeal	Island
24. Change in responsibilities at work	Jeans	Taptap
25. Trouble with in-laws, or with children	Judge	Millet
26. Outstanding personal achievement	Lace	Papadap
27. Spouse begins or stops work	Calculator	Lamp
28. Begin or end school	Cable	Lettuce
29. Change in living conditions (visitors in the home, change in	Sorghum	Picture
roommates, remodeling house)		frame
30. Change in personal habits (diet, exercise, smoking, etc.)	Marbles	Ocean
31. Chronic allergies	Cemetery	Pear
32. Trouble with boss	Plane	Cabbage
33. Change in work hours or conditions	Cyclone	Playing

34. Moving to new residence	Poison	Judge
35. Presently in pre-menstrual period	Scarf	Cemetery
36. Change in schools	Queen	Faucet
37. Change in religious activities	Popcorn	Feathers
38. Change in social activities (more or less than before)	Seahorse	Magic
39. Minor financial loan	Bedsheet	Smoke
40. Change in frequency of family get-togethers	Street	Slave
41. Vacation	Throne	Sugarcane
42. Presently in winter holiday season	Turkey	Wrench
43. Minor violation of the law	Stream	Bra

Decision-Making Skills

Instructions. Please indicate how much you agree with each of the following statements by marking the appropriate box. Would you say you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree?

	strongly disagree 1	Disagree 2	neither agree nor disagree 3	Agree 4	strongly agree 5
1. I take the responsibility for my own actions	Carpenter	Mermaid	Bowl of fruit	Gas can	Heart
2. I set long term goals for myself	Pharmacy	Puppies	Laborer	Lock with key	Money
3. I am confident about my ability to lead	Pregnant woman	Cornmeal with bean sauce	Pillow	Minister	Mountain range
4. I achieve anything I set out to do	Radio playing music	Cucumber	Pocket	plastic	Pile of coal
5. I know how to plan projects	Axe	Button down shirt	People walking	Beach	Schoolbooks

talking in front of		Girl with a blue shirt	Toussaint L 'Overture	Bundle of sticks	Red truck
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Competence for Civic Action (CCA)

Instructions. If you found out about a problem in your community that you wanted to do something about (for example, illegal drugs were being sold near a school, or high levels of lead were discovered in the local drinking water), how well do you think you would be able to do each of the following? I Definitely Can't (1); I Probably Can't (2); Maybe (3); I Probably Can (4); I Definitely Can (5)

- 1. Create a plan to address the problem.
- 2. Get other people to care about the problem.
- 3. Organize and run a meeting
- 4. Express your views in front of a group of people.
- 5. Identify individuals or groups who could help you with the problem.
- 6. Write an opinion letter to a local newspaper.
- 7. Call someone on the phone that you had never met before to get their help with the problem.
- 8. Contact an elected official about the problem.
- 9. Organize a petition, protest, or other political action to pursade policymakers to address the problem.

Political Conversations with Others (PCWO)

Instructions. Here are some questions about your political discussions with others.

Indicate how much you agree or disagree with each statement. Strongly Disagree (1); Disagree (2); Uncertain (3); Agree (4); Strongly Agree (5)

- 1. I talk to my parents/family elders about politics.
- 2. I'm interested in my parents'/ family elders' opinions about politics.
- 3. My parents/ family elders encourage me to express my opinions about politics and current events, even if they are different from their views.
- 4. I talk to my teachers/internship supervisor/program leaders about politics.
- 5. I'm interested in my teachers/internship supervisor/program leaders' opinions about politics.
- 6. My teachers/internship supervisor/program leaders encourage me to express my opinions about politics and current events, even if they are different from their views.
- 7. I talk to my friends about politics.
- 8. I'm interested in my friends' opinions about politics.
- 9. My friends encourage me to express my opinions about politics and current events, even if they are different from their views.
- 10. I talk to my classmates/other participants/other interns about politics.
- 11. I'm interested in my classmates/other participants/other interns' opinions about politics.
- 12. My classmates/other participants/other interns encourage me to express my opinions about politics and current events, even if they are different from their views.

