

Examining the Perceived Internal and External
Effectiveness of NGOs in the Palestinian Territories:
The Role of Complexity, Resilience, and Job Adaptability

Naira Musallam

Submitted in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy
in the Graduate School of Arts and Sciences

COLUMBIA UNIVERSITY
2011

ABSTRACT

Examining the perceived internal and external effectiveness of NGOs in the Palestinian

Territories: The Role of Complexity, Resilience, and Job Adaptability

Naira Musallam

The current study examined some key factors that have the potential to impact non governmental organizations' (NGOs) effectiveness operating in war and conflict settings. Previous research suggested that integrative complexity (Streufert, 1970; Suedfeld, Tetlock, & Streufert, 1992), behavioral complexity (Lawrence, Lenk, & Quinn, 2009), emotional complexity (Kang & Shaver, 2004), job adaptability (Pulakos, Arad, & Plamondon, 2000) and resilience (Masten, 2001) are linked to positive individual outcomes. However, no systematic studies have been conducted to examine the potential impact of these variables on perceived work effectiveness in the context of volatile and violent environments. Therefore, I investigated the relationship between individual integrative complexity, perceived behavioral and emotional complexities of Top Management Teams (TMTs), perceived job adaptability of TMTs, perceived resilience of TMTs and their relationship to perceived internal and external effectiveness of their respective NGOs working in the Palestinian Territories. A total of 133 participants participated in the study, representing TMTs from 26 local NGOs based in Ramallah, West Bank working in various fields such as community development, children and youth, human rights, women empowerment, agriculture, health and psychological counseling, advocacy, education, and culture. Participants were asked to fill out a battery of questionnaires assessing these variables. Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were utilized to analyze the data. The overall results indicated that integrative

complexity was negatively associated with leader's perceptions of the external effectiveness of their NGO, and was not found to be related to perceived internal effectiveness. Both perceived behavioral complexity and emotional complexity of TMTs' were positively associated with perceptions of internal and external effectiveness. An exploratory analysis revealed an interaction effect between behavioral and emotional complexity in terms of their combined impact on perceived internal and external effectiveness. In addition, perceived job adaptability of TMTs was significantly related to perceived external effectiveness, but not with perceived internal effectiveness. Finally, perceived resilience of TMTs was not found to be associated with any outcome variables. The theoretical, practical and future research implications of the results are discussed.

TABLE OF CONTENTS

List of Tables	iii
List of Figures	iv
List of Appendices	v
Acknowledgements	vi
Dedication	xii
Chapter I: Introduction	1
Chapter II: Literature Review	11
Integrative complexity, individual and organizational outcomes	11
Behavioral Complexity, individual and organizational outcomes	14
Emotional Complexity, individual and organizational outcomes	17
Job Adaptability, resilience individual and organizational outcomes	20
Chapter III: Methodology	
Research in context: the Palestinian Territories	24
Sample	26
Procedures	27
Measures	29
Integrative complexity	29
Behavioral Complexity	30
Emotional Complexity	30
Top Management Team Resilience	30
Job Adaptability	31

Perceived Internal and external effectiveness	34
Chapter IV: Results	
Overview	35
Preliminary Data Analysis	35
Determining data analysis strategy	36
Correlation analyses	37
Integrative complexity analysis	38
Structural Equation Modeling	39
Separate Confirmatory Factor Analysis for measurements	41
Exploratory Analyses	43
Chapter V: Discussion	
Main results	46
Theoretical implications for studying complexity	56
Limitations	58
Implications for future research	59
Implications for conducting research in conflict zones	60
References	63
Tables and Figures	78
Appendixes	96

LIST OF TABLES

Table 1: Respondents' sample characteristics	78
Table 2: Respondents' representation of surveyed organizations	79
Table 3: Organizational characteristics	80
Table 4: Descriptive statistics for all independent and dependent variables	81
Table 5: Correlation matrix for all independent and dependent variables	82
Table 6: Confirmatory Factor Analysis: factor loadings of manifest and latent constructs	83
Table 7: correlation matrix for behavioral complexity	87
Table 8: correlation matrix for job adaptability	88
Table 9: model fit statistics	90

LIST OF FIGURES

Figure 1: Structural equation modeling results	86
Figure 2: Confirmatory factor analysis: internal and external effectiveness	89
Figure 3: Proposed structural equation model: mediator model 1	91
Figure 4: Proposed structural equation model: mediator model 2	92
Figure 5: Univariate plot for top management teams' behavioral and emotional complexity to perceived internal effectiveness	93
Figure 6: Univariate plot for top management teams' behavioral and emotional complexity to perceived internal effectiveness	94
Figure 7: Interaction effect using dichotomized scores of behavioral and emotional complexity	95

LIST OF APPENDICES

Appendix A : Cover Letter	96
Appendix B : Demographic variables	97
Appendix C : Integrative complexity measure	98
Appendix D : Job adaptability measure	99
Appendix E : Top Management Team resilience measure	101
Appendix F : Behavioral complexity measure	102
Appendix G : Emotional complexity measure	104
Appendix H : perceived internal effectiveness	105
Appendix I : perceived external effectiveness	106
Appendix J : Scoring manual of integrative complexity.	107

Acknowledgements

First, I want to thank my sponsor and mentor Dr. Peter T. Coleman for providing me with a magnificent experience during my graduate studies. Thank you for broadening my intellectual perspectives, engaging me in challenging conversations, always making yourself available to discuss whatever is on my mind, and for involving me in so many unique experiences that every doctoral student dreams about. Above all, thank you for having faith in me. You have been the ideal mentor, and I could not have asked for more. I truly feel fortunate and blessed having worked with you for all of these years.

I would also like to thank the Chair of my doctoral committee Dr. Debra Noumair for all of your brilliant insights that made the ultimate product much better. But more importantly, I would like to thank you for agreeing to be with me on this journey. Like many meaningful journeys in life, at times, it was not easy; however, it was extremely rewarding. Your openness, patience, moral and emotional support helped me go through this, and for that, I will ever be grateful.

Furthermore, I am so grateful for Dr. James Westaby, who enthusiastically agreed to serve on my committee. Thank you for all your great methodological and statistical insights, generosity, time, and patience with me. Your door was always wide open for me, and I always walked out of your office knowing more about my data.

I would also like to thank my fourth and fifth committee members Dr. Andrea Bartoli and Dr. Larry Heuer for all of their insightful comments. Thank you for your fresh comments and intellectual engagement that contributed to the improvement of this product.

In addition, I would like to thank Dr. Morton Deutsch. Your great accomplishments and many contributions to the field, and yet, your openness and modesty is a true inspiration. What a

true honor and privilege it has been to dialogue with one of the main founders of the field of conflict resolution.

The infancy stage of conceptualizing my study goes back to my work with the “Dynamical Systems Team” that included Dr. Andrzej Nowak, Dr. Larry Liebovitch, Dr. Robin Vallacher, and Lan Bui Wrzosinska. Thank you for all your intellectual stimulation.

Strong bonds that transcend nationality, religion, and at times worldviews are rare in life. I want to take the opportunity to express my great gratitude for what my family members refer to as the “fifth sister”, my very dear friend Lynda Goltzman Hallmark. You have always stood right beside me, joining my joy during celebrations, and grieving with me during challenging and testing times, and rooting for me during my various journeys. Thank you for everything you have provided me all of these years, and for everything you continue to do for me. I will forever be grateful for all of your professional and personal support, and your deep care and love for me.

With the same spirit, I want to deeply thank my amazing friend and colleague Mekayla Castro. I always walked away from our conversations with a great sense of fulfillment, whether we had them over dinner or at school, professional and personal. You have been a true inspiration for me and a role model for the highest levels of intelligence, modesty, and kindness. Thank you for always being there for me.

My graduate experience would have not been the same without the engagement and the support of my dear friend Frank Golom. Thank you for providing me with one of the greatest thrills of my life: The opportunity and the space to engage in deep and stimulating conversations around our profession and personal lives. I cannot even imagine how I could have gone through the program without your presence, passion, and continuous support.

Throughout my graduate studies, I have been lucky to have a role model for academic excellence and holding oneself to the highest standards. My very dear friend, Dr. Jennifer Bustamante -- thank you for being who you are. You have been a true inspiration for me. The combination of your high academic standards and yet your playfulness and love for life will always remain something I aspire for.

In addition, I want to thank my dear friend Apivat P. Hanvongse (Paul) for joining me in great discussions, social events, and above all, for your great spirit that made my time more enjoyable. Our small moments of laughter often helped me carry on, especially during difficult times. With the same spirit, I would like to thank Adam Mitchinson for injecting so much joy into my day-to-day life at school. Thank you for great conversations, amazing adventures together, and for all the support you have given me.

Additionally, I would like to thank my lovely cohort members Robert Bruce Morris, Tarani Joy Merriweather Woodson, Bernard Banks, and Amanda Shull who have joined me since the start of my doctorate journey, and who always encouraged me and supported me in any way they could.

Furthermore, I would also like to express my thanks to all my colleagues in the program and the larger Columbia community who have contributed to my overall positive experience during my doctoral degree. In particular, thanks to Ben Liberman, Kate Roloff, Nathan Gerard, COL. Stephen Michael, and Thomas Hill.

Special thanks to Dr. Gina Buontempo and Dr. Caryn Block for always keeping their doors open for me, but more importantly, for all of their great insights and generous advice regarding the navigation of doctoral studies. You have helped me more than you can imagine.

I would also like to thank Dr. Beth Fisher-Yoshida for always encouraging me to pursue my academic and professional passions, for matching my energy, and for providing me with incredible professional opportunities.

I would also like to extend my thanks to an extremely unique and amazing friend, Ben Dubin-Thaler. Thank you for wonderful years together in New York City, and for constantly inspiring me to have fun with scientific approaches. In addition, I would like to express my deep gratitude to my friend Kathryn Crawford for always saving me, just when things seem to have gotten out of control. Thank you for your great friendship, your amazing spirit, and for always managing to get a laugh out of me.

I would also like to express my gratitude to the staff of the International Center for Cooperation and Conflict Resolution (ICCCR): Juliette Dewolfe, Molly Clark, Claudia Cohen, and Kathrina Kugler for all the support they have provided me through out all these years. Additionally, I would like to thank the staff associated with the Department of Organization and Leadership: Angela Carrasco, Lebab Fallin, Deborah Walden, and Chrissandra Taylor for providing me with all the technical support I needed to complete this document.