Prospective Civic Engagement

Instructions. Next time you have the opportunity, how likely is it that you will do each of the following? (1) Not at All Likely (2) Maybe (3) Extremely Likely

- 1. Vote on a regular basis.
- 2. Wear a campaign button, write band, t-shirt, or hat to support a candidate.
- 3. Volunteer for a political party.
- 4. Participate in a boycott against a company.
- 5. Refuse to buy clothes made is sweatshops.
- 6. Participate in political activities such as protests, marches, or demonstrations.
- 7. Do volunteer work to help needy people.
- 8. Get involved in issues like health or safety that affect your community.
- 9. Work with a group to solve a problem in the community where you live.

Political Voice

Instructions. The next time you have the opportunity, how likely is it that you would do each of the following? (1) Not at All Likely; (2) Maybe; (3) Extremely Likely

- 1. Contact or visit someone in government who represent your community.
- 2. Contact a newspaper, radio, or talk show to express your opinion on an issue.
- 3. Sign an e-mail or written petition.

Would you consider doing any of the following, even if you were not paid to do so?

(1) YES (0) NO

- 4. Trying to talk to people and explain why they should vote for or against one of the parties or candidates during an election?
 - 5. Expressing your views about politics on a website, blog, or chatroom?
- 6. Participating in a poetry slam, youth forum, live music performance, or other event where young people express their political views?
- 7. Working as a canvasser (i.e., someone who goes door to door for a political or social group, or candidate?

School Climate Scale

Instructions. This survey is a series of statements allowing you to tell us how you think and feel about things in your school. Remember: we are only asking for what you think, not what other people think. There are no right and wrong answers, so please choose the answer that best tells us how you think or feel about each statement. If you do not wish to respond to the question, please choose the "pass" option. Think about how strongly you disagree or agree with the following statements about your school. Mark the answer that best shows us what you feel based on your experiences since the last time we talked to you (or, at baseline, "during the past year").

	Really Disagree	Disagree	Agree	Really Agree
1. My teachers respect me.	Ant	Ball	Milk	Dog
2. My teachers are fair.	Cat	Spider	Shirt	Car
3. Teachers in my school are nice people.	Banana	Hammer	Bike	Boy
4. When students break rules at my school, they are treated fairly.	Tire	Birthday cake	Door	Lamp
5. The principal asks students about their ideas at my school.	Window	Tree	Wrench	Mango
6. My school is a good place to be.	Phone	Taptap	Baby	Goat
7. I feel like I belong at my school.	Bat	Bed	Laundry	Man

8. My school is important to me.	Plumber	Truck	Bread	Horse
9. Teachers and staff at my school are doing the	Donkey	Pliers	Bench	Pencil
right things to prevent students from mistreating				
each other.				

Financial Self-Efficacy Scale (FSES)

Instructions. Please respond to the following statements using these response categories:

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

- 1. It is hard to stick to my spending plan when unexpected expenses arise.
- 2. It is challenging to make progress toward my financial goals.
- 3. When unexpected expenses occur I usually have to use credit.
- 4. When faced with a financial challenge, I have a hard time figuring out a solution.
- 5. I lack confidence in my ability to manage my finances.
- 6. I worry about running out of money in retirement.

Job Search Readiness Checklist

Instructions. Use this tool to determine the participant's level of job search readiness.

Use it to track participant development throughout their progress in the program.

Motivation and Follow-Through.

- 1. Has the participant been punctual to all meetings with staff and all classes, groups, and trainings?
- 2. Has the participant met the program's attendance requirements and been engaged in the activities of the program?
- 3. Has the participant followed up on all job search assignments given by staff or suggested during workshops or trainings?

4. Has the participant taken initiative to find employment on his / her own and utilized personal networks as a source of job leads?

Job Search Preparation.