This field research could not have been carried out without the significant assistance of Mohanad and Najwan Berekdar. Thank you for opening your house for me, and for all of your invaluable assistance in the Palestinian Territories. Additionally, I would like to thank the many Palestinian NGO staff who opened the doors for me, and welcomed my study, despite all the daily constraints they had to face. Moreover, I would like to thank all the Palestinian taxi drivers, grocery owners, and walkers who guided me, and ultimately helped me carry out my study.

I would also like to acknowledge the impact Roland Pierre Mcgreer Minez had on the formulation of my dissertation topic. Thank you for your constant intellectual stimulation, and for always challenging me and pushing me to make my work relevant to real world issues.

Finally, words cannot do justice to express the deep gratitude I have for my beloved family. While for a significant amount of this journey we have been physically apart, each one of you have been so close in my heart. At the center of everything that I have ever achieved, was your love and truly infinite support. To my beloved four sisters: Mateel, Ghaida, Afnan and Raneem Musallam. I would not be where I am at in life without your love, encouragement, and support. You have my deepest admiration, and because of you, I want to be the best I can be. To my little brother Elias Musallam: You always managed to put a smile on my face with your playfulness and cheerfulness. I want to thank my father Sami Musallam for his deep love, for always pushing me to the next level of excellence and professional achievements, and for constantly providing me with all your support to fulfill my next dreams. I also want to extend my deep thanks to my aunt Nawar Musallam for her continuous support for me, and the rest of my family. I don't know what I would have done without you in my life. Also, I want to thank my grandmother Mateel Musallam for her seemingly simple but at the same time extremely loving acts that have made the entire difference in my life. Furthermore, I would like to thank my amazing larger Musallam and Khuri families, all the great uncles, aunts, and cousins, who have extended their support in any way they could.

Last but by no means least, I would like to acknowledge the significant contributions my mother, Radiah Jeries Khoury Musallam had on the creation of this document. It is heartbreaking that you did not live to see the completion of this chapter of my life, but no current or future

accomplishment of mine would have been possible without your infinite encouragement, support, and love for me. Be sure that you will always be with me along the way.

Dedication

This work is dedicated to the life and memory of my mother:

Radiah Jeries Khoury Musallam

(January 23, 1960- August 31, 2009)

You will always crown my achievements.

CHAPTER I: INTRODUCTION

Today, no serious, relevant, and sustained peace effort can be achieved without the input, influence, and participation of nongovernment organizations (NGOs) (De Mars, 2005; Bartoli, in press). These organizations engage in conflict resolution activities in various forms, and are present in all peace phases including prevention, peacemaking, peacekeeping, and peacebuilding (Boutros-Ghali, 1992). Given their increasing importance and presence in conflict and war zones, what is today lacking are empirically-based examinations of NGO activities (Bartoli, in press), and systematic evaluations of their effectiveness (Jordan and Van Tuiji, 2006).

The 1990s have witnessed a significant increase in attempts to measure the effectiveness of NGOs (Fowler, 1996). According to Fowler (1996), the increasing pressure to demonstrate their effectiveness has to do with several factors: 1) since much of the aid comes from public giving, there is an increased demand for financial accountability (Hawley, 1993), 2) the end of the Cold War shifted donor priorities toward institutional reconstruction of recipient countries, which altered the role of NGOs in many societies, 3) NGOs have claimed that they are more efficient and effective in serving targeted populations and therefore they have been called upon to support this claim (Dijk, 1994) and 4) NGOs are required to demonstrate that they are learning organizations. This entails data collection on all aspects of organizational functioning including assessments regarding their impact and capacity to adapt to change.

However, there is little research investigating some of the key conditions, processes, and human characteristics that have the potential to affect NGO's effectiveness in war and conflict zones (Bartoli, in press). Therefore, the current study will examine some of the individual and organizational factors that can impact NGOs performance in settings of ongoing conflict and violence.

The Palestinian Territories (PT) serve as a rich case study to conduct this research, especially given that 1) the Israeli Palestinian conflict is still ongoing, 2) PT's are in desperate need of effective development (West Bank report, 2009), 3) all NGOs operate with the absence of a formal state to support their work and the continuation of the Israeli occupation, which imposes serious challenges to their development work (Brynen, Awartani, & Woodcraft, 2000) and 4) International assistance to the Palestinian Territories stands out as one of the largest and most complex cases of post Cold War economic peacebuilding (Brynen, Awartani, Woodcraft, 2000).

Previous research has demonstrated the importance of fostering conditions and processes which increase the potential for complex thinking, resilience, and adaptability in fostering constructive outcomes in conflict situations (e.g., Coleman, Vallacher, Nowak, Bui-Wrzosinska, 2007; Tetlock, 1985). This includes research on complexity (e.g., Dorner, 1996; Kugler, & Coleman, in press; Losada, 1999; Lawrence, Lenk, & Quinn, 2009; Kang, & Shaver, 2004; Tetlock, 1985), resilience (e.g., Masten, 2001; Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008), and job adaptability (e.g., Pulakos, Arad, Donovan, Plamondon, 2000). This research has provided strong support at both the individual and organizational levels that has suggested that people and organizations who demonstrate higher levels of these processes tend to be associated with more positive organizational outcomes. However, to date, no published research has examined these variables in the highly stressful context of NGOs operating in war and conflict zones, which limits the generalizability of the effects found previously of complexity, resilience and adaptability on perceived effectiveness. Therefore, the current study will investigate the relationship between complexity (cognitive, behavioral and emotional dimensions), resilience and job adaptability, and their relationship to perceived internal and

external NGO effectiveness in settings of on-going violence and conflict. In the following section, I will describe the context in which this study will be conducted, determine the level of inquiry of the studied variables and provide broad theoretical and empirical basis of the study.

NGO Effectiveness in Conflict Zones

In 1997, former U.N Secretary General Kofi Annan argued that “NGOs and other civil society actors are perceived not only as disseminators of information or providers of services but also as shapers of policy, be it in peace and security matters, in development or in humanitarian affairs” (Bartoli, in press, p.57). Indeed, NGOs have played and still play an instrumental role in conflict resolution and peace building activities (Bartoli, in press). According to a 2006 report by the World Bank, their functions and contributions can be classified under protection (e.g., protecting citizen life, freedom and property against attacks from state and non-state actors), monitoring (e.g., observing and monitoring the activities of conflict actors), advocacy (e.g., articulation of specific interests, especially of marginalized groups), socialization (e.g., formation and practice of conflict resolution), social cohesion (e.g., strengthening links among citizens, building bridging social capital across societal cleavages), intermediation/facilitation (e.g., establishing relationships to support collaboration between interest groups, facilitating dialogue and interaction, and promoting attitudinal change), and service provision (providing services to citizens that promote peacebuilding).

The increasing contributions of NGOs in peace building activities demands close examination and measurement of their effectiveness and ineffectiveness (Espirito, 2001). However, measuring organizational effectiveness is a challenging task. In Kanter and Brinkerhoff’s (1981) review on organizational effectiveness and performance, they argued that “one of the most interesting questions in this area are not technical, they are conceptual: not how

to measure effectiveness or productivity, but what to measure” (p. 321). Indeed, there is little agreement on how to conceptualize and measure organizational effectiveness (Goodman & Penning, 1981; Ramalingam, Mitchell, Borton, & Smart, 2009). For example, effectiveness has been previously defined in terms of 1) task effectiveness or goal attainment, 2) appropriate organizational structure and process and 3) environmental adaptation (Kanter & Brinkerhoff, 1981). Campbell (1977) suggested that effectiveness criteria be chosen with reference to the purpose of the measurement. For instance, are we measuring effectiveness in order to 1) determine the current state of the system, 2) evaluate this state, 3) compare organizations for public purposes, or 4) serve the interests of a particular group. The current study will address the first and second questions: determining and evaluating the current state of the system (for more details see the methods section).

Additionally, Fowler (1996) has argued that there are several faulty assumptions associated with NGOs effectiveness: 1) the assumption that it is possible to predict and create knowable futures (Rolling & de Zeeuw, 1987), 2) linear approaches of “cause-effect”, or “input-output” are very problematic in the humanitarian sector, given the fact that more often than not NGOs don’t have control over many external factors that can affect their performance for the better or worse, 3) there is significant interdependence among the various NGOs that can potentially affect their performance, and 4) often there are high levels of uncertainty, which makes it really difficult to predict outcomes. Kanter and Brinkerhoff (1981) suggested moving away from linear assessment by making sure that any evaluation includes multiple stakeholders, and paying closer attention to the process, rather than the outcomes.

Similarly, in their comprehensive report on performance and effectiveness in the humanitarian sector, Ramalingam, Mitchell, Borton, and Smart (2009) offered a system wide

performance and effectiveness approach, which is based on what they termed as a “balanced approach”. They argued that any comprehensive assessment of NGO’s performance, should include the following dimensions: 1) impact perspective, including impact assessment for the population being served, 2) stakeholder perspective, including beneficiaries, staff, and donors, 3) process perspective, which entails context and situational analysis, response and contingency planning, coordination, monitoring and evaluation, and logistics, 4) resource perspective, such as the analysis of resource commitment and mobilization, cost control, and utilization of resources, and 5) organizational capacity perspective, including leadership, strategy and policy, knowledge and learning, partnerships and networks, and research and development/innovation.

Addressing all the criteria mentioned above is beyond the scope of the current study. However, in determining and evaluating the effectiveness of NGOs, I will take a multi-dimensional approach by addressing relevant dimensions related to both perceived internal and external effectiveness (see methods section).

Determining the variables’ level of inquiry

Scholars have suggested that it is best to study organizational phenomena from a multilevel perspective, as opposed to approaching them at a single level (Chan, 1998). Such phenomena can be studied at organizational, team, or individual levels, just to mention a few. Studying the relationship between complexity, adaptability, and resilience to perceived effectiveness of NGOs at the organizational level demanded: 1) the participation of a large number of NGOs operating in a specific conflict zone (which proved very difficult to obtain); 2) the need for the data to show sufficient within group agreement to be able to aggregate and analyze it at the organizational level (which meant that there was a possibility of not being able to study the variables on an organizational level if the within group agreement did not reach the

index criteria), and; 3) sufficient theoretical justification for aggregation of the data (which was not well theoretically established in the literature; see Chan, 1998).

While studying the variables of interest at the individual level is interesting, it was not sufficient for answering the research questions of my study, since I sought to gain insights in regards to variables that have the potential to affect the perceived effectiveness of the organization. The constraints of conducting field research in a conflict zone, and particularly, the considerable challenge to access large number of organizations due to factors such as challenging infrastructure, mobility of NGOs, their time and resource constraints demanded careful attention to the conceptualization of the level of variables being studied.

Given these potential statistical and field constraints, conducting the study at the team level, and more specifically, the Top Management Teams (TMTs) level provided a more viable option. It was decided to work with individuals who are part of TMTs that are considered to be most influential in their respective NGO. They have influence on many organizational processes such as the mission and outlook of their organization, internal and external decision making processes, strategies, and more generally, the way in which the organization conducts its work (for more details about TMTs see next section). This allowed the examination of the variables beyond the individual level, while having the opportunity to shed some light on the organizational level dynamics, given the leverage of TMTs on their organizations.

Top Management Teams (TMTs) and Organizational Effectiveness

In the last two decades, increasing attention has been paid to the role of Top Management Teams (TMT), defined as top-level decision makers (Hanbrick, & Mason, 1984), and how they effect their organization's performance (Canella, 1997; Waldman, Javidan, & Varella, 2004). This indicates a major shift from the traditional view that TMT had little impact on their

organizations. A growing body of evidence has demonstrated that “the top team, rather than the top person, has the greatest effects on organizational functioning” (O’Reilly, Snyder, & Boothe, 1993, p. 150).

The emphasis on the importance of TMT is rooted in The Upper Echelon Theory proposed by Hambrick and Mason (1984), who argued that certain characteristics of top leadership affect organizational performance. Experiences, values, and personality traits were among the initial leadership characteristics they suggested would influence organizational effectiveness. The Upper Echelon Theory generated a series of studies that centered around two major trends (Carmeli, 2008): 1) TMT composition (e.g., size of team, age, tenure, educational and functional background of team members, Hambrick, & Mason, 1984), and 2) TMT process such as information sharing, collaboration, joint decision making, and behavioral integration (Hambrick, 1994).

Over the years, what became clear is that the decision making processes of TMTs greatly impact the organization they work for (Hambrick, & Finkelstein, 1996). They are perceived as being responsible for the complex systems (Kotter, 1982), where they continuously have to confront emerging problems, and provide solutions (Carmeli, 2008). Therefore, the current study will focus on the cognitive, behavioral, and emotional complexities of TMTs members of NGOs.

Intractability and the Israeli-Palestinian Conflict

Most international conflicts, whether fought over tangible or intangible issues, show a significant decline in their violence and escalation patterns over time (Bercovitch, 2005). Azar (1985, 1990) advanced the concept of intractable conflicts to describe those conflicts that maintain their destructive patterns, and resist many efforts to resolve them. These types of

conflicts tend to be exhausting, demanding, stressful, painful, and costly-both in human and material terms (Bar-Tal, 1998). Coleman (2003) identified over fifty variables associated with the destructiveness and persistence of such intractable conflicts, which include various dimensions of their contexts (e.g. historical dominance and injustice), issues (human and social polarities), relationships (destructive relationships, polarized collective identities), processes (malignant social processes, pervasiveness and complexity) and outcomes (protracted trauma and continuous duration). Bar-Tal (1998) argued that there are seven features of intractable conflicts: 1) they are protracted 2) they are perceived as irreconcilable 3) parties have an interest in the conflict's continuation 4) they are violent 5) they are perceived as being of zero-sum nature 6) they are total, and 7) they are central.

The Israeli Palestinian conflict is one of the most intractable conflicts we have seen over the past century. While some attribute the Israeli-Palestinian conflict back to ancient times, the conflict as we know it in modern times can be traced back a century ago. It began with the development of two national movements: Palestinian Nationalism and Jewish Zionism, which have continuously clashed over territory, self determination, statehood, and justice (Halperin, Bar-Tal, Nets-Zehngut and Drori, 2008). In 1948 a war broke out between the Jewish population which mostly immigrated to the region after the atrocities of World War II, and the indigenous Palestinians. In November of 1947, the United Nations decided to divide the land between the two communities; however, it was rejected by the Palestinians who perceived the resolution as being unfair. As a result, the conflict escalated, and the neighboring Arab countries entered a war, which resulted in the establishment of the State of Israel, and the ethnic cleansing of a large Palestinian population (Pape, 2006).

At the heart of the conflict, there are several core issues that resonate and divide people today, including the right of refugees to return to their homes, the status and political control of Jerusalem, and evacuation of all illegal settlements existing in the West. There are several parties that have been playing key roles with regard to these issues. This includes the Israeli government, the Palestinian Authority, the Quartet on the Middle East which includes the United States, Russia, the United Nations, and the European Union, and finally the Arab League. Additionally, in terms of the peace processes, numerous formal and informal initiatives have been initiated through the decades of war, including the Oslo peace process, the 2000 Camp David summit, the Road Map to Peace, the Arab Peace Initiative, the Geneva accords, and most recently the Annapolis talks. Unfortunately, none of these initiatives has resulted in significant positive change in the overall situation.

NGO's in the Palestinian Territories

The Israeli-Palestinian conflict remains one of the most intractable conflicts in the world causing pain and suffering for both sides, and threatening the security of the region. However, the overwhelming asymmetric military, political, and economic power between Israel and the Palestinians (Bar-Tal, 2007), and more specifically, the result of forty two years of Israeli military occupation on one hand, and internal conflicts and corruption on the Palestinian side on the other hand, have left the West Bank and Gaza Strip in a general state of destructiveness and a desperate need for significant development (for details see the World Bank Report on the West Bank and Gaza Strip, 2009; The United Nation's Office for the Coordination of Humanitarian Affairs in the Occupied Palestinian Territories, 2007). Intervening organizations are often forced to operate under conditions that are far less than optimal. Among the challenges they face on a daily basis are: staff physical safety, movement constraints, random and organized violence,

conflict with other organizations and local populations, complex decision making, and a rapidly changing environment. The current study aims at contributing to the work of NGOs operating in conflict zones via examining factors that could increase their effectiveness.

CHAPTER II: LITRATURE REVIEW

In Dorner's (1996) inspiring book: *The Logic of Failure: Recognizing and Avoiding Error in Complex Systems*, it is argued that a high level of complexity of situations "places high demands on a planner's capacities to gather information, integrate findings, and design effective actions" (Dorner, 1996, p. 38). The dynamic and complex nature of many situations of intractable conflict demand that interveners continuously analyze the changing environment, and accordingly plan, execute, evaluate, and reevaluate their interventions (Dorner, 1996). Therefore, the current study argues that the capacity to manage complexity is a key factor that will influence the effectiveness of NGOs'.

Integrative (cognitive) complexity, individual and organizational functioning

Research on integrative complexity, which focuses on the structure of thought rather than on content, is a descendant of Kelley's (1955) personal construct theory (Suedfeld, Tetlock, Streufert, 1992). In Suedfeld, Tetlock, and Streufert's (1992) review of the theoretical origins of integrative complexity, it is argued that the development of the construct proceeded through conceptual systems (Harvey, Hunt, & Schroder, 1961), conceptual complexity (Schroder, Driver, & Streufert, 1976), interactive complexity (Streufert & Streufert, 1978), to meta-complexity (Streufert, & Nogami, 1989). Conceptual systems and early conceptual complexity considered complexity to be a relatively stable personality characteristic or ability (Harvey, Hunt, & Schroder, 1961), while later versions of conceptual complexity and what was labeled interactive complexity tended to view complexity as specific to various experiential domains (Suedfeld, Tetlock, & Streufert, 1992). The metacomplexity approach is based on joining "various cognitive processes into a single, parsimonious theoretical structure" (Suedfeld, Tetlock, & Streufert, 1992, p. 395). Integrative complexity focuses on examining individuals' levels of complexity in a

particular situation and context. Given the purpose of the current study, I will utilize the integrative complexity construct, since I will be examining the integrative complexity of individuals working in NGOs located in conflict zones.

Integrative complexity was originally formulated to explain individual differences in the complexity of the cognitive rules that individuals use to process and analyze information (Harvey, et. al., 1961; Tetlock, 1985). Years later, it was defined by Schroder, Driver, and Streufert (1967) in terms of two components: *differentiation* and *integration*. Differentiation refers to the degree to which individuals are capable of perceiving different dimensions within a domain, and the capacity to take different perspectives when considering that domain.

Moreover, differentiation is a prerequisite for the second component of the construct. Integration refers to the capacity of individuals to develop conceptual connections among differentiated dimensions or perspectives (Suedfeld, Tetlock, Streufert, 1992).

In later years, the static-trait conception of the construct was abandoned in favor of an interactionist position where integrative complexity of cognitive functioning at any given time was viewed as a joint outcome of long term dispositional variables and immediate situational variables (Tetlock, 1985). For example, it has been found that variables such as age, stress, and feeling of accountability can affect the degree of integrative complexity people exhibit during decision making processes (Lee, Herr, Kardes, Kim, 1999).

A significant amount of research with both archival data as well as with other types of data has been conducted on integrative complexity. Archival studies involved the analysis of written documents and included the writings of revolutionary leaders (Suedfeld & Rank, 1976), diplomatic communications during international crises (Levi & Tetlock, 1980), presidential speeches before and after elections (Tetlock, 1981), and supreme court opinions (Tetlock,

Bernzweig, & Gallant, 1985). Non-archival studies have examined the relationship between integrative complexity and crises decision making (Driver, 1965; Schroder, Driver, & Streufert, 1967), bargaining and negotiation behavior (Streufert & Streufert, 1978), and attitude change (Streufert & Fromkin, 1972). For example, Schneider and Giambra (1971) found in their study involving concept identification tasks that higher complexity participants obtained information most efficiently and made fewer errors than participants of lower complexity. Additionally, the results of controlled experiments in social simulations have suggested that leaders with high levels of complexity and ability to adapt are more likely to be successful in high turbulent environment than leaders with lower levels of cognitive complexity and ability to adapt who are more effective in more stable and structured situations (Hunsaker, 2007).