- 1. Has the participant identified appropriate short term and long term career goals?
- 2. Can the participant describe their unique transferable skills?
- 3. Has the participant completed a sample application that has been reviewed and approved by a staff member?
- 4. Has the participant completed a sample resume that has been reviewed and approved by a staff member?
- 5. Does the participant have all the documents that are typically required in the job application process including a NIF and identification card?
- 6. Has the participant identified an approved list of employment references that they have received permission to use?
- 7. Has the participant demonstrated how to leave a professional voicemail or narrative message?
- 8. Has the participant written a finalized thank you letter that a staff member has approved?
- 9. Has the participant demonstrated that they can dress professionally and appropriately for the job?
- 10. Does the participant have access to at least one appropriate clothing outfit that they can wear for interviews?

Interview Preparation.

- 1. Can the participant talk clearly about his/her background, skills, interests and goals?
- 2. Have they practiced common interview questions with others?
- 3. Have they participated in at least three mock interviews (preferably one with an employer) to practice answering common questions?
- 4. Has the participant received acceptable ratings in at least 2 of 3 mock interviews?
- 5. If applicable, have they answered any questions about their criminal record/involvement in an armed group to the reviewer's satisfaction?

Scoring. Total the sum of "Yes" responses. Participants should have a total number of 15"Yes" responses to be considered job search ready.

Supervisor Evaluation

Instructions. This form should be completed by the participant's supervisor at their job or internship.

Meets	Poor (does not) -	Fair	Very good	Excellent
expectations:	1	(occasionally) - 2	(usually) - 3	(always) - 4
Attendence				
Punctuality				
Quality of work				
produced				
Quanity of work				
produced				
Professionalism				
Iniative				
Communication				
Skills				
Teamwork				
Problem Solving				
Response to				
supervision				

Conflict Resolution – Individual Protective Factors

Scoring. The items listed under Self-Control are scored as follows: Yes! = 1, yes = 2, no = 3, NO! = 4. The Cooperation items are reverse coded. To score, point values for all 12 items are added. Blank items are excluded, with the score adjusted for the number of items completed when two or few items are blank. The maximum obtainable score of 48 indicates a high level of conflict resolution skills. A minimum score of 12 indicates a low level.

Instructions. Respondents are asked to indicate how closely several statements match their feelings. A"YES!" is checked if the statement is very true for them; "yes" if it is somewhat true; "no" if it is somewhat false; and "NO!" if it is very false.

Self-Control. 1. Sometimes you have to physically fight to get what you want. 2. I get mad easily. 3. I do whatever I feel like doing. 4. When I am mad, I yell at people. 5. Sometimes I break things on purpose. 6. If I feel like it, I hit people.

Cooperation. 1. I like to help around the house. 2. Being part of a team is fun. 3. Helping others makes me feel good. 4. I always like to do my part. 5. It is important to do your part in helping at home. 6. Helping others is very satisfying.

Appendix B: Curriculum Vitae

Athena R. Kolbe

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Education

2008-2015 University of Michigan, Ann Arbor: Social Work & Political Science PhD (Candidate)

Dissertation: "Reintegrating members of armed groups into Haitian society: An evaluation of three approaches," Committee: Rich Tolman (co-chair), James Morrow (co-chair), Berit Ingersoll-Dayton, Yuri M. Zhukov

2008 -2011 University of Michigan, Ann Arbor: MA Political Science Thesis: "Securing the State: The Haitian National Police before and after the earthquake" (Readers: James Morrow, Allan Stam)

2006-2007 Wayne State University: Graduate Certificate in Social Work Practice with Families & Couples

2004-2006 Wayne State University: MSW Interpersonal Social Work Practice Thesis: "Human Rights Abuses and Crime in Port-au-Prince, Haiti: A Random Survey of Households." (Readers: Royce Hutson, Bart Miles, Eileen Trzcinski)

2000-2002 Golden Gate Seminary: MA Theological Studies

1998-2000 Skidmore College: BA International Affairs & Labor Studies

1995-1998 Laney Community College

Employment

2011-2015 Director of Social Work Education; Social Work and Political Science Instructor - Institute of Social Work & Social Science/Enstiti Travay Social & Syans Sosyal, Petionville, Haiti

2009-2015 Graduate Student Instructor/Graduate Student Research Assistant, Department of Political Science and School of Social Work - University of Michigan, Ann Arbor, MI