Over all, higher complexity has been associated with positive outcomes, including the likelihood of reaching mutually beneficial compromise agreements (Pruitt & Lewis, 1975), successful diplomatic communications (Suedfeld & Tetlock, 1977), employing cooperative tactics during negotiations (Driver, 1965), and managerial effectiveness (Hooijberg & Quinn, 1992; Hunsaker, 2007).

Generally, the theoretical reasoning behind such outcomes is that those who are low in complexity tend to dislike ambiguity and dissonance and seek rapid cognitive closure in judging others and in making decisions. Their impression of people, events, and issues tend to be dichotomous (Tetlock, Peterson, & Berry, 1993), while those who are high in integrative complexity tend to be more flexible, open minded, and perceive the social world as multidimensional.

However, it is important to note that high integrative complexity is not always an optimal state, and that low integrative complexity is not always associated with negative outcomes. In

fact, Tetlock, Peterson, and Berry (1993) argued that there are “flattering” and “unflattering” aspects associated with integratively simple and complex individuals, “that it is too simple to conclude that complexity is inherently superior to simplicity” (p. 501). They suggest that both low and high integrative complexity can be either highly adaptive or highly maladaptive, depending on the presenting problem and the circumstances of the situation. For example, the positive aspects of highly complex individuals include being open minded, and the willingness not to jump to conclusions too quickly when facing ambiguous situations. The positive aspects associated with low complexity individuals is their practicality, decisiveness, and being true to their values. On the other hand, the negative image of low complexity individuals includes their tendency to jump to conclusions quickly, and general unwillingness to change their mind. The negative image of those who are high on integrative complexity is that they are excessively intellectualized, impractical, and have a hard time making decisions.

Given the significant empirical evidence on the existing positive relationship between high integrative complexity and positive personal and organizational outcomes (e.g., employing constructive tactics during conflict, making data-driven decisions, and effective leadership in organizations), the current study takes the approach that the more an organization has individuals with high cognitive complexity, the more likely it will be more effective.

Behavioral Complexity, Individual and Organizational Outcomes

Much of what we know about behavioral complexity, defined as the array of differentiated and even competing behaviors (Lawrence, Lenk, Quinn, 2009), comes from the leadership and management literatures. Traditional management and leadership theories divided these domains into distinct categories (Denison, Hooijberg, Quinn, 1995). Classic examples include Zaleznik’s (1977) distinctions between managers and leaders, and Burns’s (1978)

classification of leaders being either transactional or transformational. The extensive leadership literature is mainly defined and understood through bipolar categories: leaders are either autocratic or democratic, directive or participative, task-oriented or relations-oriented, and so forth (Stogdill, 1994, pp. 365-397). As concluded by Denison, Hooijberg, and Quinn (1995) “central to these theories is often the notion that leaders can be classified in either one category or the other, or that certain styles and behaviors can be matched with certain situations to produce effective leadership” (p. 525).

However, more recent theories have emphasized paradoxes, contradictions, and complexities (Denison, Hooijberg, Quinn, 1995), which affected a wide line of research addressing topics such as group dynamics (Smith and Berg, 1987; Murnighan and Conlon, 1991), cognition (Hampden-Turner, 1981, Streufert and Swezey, 1986), psychodynamics (Kets de Varies and Millier, 1985), creativity and learning (Rothenberg, 1979), leadership (Quinn, 1984), and organizational effectiveness (Van de Ven, 1983).

In terms of the leadership literature, it was argued that more holistic approach was required, which recognizes that most leaders interact simultaneously with a variety of constituencies in many and rapidly changing settings covering a wide range of contingencies (Hunt, 1991). Such an approach challenges the way we have been conceptualizing the role of leadership, along with the contextual factors that result in the impossibility of prescribing leadership behaviors for all possible contingencies, and the way it influences the relationship between leadership and organizational effectiveness (Hooijberg, Hunt, & Dodge, 1997).

According to Hooijberg and Quinn (1991), effective leaders must be able to conceive of, as well as perform, multiple and contradictory roles. Early recognition of the wide range of responses and behaviors needed for effective leadership is evident in the work of theorists such

as Bass (1988), Blake and Mouton (1964), Burns (1978), and Denison, Hooijberg, Quinn (1995). Accordingly, a behaviorally complex leader is someone who has the ability to “perform the multiple roles and behaviors that circumscribe the requisite variety implied by an organizational or environmental context”(Lawrence, Lenk, Quinn, 2009, p.526). In fact, empirical research has shown support for this idea. For example, in a study of managerial leaders from Fortune 500 company, Quinn, Spreitzer, and Hart (1991) found that those leaders who were able to balance competing demands well by performing multiple roles do better than managerial leaders who are able to focus only one demand over another. Similar results were obtained by a study comparing the behavior patterns between effective and ineffective leaders (Denison, Hoojberg, and Quinn, 1995). Furthermore, Hart and Quinn (1993) and Bullis (1992) found that behavioral repertoire not only affected managerial effectiveness, but the larger organizational effectiveness.

While several authors have attempted to conceptualize leadership in terms of complex behaviors (Mintzberg, 1973, 1975), Quinn (1984) has offered a theoretical framework of leadership that addresses issues of contradiction and paradox. He reviewed the literature on leadership and developed the Competing Values Framework (CVF). The framework is conceptualized in terms of two dichotomous values: flexible versus stable structure and internal versus external focus, that resulted in what Denison and his colleagues (1995) termed “circumplex”, representing four quadrants: rational goal criteria (planning, goals, settings, productivity), referred to as the “compete” dimension, human resource criteria (cohesion, morale, training) termed as the “collaborate” dimension, internal process criteria (information management, stability, control) named the “control” dimension, and open system criteria (adaptation, growth), representing the “create” dimension. Zaccaro (2001) noted that the conceptual oppositions in the framework’s quadrants reflect basic theoretical distinctions and

provide an integration of role literature. Thus, the integration of competing expectations of organizational demands is represented by the performance of such competing roles (Lawrence, Lenk, Quinn, 2009).

In sum, what becomes apparent is that complex behavior is critical to the adaptation and ultimately survival at the organizational level as well as the individual level (Sale, 1980).

Emotional Complexity, Individual and Organizational Outcomes

Rafael Echeverria (1994), a trained scholar in ontological approaches to coaching once argued “ depending on the emotional space we are in, certain actions are possible and others are not – some possibilities open for us, others close....in a state of enthusiasm, our horizon of possible actions is widened....fear narrows the space of what is possible...emotional spaces not only contain the actions that are possible, they also modulate the way in which we carry out those actions” (in Losada, 1999, p.745).

Emotional experiences are crucial phenomenon to understand because decision-making processes, implementation of planned interventions, organizational process, and emerging social problems are rarely emotion free (Hooijberg, Hunt, Dodge, 1997). As noted by Fitness (1996), emotions have the potential to affect both leaders’ thinking and behaviors in several ways. For example, knowledge structures can be built from emotional recollections, or contain emotion scripts and schemas, and they can frame the way leaders perceive, process, and remember things.

Traditionally, psychological and organizational research examines the effects of either positive or negative emotions on human behavior (Baumeister, Bratslavsky, Finkenauer, & Vohn, 2001; Fredrickson, 2001). Recently, more scholars have been trying to avoid these dichotomies (Rathunde, 2000), and instead study the complexity of emotions. For example, the research conducted on marriage and divorce by Gottman, Murray, Swanson, Tyson, and

Swanson (2002) found that couples needed to maintain a high ratio of positive to negative emotions in order to sustain their relationship. Similarly, Losada (1999) explored the complex dynamics of high performance teams, and was able to demonstrate that “high performing teams are capable of creating emotional spaces that are expansive and open possibilities for effective action, while avoiding getting stuck in restrictive emotional spaces that close possibilities for effective action” (p. 190).

Moreover, very little research and attention has been paid to the *range and differentiation of emotional experience* (Kang, Shaver, 2004). Wessman and Ricks (1966) are acknowledged for being the pioneering researchers who noticed that individuals differed in the richness and range of subjective feelings and coined the term “affective complexity”. Two main orientations have been proposed to account for individual differences in emotional experiences. The first orientation views emotional complexity as a dispositional trait (Russell and Barrett and, 1999; Wessman and Ricks, 1966), and the second one addresses it more developmentally as a reflection of different levels of cognitive ability (Sommers, 1981; Lane, Sechrest, & Riedel, 1998).

Kang and Shaver (2004) conducted a study to explore the psychological and behavioral significance of individual differences in emotional complexity, which they conceptualized in two correlated aspects: 1) the degree to which an individual has a broad range of emotional experiences and 2) individual’s capacities to make subtle distinctions within emotion categories. They argued that emotional complexity will be a product of 1) cognitive complexity, personality dispositions, and life experiences, and 2) it will lead individuals to empathize with the feelings of others and will cause greater interpersonal adaptability. The results of their two studies supported all of the above hypotheses. In addition, Kugler and Coleman (in press) conducted a

study to investigate the relationship between emotional complexity and constructive conflict processes. Their results demonstrate that those individuals that are high on emotional complexity tend to engage in more constructive conflict processes and have more positive outcomes, and that individuals who are low on emotional complexity are more likely to engage in destructive conflict processes and have more negative outcomes.

Even though the research on emotional complexity is still in a stage of early development, the findings on emotional complexity suggest that it will be associated with positive individual and organizational outcomes, suggesting that allowing the experiencing of both positive and negative affect at the work place would ultimately contribute to higher sense of effectiveness. This argument is specially compelling given the context of the study. One can make the case that in settings of conflicts, interveners need to experience both positive and negative emotions. On the one hand, they often experience overwhelming negative emotions such as frustration, anger, sense of helplessness, and even despair in their work, simply because of the nature of conflict settings. On the other hand, experiencing positive feelings such as hope, satisfaction and empowerment is essential for the interveners to be able to continue their work. Indeed, it is difficult to imagine interveners operating in such contexts without allowing the experience of both positive and negative emotions.

In summary, the participation and work of NGOs in conflict zones is critical to any peacebuilding process. Often, these NGOs have to operate in highly complex and volatile environments (Dorner, 1996; Coleman, personal communication). Even though little empirical work has been conducted to examine the effect of cognitive complexity, behavioral complexity, and emotional complexity on organizational effectiveness, the current study proposes that the capacity of NGO leaders to think, feel, and behave in complex and flexible manners will enable

them to better manage the complex dynamics inherent in intractable conflicts, which will ultimately result in better performance/effectiveness of their organization in such settings.

Therefore, I hypothesize the following:

Proposition 1: Higher levels of complexity of Top Management Teams (TMTs) of NGOs will be positively associated with the effectiveness of their organizations.

Hypothesis 1a: Integrative complexity of organizational leaders (TMTs) will be positively associated with perceived internal organizational effectiveness.

Hypothesis 1b: Integrative complexity of organizational leaders (TMTs) will be positively associated with perceived external organizational effectiveness

Hypothesis 1c: Behavioral complexity of organizational leaders (TMTs) will be positively associated with perceived internal effectiveness

Hypothesis 1d: Behavioral complexity of organizational leaders (TMTs) will be positively associated with perceived external effectiveness

Hypothesis 1e: Perceived emotional complexity of organizational leaders (TMTs) will be positively associated with perceived internal organizational effectiveness.

Hypothesis 1f: Perceived emotional complexity of organizational leaders (TMTs) will be positively associated with perceived external organizational effectiveness.

Resilience, adaptability and their relationship to individual and organizational functioning

It has been argued that studying resilience, the ability to bounce back despite adversities, provides an operational tool for understanding organizational sustainability (Seager, 2008). But what does it mean to be resilient? The literature on resilience offers a variety of definitions, however, most of them emphasize the capacity for successful adaptation in the face of disturbance, stress, or adversity (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008).

For example, from an ecological perspective, Walker (2001) defines it as positive adaptation in response to adversity. Ganor and Ben-Lavy (2003) quantify it in a community context as the measure of adaptation and flexibility. From an individual perspective, Masten (2001) defines it as the process of, capacity for, or outcomes of successful adaptation, despite challenging or threatening circumstances.

Much of what we know about resilient individuals and organizations is rooted in the literature on individual and ecological resilience (Holling, 1973). In the field of psychology, Gramezy (1971, 1974) is credited for being the first investigator to study resilience, when he conducted studies to understand how children of schizophrenic mothers showed healthy growth despite their adverse circumstances. Inspired by this finding, a significant body of research was dedicated to understanding individual and environmental factors that enhance resilience (Masten and Reed, 2002). When researchers conducted longitudinal studies on at-risk children, significant variations in outcomes were observed, ranging from apparent psychopathologies to remarkable success stories. Following that, researchers turned their energy to study promotive and protective factors, focusing on the question of “what makes a difference” (Masten and Obradovic, 2006). In general, research results have demonstrated that higher levels of resilience were associated with positive outcomes including academic achievement, prosocial and antisocial behavior, peer acceptance, and job performance (e.g., Cicchetti & Rogosch, 1997; Conrad, & Hammen, 1993; Masten & Curtis, 2000).

During the 1990's, and due to difficult times in the financial and political sectors, organizational psychologists stressed the urgency to study resilience in organizations (Norman, Luthans, & Luthans, 2005). In his book “*Built to Last: successful habits of visionary companies*”, Jim Collins (1994) argued that resiliency is a key organizational factor that promotes success.

He noted that while most organizations face challenges during their existence, visionary organizations display a remarkable resiliency; an ability to bounce back from adversity, which in turn can increase the chances of their success (Hunter & Chandler, 1999). Similar to resilience on the individual level, the capacity to adapt is key to resilience on the organizational level. For example, Coutu (2002) presented a model for organizational resilience that contains three qualities: built-in systems that equip organizations to understand, accept, and adapt to the reality of the market place, a clear organizational mission statement with deep belief in the organizational purpose, and the ability for the organization to utilize existing resources and improvise with changing market conditions. Robb (2000) synthesized the literature on organizational resilience and argued that resilient organizations fulfill two requirements: the existence of a developed adaptation system that prepares an organization to shift and adapt to external changes, and attention to internal systems that monitor performance compared with organizational goals.

How can we conceptualize adaptation within the context of work? Pulakos, Arad, Donovan and Plamondon (2000) argued that adaptive job performance is an essential characteristic for job performance. Accordingly, they developed a taxonomy of adaptive job performance using over 1000 critical incidents from 21 different jobs. They identified eight dimensions that define adaptive performance: 1) Handling emergencies or crisis situations, 2) Handling work stress, 3) Solving problems creatively, 4) Dealing with uncertain unpredictable work situations, 5) Learning work tasks, technologies, and procedures, 6) Demonstrating interpersonal adaptability, 7) Demonstrating cultural adaptability, and 8) Demonstrating physically oriented adaptability. Unfortunately, even though there is significant theoretical work on organizational resilience and outcomes, to my best knowledge, there are no empirical studies

that have investigated the relationship between the two. Therefore, the current study will investigate the following:

Proposition 2: Higher resilience and job adaptability will be associated with higher organizational effectiveness.

Hypothesis 2a: Perceived TMTs resilience will be positively associated with Perceived internal effectiveness.

Hypothesis 2b: Perceived TMTs resilience will be positively associated with Perceived external effectiveness.

Hypothesis 2c: Perceived Job adaptability of TMTs will be positively associated with internal organizational effectiveness

Hypothesis 2d: Perceived Job adaptability of TMTs will be positively associated with external organizational effectiveness

To summarize, the current study will investigate the relationship between complexity (cognitive, behavioral, and emotional dimensions), resilience and job adaptability on one hand and perceptions of organizational effectiveness of NGOs operating in the extraordinarily difficult conditions of the West Bank and Gaza Strip. While significant number of studies has been conducted on integrative complexity, to my best knowledge, no studies have been conducted in the context of NGOs working in conflict zones.

CHAPTER III: METHODOLOGY

Research in context: the Palestinian Territories

The current study can be classified under the umbrella of field research. Simply put, “field research is the systematic study of ordinary activities in the settings in which they occur” (Bailey, 2007, p.2). By nature, field research requires continuous interaction with the population associated with the study. Bailey (2007) noted that conducting proper field research requires social skills, an ability to cope with ambiguity, patience, and flexibility. Before I discuss in detail the characteristics of my study in terms of sample, procedures, and measurement, I will discuss briefly Bailey’s (2007) criteria as they manifested themselves in my study.

Upon arrival to Ramallah, West Bank, the first challenge I encountered was the infrastructure of the place. There were no clear addresses of operating NGOs, due to the fact that street addresses did not practically exist. When NGO’s locations were available, they were typically indicated using names of buildings and local landmarks (e.g. next to the market, left of the independence circle, etc.). The absence of a formal navigating system required that I rely on local street walkers, taxi drivers, grocery owners, and so forth to locate my participating NGOs.

Adapting methodology in terms of sample and procedures.

Originally, the plan was to survey both local and international NGOs operating in the Palestinian Territories. While it was fairly easy to get the participation agreement from local NGOs, accessing international NGOs turned out to be a challenging task. This is due to the fact that all international NGOs were branches of larger organizations, and therefore, conducting my study required significant bureaucratic navigation of their systems, and communications with their headquarters around the globe. Therefore, I decided to focus my sample on local NGOs.

Additionally, the initial procedure of data collection entailed that I make phone calls with targeted organizations, schedule timeslots to meet with senior staff who could authorize conducting my study, and then schedule a meeting, where all TMTs would gather, and I would explain the study, and ask them to fill out the survey. However, soon after my arrival to the Palestinian Territories, it became clear that the plan needed to get adjusted due to the working nature of such environment. It was extremely difficult to set up meetings because of various constraints such as closures, delays at checkpoints, and the emergent need for staff to be in the field. As a result, the data collection plan was adjusted, and instead, I met only with NGOs directors, and received the authorization to conduct the study. Surveys were collected individually at various times that were convenient to the participants. On average, five phone calls per individual were made in order to make sure that they completed the survey and coordinate time for me to pick up the questionnaires.

More than anything, the above section illustrates the nature of conducting field research, and the need to be willing to adjust research plans, as demanded by the environment. Burgess (1986) argued that even though much has been written about field research, relatively little material is available on how to prepare, when to start, the issue of access, and how to go about gaining the data. Indeed, Bailey's (2007) criteria for conducting proper field research which entails the possession of social skills, the ability to cope with ambiguity, patience, and flexibility were all required to collect the data for the current study. Social skills were required in order to forge relationships with NGOs, and move beyond a transaction researcher-participant paradigm. This included things such as the willingness to engage in discussions not related to my study, exchanging information that was not relevant to the study. Additionally, tolerance for ambiguity allowed me to access NGOs and identify the individuals who are truly affecting the organization

rather than relying on rigid organizational charts of leaders that may have been misleading. Finally, both patience and flexibility were crucial, since the modification of the procedures, and the coping with changing plans were necessary for the completion of the data collection. The next section details the finalized sample and procedures.

Sample

In order to investigate the relationship between complexity (cognitive, behavioral and, emotional), job adaptability, resilience, and their relationship to perceived organizational effectiveness, I approached 47 organizations, and managed to have senior staff meetings with 32 of them. All approached organizations had their headquarters located in the City of Ramallah, West Bank (for more details, see the following procedure section). Even though 32 NGOs agreed to participate in the study, 26 of them responded and provided me with filled questionnaires, reflecting 55% response rate. On the organizational level, the participating NGOs ranged in terms of their participating members, the existence of other branches, their size, their fields, and the nationality of the staff. More specifically, three to fifteen members participated from each organization, with a total sample size of 133 participants. Twenty one out of the 26 NGOs had other branches throughout the Palestinian Territories, and five of them operated locally in the City of Ramallah. Regarding the size of the participating organizations, 12 of them (representing 44.4% of respondents, n=55) were small (number of total employees between 2-20), 10 of them (representing 33.8% of respondents, n=45) were medium sized (number of total employees between 21-40), and four of them (representing 24.8% of respondents, n=33) were large organizations (number of total employees between 41 and 200). The 26 participating NGOs represented the following fields: a) Community Development (n=30; 22.6% of total respondents, b) Children and Youth (n=29; 21.8% of total respondents), c) Human Rights (n=19; 14.3% of

total respondents), d) Women Empowerment (n=17; 12% of total respondents), e) Agriculture (n=15; 11.3% of total respondents), f) Health and Psychological Counseling (n=7; 5.3% of total respondents), g) Advocacy (n=5; 3.8% of total respondents), h) Education (n=4; 3% of total respondents), i) “Other” (n=4 ; 3% of total respondents), and j) Culture (n=3; 2.2% of total respondents). 78.9% of total respondents (n=105) said their organization consisted exclusively of Palestinian staff, and 20.3 % (n=27) said their organization consisted out of multi-national staff.