- 2007-2011 Researcher/Contractor Small Arms Survey, Geneva, Switzerland
- 2007-2012 Clinical Social Worker Children's Center of Wayne County, Detroit, MI
- 2005-2007 Teaching Assistant/Research Assistant, School of Social Work and Addiction Research Institute, School of Psychiatry Wayne State University, Detroit, MI
- 1993-2004 Journalist Pacific News Service, San Francisco, CA

Funded Research Projects:

- 2015 PI: National Household Survey Regarding Experiences with Policing and Security (Viva Rio Haiti for the United Nations Office of Internal Oversight, New York)
- 2014 PI: Sexual Exploitation by UN Peacekeepers in Haiti (United Nations Office of Internal Oversight, New York)
- 2014 PI: Involvement of Children and Youth in Sport and Recreation Activities in area of the Olympic Center (International Olympic Committee, Lausanne, Switzerland)
- 2013 PI: Mapping Crime and Human Security in the Caribbean (Igarape Institute, Rio de Janeiro, Brazil)
- 2012 PI: Evaluation of the Community Violence Reduction Program in Haiti (United Nations Department of Peacekeeping Operations, New York)
- 2012 PI: Household Survey of Food Security in Rural Haiti after the 2012 Hurricane Season: Predictions for Long-Term Food Shortages (Igarape Institute, Rio de Janeiro, Brazil)
- 2012 PI: Measuring the Economic and Social Costs of Crime, Illness and Accidental Injury in Developing Countries (Igarape Institute, Rio de Janeiro, Brazil)
- 2011 Co-PI: Evaluation of Cash for Work and Food for Work Programs in Post-Earthquake Haiti (World Food Program, Rome, Italy)
- 2010 PI: Study of Health and Harm in Post-Earthquake Haiti (International Development Research Centre, Ottawa, Canada)
- 2010 PI: Individual Interactions with Peacekeepers & Perceptions of Security Provision in Haiti (Small Arms Survey, Geneva, Switzerland)
- 2009 PI: Haiti Violence Assessment: A National Study of Health, Human Rights, and Small Arms Violence (Small Arms Survey, Geneva, Switzerland)

2008 Co-PI: Perceptions of Security in South Lebanon (U.K. Embassy of Beirut/Overseas Projects)

2008 Co-Investigator: Program Evaluation of the Viva Rio Intervention: A neighborhood survey (Small Arms Survey, Geneva, Switzerland)

2007 Co-PI: Lebanon Armed Violence Assessment (Small Arms Survey, Geneva, Switzerland)

Selected Publications and Presentations

Peer Reviewed Journal Articles:

Hutson, R.A., Trzcinski, E., Kolbe, A.R. (2014) Features of Child Food Insecurity after the 2010 Haiti Earthquake: Results from Longitudinal Random Survey of Households. *PloS ONE 9* (9): 1-12.

Shannon H.S., Hutson, R. A., Kolbe, A.R., Stringer, B., and T. Haines. (2012) "Choosing a survey sample when data on the population are limited: a method using Global Positioning Systems and aerial and satellite photographs". *Emerging Themes in Epidemiology* 9(4): 1.

Kolbe, A.R., Hutson, R. A., Shannon, H.A., Trzcinski, E, Miles, B., Levitz, N., Puccio, M., James, L., Noel, J.R., Muggah, R. (2010). Mortality, crime and access to basic needs before and after the Haiti earthquake: a random survey of Port-au-Prince households. *Medicine, Conflict and Survival* 26 (4): 281-297.

Kolbe, A. R. & Hutson, R. A. (2006) Human Rights Abuses and Other Criminal Violations in Port-au-Prince, Haiti: A Random Survey of Households. *Lancet* 368(9538): 864-873.

Book Chapters:

Kolbe, A.R. (2015) "Human Security after the 2010 Haiti Earthquake: Lessons Learned" in R. Watson (Ed) *Public Health in Natural Disasters: Nutrition, Food, Remediation and Preparation*. Wageningen, Netherlands: Wageningen Academics.

Kolbe, A.R. & Muggah, R. (2011). "Securing the State: Haiti before and after the earthquake" in E. Lebrun (Ed.) *Small Arms Survey 2011: States of Security*. Cambridge: Cambridge University Press.