As for individual-level characteristics, 70 of the respondents (52.6%) were females, and 63 (47.4%) were males, with an average age of (M=34.87; SD=10.7) ranging from 19 to 61 years old. In terms of the number of years they have worked at their current organization, the average was (M=5.48; SD=.52) ranging from 1 to 21 years. The total number of years they have worked in various NGOs was (M=8.71; SD=7.6) ranging from 1-40 years of experience in the NGOs field. The results are summarized in Tables 1, 2, and 3.

Procedures

At the initial stage of the study, a comprehensive list of all NGO organizations working in the Palestinian Territories was compiled, along with their contact information. In order to compile a comprehensive list, I relied on two main sources: 1) the 2009 *Handbook of NGOs in the Occupied Palestinian Territories*, and 2) *The Palestinian Nongovernmental Organizations Network (PNGO)* www.pngo.net. The handbook included a comprehensive list of all NGOs operating in the Palestinian Territories, along with some basic information such as NGOs’ mission, size, the year it was founded, address, phone number, and contact person. I also relied on the online database *PNGO*, which included a partially overlapping list of NGOs operating in the Palestinian Territories, along with contact information.

In order to make the data collection process feasible, I decided to concentrate on local NGOs that have their headquarters based in the City of Ramallah. Using my two sources, I identified 165 listed organizations. Since I was interested in testing my variables with Top Management Teams, I excluded organizations that had less than 6 full time staff members. In addition, I excluded organizations that 1) were registered as NGOs but were no longer active in the field, 2) were only active periodically, for example, only during the summer 3) were registered as NGOs but their work was not applicable to my study. For example, this included infant care centers, summer camps, and private elementary and high schools. Then, I began contacting organizations by phone in order to arrange for onsite meetings. Within four weeks, I was able to arrange visits with 31 directors/assistant directors of NGOs operating within the City of Ramallah. My in-person meetings allowed me to explain the purpose of my study, and to learn more about the structure of each particular NGO, which in turn enabled me to make informed decisions around potential participants from each organization. After getting the directors' agreement to participate in the study, the next step was to identify the Top Management Teams (TMTs). This was achieved by asking the directors "*how do you make decisions around here*" and "*who are the individuals that have impact on the way your organization looks and runs*". Typically, large and medium NGOs had a clear structure of TMTs in place, while small NGOs included all full time staff, excluding administrative positions, part time staff, interns, and volunteers. I gave the appropriate number of paper surveys to the directors, and arranged for follow up meetings to collect the completed questionnaires. Overall, it took 8 weeks and hundreds of follow-up calls to get back the completed questionnaires from all participating organizations.

Measurement

Integrative Complexity

The integrative complexity (IC) of the Top Management Teams (TMTs), their ability to differentiate and integrate issues, was assessed using the essays methodology originally developed by Streufert (1970). Participants were presented with the following scenario: “The Israeli Palestinian Conflict has been going on for many years now. Please take the next 5-7 minutes to describe your teams’ thoughts regarding this issue”. After the completion of the essays, participants’ cognitive complexity was measured based on the scoring manual developed by Baker-Brown, Ballad, Bluck, De Vries, Suedfeld, and Tetlock (1992) (for more details see the appendix). Myself and another coder were trained in using the integrative complexity coding system. Coders “will be considered qualified once they reach 85% agreement or alternatively, a correlation of 0.85 with an expert” (Suedfeld, Tetlock, & Streufert, 1992, p. 399). Integrative complexity was coded on a 7-point scale (Schroder, et. al 1967; Tetlock & Hannum, 1984). *Score of 1* reflects low differentiation and low integration. Events are classified into dichotomous, good-bad categories. *Score of 3* reflects moderate to high differentiation, but low integration. The individual recognizes alternative points of view, but does not perceive relations between them. *Score of 5* reflects moderate to high differentiation and moderate integration. The individual develops an explicit comparison rule to contrast alternative perspectives on the issue. *Score of 7* reflects high differentiation and high integration. The individual uses complex rules to compare and contrast alternative perspectives on the issue. *Scores of 2, 4, and 6* represent transition points between levels. These scores are assigned when participants demonstrate implicit differentiation or implicit integration (Appendix B).

Behavioral Complexity

Behavioral complexity was assessed using the measure developed by Lawrence, Lenk, and Quinn (2009), which was based on the Competing Values Framework (CVF; Quinn, 1984). The measure consists of 36 items (See Appendix D) which reflects two dichotomous or competing values: flexible versus stable structure and internal versus external focus. These four dimensions ultimately reflect four types of distinct orientations to leadership: 1) Collaborate 2) Compete 3) Create and 4) Control. At the top of the page, the following phrase appears “I would describe our Top Management Team as being skilled in the following”. The questions are administered with a 5-point likert scale that range from strongly disagree to strongly agree. Each one of the four dimensions has six questions associated with it (See Appendix D). The cronbach alpha was found to be .87.

Emotional Complexity

The perceptions of TMTs emotional complexity, their ability to experience a range of emotions at the workplace, were assessed using the Differentiation of Emotional Experience Scale (RDEES) developed by Kang and Shaver (2004). The measure consists of 14 items, and participants were asked to rate the range and differentiation of their emotional experiences on a 5 point Likert scale ranging from strongly agree to strongly disagree. The cronbach alpha of the 14 item RDEES was .76.

Organizational Resilience

Organizational resilience, its ability to bounce back from hardship, was assessed using the Brief Resilience Scale (BRS) developed by Smith, Dalen, Wiggins, Tooley, Christopher, and Bernard (2008). The authors noted that all previous measures of resilience have generally assessed protective factors or resources that involve personal characteristics and coping styles.

For example, the Resilience Scale (developed by Wagnild & Young, 1993) measures equanimity, perseverance, self-reliance, meaningfulness, and existential aloneness. Similarly, the Connor Davidson Resilience Scale (Conner & Davidson, 2003) aimed to assess characteristics such as self efficacy, sense of humor, patience, optimism, and faith (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008). In contrast, Smith and his colleagues developed a new scale that measures resilience directly. They define resilience as “the ability to bounce back and recover from stress” (P. 194). Their measure assesses resilience on the individual level, and consists of six items (See Appendix E), where participants are asked to rate their answers on a 5 point Likert scale ranging from “strongly disagree to strongly agree). In order to assess resilience from an organizational perspective, I adapted the BRS items in the following way: instead of saying “Out Top Management Team tends to bounce back quickly after hard times”. Cronbach alpha was .64

Job Adaptability

Pulakos, Arad, Donovan and Plamondon (2000) developed a taxonomy of adaptive job performance using over 1000 critical incidents from 21 different jobs. They identified eight dimensions that define adaptive performance:

- a) *Handling emergencies or crisis situations*: Reacting with appropriate and proper urgency in life threatening, dangerous, or emergency situations; quickly analyzing options for dealing with danger or crises and their implications; making split second decisions based on clear and focused thinking; maintaining emotional control and objectivity while keeping focused on the situation at hand; stepping up to take action and handle danger or emergencies as necessary and appropriate.
- b) *Handling work stress*: remaining composed and cool when faced with difficult circumstances or a highly demanding workload/schedule; not overreacting to unexpected news or situations;

managing frustration well by directing effort to constructive solutions rather than blaming others; demonstrating resilience and the highest levels of professionalism in stressful circumstances; acting as a calming and settling influence that others look to for guidance.

c) Solving problems creatively: employing unique types of analyses and generating new, innovative ideas in complex areas; turning problems upside- down and inside-out to find fresh, new approaches; integrating seemingly unrelated information and developing creative solutions; entertaining wide ranging possibilities others may miss, thinking outside the given parameters to see if there's a more effective approach; developing innovative methods of obtaining or utilizing resources when insufficient resources are available to do the job.

d) Dealing with uncertain unpredictable work situations: taking effective action when necessary without having to know the total picture or have all the facts at hand; readily and easily changing gears in response to unpredictable or unexpected events and circumstances; effectively adjusting plans, goals, actions, or priorities to deal with changing situations; imposing structure for self and others that provide as much focus as possible in dynamic situations; not needing things to be black or white, and refusing to be paralyzed by uncertainty or ambiguity.

e) Learning work tasks, technologies, and procedures: demonstrating enthusiasm for learning new approaches and technologies for conducting work; doing what is necessary to keep knowledge and skills current; quickly and proficiently learning new methods or how to perform previously unlearned tasks; adjusting to new work processes and procedures; anticipating changes in the work demands and searching for and participating in assignments or training that will prepare self for these changes; taking action to improve work performance deficiencies.

f) Demonstrating interpersonal adaptability: being flexible and open-minded when dealing with others; listening to and considering others' viewpoints and opinions, and altering own opinion

when it is appropriate to do so; being open and accepting of negative or developmental feedback regarding work; working well and developing effective relationships with highly diverse personalities; demonstrating keen insight of others' behavior and tailoring own behavior to persuade, influence, or work more effectively with them.

g) Demonstrating cultural adaptability: taking action to learn about and understand the climate, orientation, needs, values, etc. of other groups, organizations, or cultures; integrating well into and being comfortable with different values, customs and cultures; willingly adjusting behavior or appearance as necessary to comply with or show respect for others' values and customs; understanding the implications of one's actions and adjusting approach to maintain positive relationships with other groups, organizations, or cultures.

h) Demonstrating physically oriented adaptability: adjusting to challenging environmental states such as extreme heat, humidity, cold, dirtiness, etc.; frequently pushing self physically to complete strenuous or demanding tasks; adjusting weight/muscular strength or becoming proficient in performing physical tasks as necessary for the job. Based on the above descriptions, an instrument with 37 items (4-6 items per dimension) was developed¹. Cronbach alpha was .95.

¹ A pilot study was conducted, and 58 participants participated in the study. On a 5-point Likert scale they rated their job adaptability. Cronbach alpha was (0.83). Analyzing the sub-scales yielded the following results: Handling crises and emergencies (Cronbach alpha=0.83), handling work stress (Cronbach alpha=0.25, when dropping item # 6, Cronbach alpha=.70) solving problems creatively (Cronbach alpha=0.87), dealing with uncertainty (0.73, when dropping item # 19, Cronbach alpha=0.79), learning work task and procedures (Cronbach alpha=0.77), interpersonal adaptability (Cronbach alpha=0.77, when dropping item # 31, Cronbach alpha=0.79), cultural adaptation (Cronbach alpha=0.7), physical adaptation (Cronbach alpha=0.73).

Perceived internal and external organizational Effectiveness

In order to assess organizational effectiveness, I relied on two effectiveness measurements developed by Espirito (2001) using the Delphi method (obtaining consensus by experts) and administered to 400 U.S based NGO's. the first measure, I refer to as *external effectiveness*, and it reflects the degree to which objectives are met within budget constraints, overall goals are attained, services are perceived as valuable, funding is maintained and sufficient, and impact on the served population (see Appendix). The second measure I refer to as *internal effectiveness*, and it reflects organizational performance indicators. These indicators include: Goal clarity, clarity of program activities, goal setting, activities, decisions of task structure, performance assessment, intervention strategy, goal determination, communication, change in decision making, interdependence, diversity of funding sources, and long term decisions.

CHAPTER IV: RESULTS

Overview

The current chapter presents all data analyses conducted to test the hypotheses of the study. First, I share with the reader the rationale for conducting linear transformations and the statistical method for data analysis. Then a summary of the significant intercorrelations are presented. Following that, the results addressing the relationship between integrative complexity and perceived internal and external effectiveness are presented separately due to the fact that only 40% of the total respondents answered the relevant question. Then, utilizing Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM), I present the results on the relationship between perceived behavioral and emotional complexity of Top Management Teams (TMTs), perceived job adaptability of TMTs, and their association to perceived internal and external effectiveness. In addition, separate Confirmatory Factor Analysis are computed for perceived internal and external effectiveness, perceptions of TMTs job adaptability, and perceived TMTs behavioral complexity. Finally, the results of exploratory analyses are presented, which include the testing of mediation model of TMTs perceived resilience, and interaction effect between perceptions of TMTs behavioral and emotional complexity are discussed.

Preliminary Data Analyses

Linear transformations (standard scores): since the properties of any raw score scale are dependent on the characteristics of the particular scale, it is frequently considered preferable to transform the scales into an other system of equal units that would be independent of the specific properties of the various scales (Angoff, 1984). Obtaining z scores is a common method for achieving equality of units. Therefore, before investigating the relationships between the various

independent and dependent variables, I transformed and standardized all scales by calculating z scores by subtracting the populations' mean from the individual raw score and dividing the difference by the populations' standard deviation.

$$z = \frac{x - \mu}{\sigma}$$

The transformed scales included integrative complexity, behavioral complexity, emotional complexity, job adaptability, organizational resilience, and both perceived internal and external organizational effectiveness.

Determining Data analysis strategy

Theoretically, nested data, where individuals are embedded within organizations, often employ Hierarchical Linear Models (HLM), because it recognizes that individuals within a particular group may be more similar to one another than individuals in other groups and thus do not provide independent observations (Hoffman, 1997). However, in order to determine empirically whether HLM is appropriate, one needs to calculate Intra-Class Correlation (ICC), “a measure of the degree of dependence of individuals in the data set (Kreft & de Leeuw, 1998). Raudenbush and Bryk (2002) defined ICC as the proportion of the between variance to the sum of the between-group variance and the within-group variance in the dependent variable. I calculated the ICC twice using perceived external and internal effectiveness as the dependent variables. ICC (perceived external effectiveness) = $.0024 / (.0024 + .1332) = .018$, and ICC (perceived internal effectiveness) = $.0097 / (.0097 + .1094) = .081$. While a high ICC indicates that much variation in the dependent variable is due to the features of organizations, a low ICC indicates that much of the variation in the dependent variable is due to individual characteristics (Snijders & Bosker, 1999). It is often recommended to consider using HLM in cases where ICC is .25 or greater (Guo, 2005). The low ICC values I have in my study suggests that using

regression models are most appropriate for my data analysis. In addition, I conducted the *Likelihood ratio test* which is performed by estimating two models (HLM versus multiple regressions) and comparing the fit of one model to the fit of the other one. The results of the Chi tests were significant ($X^2=1.31(2)$, $p=.013$), suggesting that linear regression models are a better fit for my results. Ultimately, I decided to present the regression analyses utilizing Structural Equation Modeling (SEM). The details of the rationale are presented in the SEM section.

Correlation Analyses

After conducting descriptive analyses (Table1), I computed inter correlations among all study variables. Results are summarized in Table 5. The results revealed several significant correlations. As for correlations among control variables and the predictor and outcome variables, it was found that the existence of other branches of the examined NGOs was positively correlated with individual integrative complexity ($r=.26$, $p<.05$). In addition, NGOs that have solely Palestinian staff (not multinational) were positively correlated with integrative complexity ($r=.28$, $p<.05$). Finally, NGOs of small size (staff <30) were positively correlated with perceptions of Top Management Team's job adaptability ($r=.2$, $p<.05$). In regards to the predictor and outcome variables, most of them were found to be inter correlated. More specifically, perceptions of TMTs behavioral complexity were significantly correlated with perceptions of TMTs emotional complexity ($r=.38$, $p<.001$), individual integrative complexity ($r=.19$, $p<.05$), perceived job adaptability of TMTs ($r=.70$, $p<.05$), perceived organizational resilience ($r=.46$, $p<.001$), and perceived internal effectiveness ($r=.65$, $p<.001$) and perceived external effectiveness ($r=.70$, $p<.05$). Furthermore, perceived emotional complexity of TMTs were significantly correlated with perceptions of TMTs job adaptability ($r=.32$, $p<.001$), perceived organizational resilience ($r=.28$, $p<.001$), perceived internal effectiveness ($r=.39$,

$p < .001$), and perceived external effectiveness ($r = .34, p < .001$). Individual integrative complexity was found to be negatively correlated with perceived external effectiveness ($r = -.28, p < .05$). Perceived TMTs job adaptability was positively correlated with perceived organizational resilience ($r = .66, p < .001$), perceived internal effectiveness ($r = .55, p < .001$), and perceived external effectiveness ($r = .56, p < .001$). Perceived organizational resilience was found to be positively correlated with perceived internal effectiveness ($r = .45, p < .001$) and perceived external effectiveness ($r = .39, p < .001$). Finally, both perceived internal and external effectiveness were positively correlated ($r = .66, p < .001$).

Separate analysis for the Effects of Integrative Complexity on Perceived Internal and External Effectiveness

Out of the 133 participants, only 54 answered the integrative complexity question sufficiently, accounting for 40.6% of the total respondents. Because of the small response rate for this variable, which can affect the robustness of the findings, it was decided to analyze integrative complexity separately from the other predictor variables where the response rate was considerably higher. In addition, while behavioral complexity, emotional complexity, and job adaptability refer to participants' *perceptions of TMTs*, the measure of integrative complexity assessed each individual's cognitive structure. Therefore, it made more sense theoretically to analyze integrative complexity separately.

I hypothesized that integrative complexity would be positively associated with perceived internal and external complexity. The data was analyzed after reaching inter-rater reliability of the coding for integrative complexity of .85. Contrary to expectations, the results indicated that integrative complexity was negatively associated with perceived external effectiveness ($b = -.243$,

$p < .05$). As for the effect of integrative complexity on perceived internal effectiveness, no significant relationship was found. I will address this finding in the discussion.

Analysis of data using Structural Equation Modeling (SEM)

SEM can be described as a combination of factor analysis and multiple regression (Ullman, 2001). It essentially encompasses two components: a) a measurement model, a confirmatory factor analysis (CFA) and b) a structural model. CFA is used to examine the extent of interrelationships and covariations among the latent constructs through factor loadings, unique variances, and modification indexes (such as dropping a variable or adding a path) are estimated in order to derive the best indicators of latent variables prior to testing a structural model (Schreiber, Stage, King, Nora, & Barlow, 2006). The structural model displays the interrelations among latent constructs and observable variables as a succession of structural (regression) equations (Schreiber, Stage, King, Nora, & Barlow, 2006).

While it is possible for the measurement and structural submodels to be estimated simultaneously, I followed Anderson and Gerbing's (1988) recommendation to conduct a two step approach, where the measurement model is estimated separately, prior to the estimation of the structural model. The structural model provides an assessment of nomological validity, a form of predictive validity which reflects the degree to which a construct behaves as it should within a system of related constructs (Campbell, 1960).

Overall Measurement model: Confirmatory Factor Analysis

CFA is a statistical procedure in which items or subscales are associated a priori with selected factors and the adequacy of the model is examined through fit indices that measure the degree to which the factor model reproduces the empirical covariance matrix (Bryant & Yarnold, 1995). Results were produced using the Mplus application (Muthen & Muthen, 2004). According

to Hu and Bentler (1999), an acceptable CFA fit model is characterized by the following values: Comparative Fit Index (CFI) > .90, Root Mean Square Error of Approximation (RMSEA) < .10, and Standardized Root Mean Squared Residual (SRMR) < .08.

The measurement model included the following latent constructs: handling emergencies, coping with stress, problem solving, tolerance for ambiguity, learning, interpersonal adaptability, cultural adaptability, physical adaptability (job adaptability constructs), and then collaborate, compete, create, control (behavioral complexity constructs), emotional complexity, perceived TMTs resilience, internal effectiveness (13 items) and external effectiveness items (7 items). The results demonstrated good model fit: CFI=.94; RMSEA=.008; SRMR=.004). Table 6 shows the factor loadings of all latent constructs. Overall, the CFA showed significant factor loadings. Two items loaded relatively less strongly on their factors. The first is the second item of the external effectiveness factor (.34), “overall goals accomplished”, and the second is item number 13 of the internal effectiveness factor (.37), “diversity of funding resources”. Even though the loadings of these two items were weaker than the rest of items, I decided to keep them because they were both statistically significant in terms of their fit with their respective internal and external constructs ($p=.000$).