Hutson, R. A. & Kolbe, A.R. (2009) "Survey Research Methodology" in B. Thyer (Ed) *Handbook of Social Work Research Methods*. Thousand Oaks, CA: Sage Publications.

Hutson, R. A., Kolbe, A.R., Stringer, B., Haines, T.D., Shannon, H.A., & Salamy, I.R. (2009). "Testing Perceived Wisdom: Attitudes about Security Provision and Violence in South Lebanon"

in R. Muggah and E. Lebrun (Eds.) *Small Arms Survey 2009: Shadows of War*. Oxford, UK: Oxford University Press.

Kolbe, A.R. & Hutson, R.A. (2007) "Haiti" in R. Muggah (Ed.) *Small Arms Survey 2008: The Gun and the City*. Oxford, UK: Oxford University Press.

Kolbe, A.R. & Hutson, R.A. (2007) "Human Rights Abuse in Port-au-Prince" in *Human Rights*. Andhra Pradesh, India: ICFAI University Press.

Peer Reviewed Briefs, Reports, & White Papers:

Kolbe, A.R., Herman, Augusta, & Muggah, R. (2014) *Break Your Bones: Mortality and Morbidity Associated with Haiti's Chikungunya Epidemic*. Rio de Janeiro: Instituto Igarape.

McDougal, T.M., Kolbe, A. R., Muggah, R., and Marsh, N. (2014) *Ammunition Leakage from Military to Civilian Markets: Market Price Evidence from Haiti 2004-2012*. San Diego: Small Arms Data Observatory of the University of California.

Kolbe, A.R. (2014) Sports, Recreation and Play: A quantitative study of young people & their families in the Haiti Olympic Center zones. Rio de Janeiro: Viva Rio.

Kolbe, A.R., Puccio, M. N., Bautista, M., Childs, E., James, L., Muggah, R., Masipag. J.A., & Jean, A. (2013) *Assessing Needs After the Super Typhoon: Results From a Random Household Survey in Samar, Leyte, Cebu, Iloilo, Capiz, Aklan, and Palawan*. Rio de Janeiro: Instituto Igarape.

Kolbe, A.R., Brookes, K., & Muggah, R. (2013) *Is Tourism Haiti's Magic Bullet? An Empirical Treatment of Haiti's Tourism Potential*. Rio de Janeiro: Instituto Igarape.

Kolbe, A.R. (2013) *HiCN Working Paper 147: Revisiting Haiti's Gangs and Organized Violence*. Brighton: Households in Conflict Network, Institute of Development Studies, University of Sussex.

Kolbe, A.R., Puccio, M. N., & Muggah, R. (2012) *After the Storm: Haiti's Coming Food Crisis*. Rio de Janeiro: Instituto Igarape.

Kolbe, A.R., Muggah, R., & Campbell, J. (2012) *An Evaluation of the Community Violence Reduction Intervention in Haiti*. New York: United Nations Department of Peacekeeping Operations.

Kolbe, A.R., Muggah, R. & Puccio, N.M. (2012) *The Economic Costs of Crime: Results from Monthly Surveys of Haitian Households*. Rio de Janeiro: Instituto Igarape.

- Kolbe, A.R. et al (2012) Evaluation of Cash and Food for Work Projects in Post-Earthquake Haiti. Port-au-Prince: World Food Program.
- Kolbe, A. R. & Muggah, R. (2012). *Haiti's Urban Crime Wave? Results from Monthly Household Surveys August 2011 February 2012*. Rio de Janeiro: Instituto Igarape.
- Muggah, R. & Kolbe, A.R (2012) *Haiti Needs to Confront the Causes and Consequences of Violent Crime*. Rio de Janeiro: Instituto Igarape.
- Kolbe, A.R. & Muggah, R. (2010). Surveying Haiti's Post-Quake Needs: A Quantitative Approach. *Humanitarian Exchange 48*. Available online at www.odihpn.org/rep.
- Kolbe, A.R., Shannon H, Levitz N, Muggah R, Hutson RA, James L, Puccio M, Trzcinski E, Noel JR, Miles B (2010). *Assessing Needs after the Quake: Sexual Violence, Property Crime and Property Damage*. Geneva: Small Arms Survey.
- Kolbe, A.R., James L, Puccio M, Trzcinski E, Shannon H, Levitz N, Noel JR, Miles B, Muggah R, Hutson RA (2010) *Assessing Needs after the Quake: Security and Basic Needs*. Geneva: Small Arms Survey.
- Kolbe, A.R., Muggah R, Hutson RA, Puccio M, Trzcinski E, Shannon H, Levitz N, Noel JR, Miles B, James L (2010) *Assessing Needs After the Quake: Access to Food, Water, Fuel and Property.* Geneva: Small Arms Survey.
- Kolbe, A.R., James L, Puccio M, Trzcinski E, Shannon H, Levitz N, Noel JR, Miles B, Muggah R, Hutson RA (2010). *Surveying Needs after the Quake: Results of a Random Survey of Haitian Households*. Geneva: United Nations Development Program.
- Kolbe, A.R., Muggah, R., Levitz, N., Miles, B., Hutson, R.A., Trzcinski, E., Balistra, S., & Jean, D. (2010). *Assessing Needs after the Quake: Preliminary Findings from a Random Survey of Port-au-Prince Households*. Geneva: Small Arms Survey. (Report to the United Nations Development Programme & International Development Research Centre).
- Hutson, R.A., Kolbe, A.R., Haines, T., Springer, B., Shannon, H., & Salamey, I. (2010) "Security Provision in Southern Lebanon: Surveying Public Opinion" Lebanon Armed Violence Assessment, Issues Brief #1. Geneva: Small Arms Survey.
- Hutson, R. A., Kolbe, A.R., Stringer, B., Haines, T.D., Shannon, H.A., & Salamy, I.R. (2009). *Human Rights and Small Arms Violence in South Lebanon*. Geneva: Small Arms Survey.
- Hutson, R.A., Kolbe, A.R., Haines, T., Springer, B., Shannon, H., & Salamey, I. (2008) *South Lebanon Armed Violence Assessment*. (Report to the British Embassy Beirut, Lebanon).

Selected Op-Eds and Other Writings:

Kolbe, A.R. & Muggah, R. (2013) "Haiti's Gangs could be a Force for Good." Ottawa Citizen. http://ottawacitizen.com/2013/06/04/kolbe-and-muggah-haitis-gangs-could-be-a-force-for-good/

Kolbe, A.R. & Muggah, R (2012) "Chronicling an Everyday Rape in Haiti." Huffington Post online. http://www.huffingtonpost.com/athena-kolbe/rape-in-haiti_b_2165466.html

Kolbe, A.R. & Muggah, R. (2012) "Haiti's Silenced Victims." New York Times. http://www.nytimes.com/2012/12/09/opinion/sunday/haitis-silenced-victims.html?

Kolbe, A.R. & Muggah, R. (2012) "The Economic Cost of Violent Crime." The Guardian (London) http://www.theguardian.com/commentisfree/2012/aug/22/haiti-violent-crime-economic-costs

Kolbe, A.R. & Muggah, R. (2011) "Haiti: The Science of Counting the Dead," Los Angeles Times, July 12. http://articles.latimes.com/2011/jul/12/opinion/la-oe-muggah-haiti-count-20110712

Conference Presentations

Kolbe, A.R. (2015, January) Reintegrating Armed Insurgents into Society: An Evaluation of Three Social Work Interventions. Paper presented at the annual meeting of the Society for Social Work and Research.

Kolbe, A.R. (2014, October) BSW Education using Flipped Learning in the Classroom. Paper presented at the annual meeting of the Council on Social Work Education. Tampa, FL.

Kolbe, A.R. & Jean, A. (2014, January) Parenting Skills Training for Caregivers of Behaviorally Disordered Children in Port-Au-Prince, Haiti. Poster presented at the annual meeting of the Society for Social Work and Research. San Antonio, TX.

Kolbe, A.R. & Soulouque, A. (2013, January) "Social Work Isn't Just for Foreigners": The Experience of Starting a BSW-Granting Social Work Institute in Port-Au-Prince, Haiti. Paper presented at the annual meeting of the Society for Social Work and Research, San Diego, CA.

Hutson, R.A., Trzcinski, E., & Kolbe, A.R. (2012, January) Features of Child Food Insecurity after the 2010 Haiti Earthquake: Results from a Random Survey of Households. Paper presented at the annual meeting of the Society for Social Work and Research. Washington, DC.

Kolbe, A.R., Trzcinski, E., Hutson, R., & James, L.E. (2011, January) Multiple Vulnerabilities of Children in Haiti. Paper presented at the annual meeting of the Society for Social Work and Research. Tampa, Fl.

- Kolbe, A.R, Muggah, R., Levitz, N., Miles, B., Hutson, R., Trzcinski, E., Balistra, S. & Jean, D. (2010, November) Mortality, Morbidity and Displacement in Haiti: A Random Survey of Portau-Prince Households Before and After the January 2010 Earthquake. Paper presented at the annual meeting of the American Public Health Association. Denver, CO.
- Hertz, R., Kolbe, A.R., Hutson, R., Miles, B., Trzcinski, E. (2010, January) Household Characteristics Associated with Human Rights Victimization in Port-au-Prince, Haiti. Poster presented at the annual meeting of the Society for Social Work and Research. San Diego, CA.
- Hutson, R., Kolbe, A.R., Haines, T., Springer, B., Shannon, H., & Salamey, I. (2008, October) Health, Human Rights & Small Arms Violence in South Lebanon: Results from a Random Survey of Households. Paper Presented at the American Public Health Association. San Diego, CA.
- Kolbe, A.R. & Hutson, R. (2007, November) Human Rights Violations Against Children in Urban Post-Coup Haiti: Results from a Random Household Survey. Paper presented at the annual meeting of the American Public Health Association. Washington, D.C.
- Hutson, R., & Kolbe, A.R. (2007, June) Assessing Mortality and other Human Rights Violations in Conflict Zones using Randomized GPS Coordinate Sampling. Paper presented at the Measuring and Costing Armed Violence and Developmental Impacts Workshop sponsored by the Small Arms Survey-Graduate Institute for International and Development Studies, Geneva, Switzerland.
- Kolbe, A.R. & Hutson, R. (2007, April) Sexual Violence against Women and Girls in Latin America: The Case of Haiti. Paper presented at the 4th Annual Meeting of the Latin American Solidarity Conference. Chicago, IL.
- Kolbe, A.R. & Hutson, R. (2007, January) Child Sexual Abuse and Human Rights in Haiti. Paper presented at the annual meeting of the Society for Social Work and Research. San Francisco, CA.
- Kolbe, A.R. & Hutson, R. (2006, November) The Frequency of Human Rights Abuses in Portau-Prince, Haiti, Paper presented at American Public Health Association. Boston, MA.
- Kolbe, A.R. & Hutson, R. (2006, August) The Frequency of Human Rights Abuses in Port-au-Prince, Haiti, Paper presented at Society for the Study of Social Problems. Montreal, Quebec.

Community Involvement and Academic Service

2012-2014	Chair, Curriculum Committee, Institute of Social Work & Social Science/Enstiti
	Travay Social & Syans Sosyal, Petionville, Haiti
2012-2015	Reviewer, Conflict, Security and Development Journal
2011-2015	Reviewer, Disasters Journal

2011-2012	Reviewer, Progress in Community Health Partnerships Journal
2009-2011	Member, Curriculum Committee, University of Michigan, Ann Arbor, School of
	Social Work
2007-2010	Reviewer, Advances in Social Work Journal
2005-2006	Member, Curriculum Committee, Wayne State University, School of Social Work
1994-2001	Member, Board of Directors, National Center for Youth Law, San Francisco
1994-2000	Member, Board of Directors, National Child Rights Alliance, New York

Professional Affiliations

Society for Social Work and Research Haitian Studies Association International Association of Emergency Managers American Public Health Association Society for the Study of Social Problems International Federation of Social Workers Urban Studies Association