Structural model

Figure 1 shows the structural model with the various path coefficients, reflecting the various hypotheses. The results demonstrated good model fit: CFI=.90; RMSEA=.006, SRMR=.067). As shown, in accordance with hypotheses (*1d*, *1e*), perceptions of TMTs behavioral complexity was positively related to both perceived internal effectiveness (path=.68, $p=.003$), and perceived external effectiveness (path=.82, $p=.001$). Perceived TMTs' emotional complexity, it was found to be positively associated to both internal effectiveness (path=.52,

$p=.021$) and perceived external effectiveness (path=.70, $p=.001$), addressing hypotheses *If* and *Ig*. As for the relationship between perceptions of TMTs job adaptability and perceived internal and external effectiveness (hypotheses *2c* and *2d*), the results indicated that job adaptability was associated with external perceived effectiveness (path=.12, $p=.028$), and was not related to perceived internal effectiveness (path= .06, ns). Perceived TMTs resilience was not found to be associated with the two outcome variables (hypotheses *2a* and *2b*)

Independent Confirmatory Factor Analysis for Behavioral Complexity, Job Adaptability and Perceived Internal and External Effectiveness

As noted earlier, confirmatory factor analysis was conducted to test for the overall model fit. The measurement model included eight subscales of perceived job adaptability, four dimensions of perceived behavioral complexity, an average score of perceived emotional complexity, 13 items of perceived internal effectiveness and seven items of perceived external effectiveness. Given the relatively small sample of the study, and as an extra step of caution, I decided to conduct independent confirmatory factor analysis for the internal and external effectiveness measures, job adaptability, and behavioral complexity. The purpose of this analysis was to confirm the construct validity for each measure independently. The results were as follow:

Confirmatory Factor Analysis (CFA) for Behavioral Complexity:

The measure of behavioral complexity consisted of a composite variable constructed out of the following subscales: 1) collaborate 2) compete 3) create 4) control. Results showed acceptable model fit (CFI= .96, RMSEA= .07, SRMR= .018).

The highest factor loadings (explained variance) was compete ($R^2=.80$), followed by create ($R^2=.65$), control ($R^2=.60$), and lastly collaborate ($R^2=.46$). The correlation matrix among the 4 dimensions are summarized in Table 7.

Confirmatory Factor Analysis (CFA) for Job adaptability:

The job adaptability scale consists out of the following sub-scales: 1) handling emergencies 2) coping with stress 3) problem solving 4) tolerance for ambiguity 5) learning 6) interpersonal adaptability 7) cultural adaptability 8) physical adaptability. The results met the criteria for acceptable model fit (CFI= .98, RMSEA= .086, SRMR= .026), indicating high construct validity of the measurement. The highest factor loadings (explained variance) was learning ($R^2=.79$), followed by interpersonal adaptability ($R^2=.76$), handling emergencies($R^2=.73$), cultural adaptability ($R^2=.72$), coping with stress and tolerance to ambiguity (.68), solving problems ($R^2=.57$), and lastly, physical adaptability (.47). The correlation matrix among the 8 subscales are summarized in Table 7, which demonstrate overall cross-correlations among the 8 sub dimensions. Table 8 reflects intercorrelations among all variables.

Confirmatory Factor Analysis for Perceived internal and external effectiveness:

13 internal effectiveness items and 7 external effectiveness items were analyzed using CFA. The purpose was to confirm that internal and external effectiveness are distinct constructs. The proposed two factor model met the criteria for acceptable model fit (CFI= .94, RMSEA= .06, SRMR= .056). Given the results, I was able to make the argument that internal effectiveness and external effectiveness are empirically distinct constructs, but highly correlated ($R=.64$; $P=0.000$). Figure 2 demonstrates these results.

Exploratory Analyses

Testing for mediation effect for Top Management Teams' (TMTs) perceived resilience

To my surprise, TMTs perceived resilience was not found to be significantly associated neither with perceived internal nor external effectiveness. I decided to conduct an exploratory analysis to investigate a different model fit, where perceived TMTs resilience plays a mediating role between perceived TMTs behavioral complexity, Perceived TMTs emotional complexity, Perceived TMTs job adaptability and perceived internal and external effectiveness of their respective organization. Structural equation modeling was utilized to investigate this relationship. Assessment of fit calculates how similar the predicted data are to matrices containing the relationships in the actual data (Kline, 2005). The results are summarized in Table 9, and are visualized in figures 3 and 4. While the mediation model (model 1) did not meet good fit indices (Figure 3), SEM suggested an alternative model (Model 2), that is closely related to Model 1 which indicated good model fit. The measures of fit were the following: CFI=.95, TLI=.93, RMSEA=.08, and SRMR=.004 (Figure 4). As demonstrated in figure 4, resilience fits in the mediating fit model, only when there is a direct path connecting behavioral complexity with perceived external effectiveness. When testing for significant paths, perceptions of TMTs job adaptability was positively associated with resilience (path=.72, $p < .01$), however, the path between resilience and perceived internal effectiveness and perceived external effectiveness were not significant (path=.05, $p = ns$; path=.12, $p = ns$, respectively). The implications of these results are discussed in the discussion section.

Interaction effect between behavioral and emotional complexity

A significant negative interaction effect was found between behavioral complexity and emotional complexity and perceived external effectiveness ($b = -1.07$, $p < .001$), and with

perceived internal effectiveness ($b = -.74$, $p < .05$). Figures 5 and 6 show the univariate plot of behavioral and emotional complexities to perceived external and internal effectiveness. Figures 5 and 6 represent the multivariate plots of behavioral and emotional complexities to perceived external and internal effectiveness using the regression coefficients. As demonstrated in the figures, the combined effect of behavioral and emotional complexity is negatively associated with perceived external and internal effectiveness.

Furthermore, I conducted Hierarchical multiple regressions in order to examine the added explained variance (R^2) of the interaction term beyond the main effects. As for the interaction effect regarding perceived internal effectiveness, the explained variance of the main effects was $R^2 = .47$. Adding the interaction term increased the explained variance to $R^2 = .49$. This means that the interaction effect added 2% of explained variance. The interaction effect in relevance to perceived internal effectiveness was the following: the explained variance of the main effects was $R^2 = .40$, and adding the interaction term increased the explained variance to $R^2 = .43$. In other words, the interaction term added 3% of explained variance. The result of likelihood ratio test suggested that the overall model is better using the interaction term ($X^2 = .7.78$, $p = .005$).

In attempts to better understand the meaning of the interaction term, I dichotomized behavioral and emotional complexities (high and low) by taking the mean as the cutoff point. Figure 7 shows that perceived internal effectiveness is highest when individuals are high on behavioral complexity and low on emotional complexity, perceived effectiveness is moderate when individuals are high on emotional complexity, and low on behavioral complexity, and perceived effectiveness is lower when individuals are high on both behavioral and emotional complexity, and perceived effectiveness is lowest when individuals are low on both behavioral and emotional complexities. These findings will be discussed in the discussion section.

Effect of Control variables

I utilized hierarchical linear regressions in order to examine any potential moderating effects of the individual and organizational control variables (i.e. size of the organization, field, branch, years of experience, age, sex). None of the control variables were found to have any moderating effects on the outcome variables (p, *ns*).

CHAPTER V: DISCUSSION

Overview of the results

The current research tested the relationships among levels of integrative complexity of members of NGO's top management teams (TMTs), their perceptions of their TMTs' behavioral complexity, emotional complexity, job adaptability, and organizational resilience, and their impact on perceived internal and external effectiveness. The overall results revealed the following: Both perceived behavioral complexity and emotional complexity of TMTs' were found to be significantly associated with perceptions of internal and external effectiveness. Additionally, perceptions of job adaptability of TMTs was significantly related to perceptions of external effectiveness, but not internal effectiveness. Contrary to expectations, it was found that high levels of integrative complexity was negatively associated with leader's perceptions of the external effectiveness of their NGO, but was not found to be significantly related to perceived internal effectiveness. Finally, exploratory analyses showed assessment of fit for a partial mediation model of TMTs perceived resilience, and an interaction effect between behavioral and emotional complexity in terms of their combined impact on perceptions of NGO effectiveness. In the next section, I will discuss these findings in detail, and address their implications.

Perceptions of behavioral complexity in TMTs and perceived internal and external effectiveness

It was hypothesized that perceptions of TMTs behavioral complexity will be associated positively with perceived internal and external effectiveness. F. Scott Fitzgerald (1945) wrote that "the test of a first-rate intelligence is the ability to hold two opposing ideas in mind at the same time as still retain the ability to function" (p. 526, in Denison, Hooijberg, & Quinn, 1995). By the same token, it was argued that effective leaders are able to exhibit contradictory behaviors while still retaining some measure of integrity, credibility, and sense of direction (Denison,

Hooijberg, & Quinn, 1995). In accordance with the above hypothesis, it was found that perceptions of the level of behavioral complexity of TMTs predicted both perceived internal and external effectiveness of organizations. The higher the levels of perceived behavioral complexity of TMTs', the more likely leaders perceived their organization to be effective, both internally and externally. The current findings suggest that when organizations contain leaders who are perceived to be both collaborators and competitors, creative and controlling, their organization is perceived to be more effective.

These findings fit well with the general climate in which NGOs operate in the Palestinian Territories. While being collaborative, where leaders encourage participation and development of staff, is important to organizational functioning (Burke, 2002), competitiveness is also needed in the presence of the politics of international aid, project biddings of many other NGOs, and the demand to demonstrate effectiveness to donors (Brynen, Awartani, & Woodcraft, 2000). In fact, the pressure to compete was evident in the results because the highest loadings of the behavioral complexity construct was in the dimension "to compete". Similarly, leaders needed to be both able to create, by anticipating needs, initiating significant changes, and inspiring people, and at the same time, they had to appear in control of projects, and possess clear and accurate policies. This suggests that in difficult environments such as conflict zones, leaders are also expected to be effective managers, which blurs the classic distinctions between managers and leaders (Zaleznik, 1977). One should note that the ability to be both managers and leaders is a challenging task, especially in highly volatile environments that require interveners and inspiring leaders to possess persistence vision and high morale in the face of daunting realities. Other than being able to embrace two supposedly contradictory roles, the nature of the context adds another layer of challenges. In situations where things are constantly in flux, the institutionalization of

organizational processes and procedures, providing a sense of direction and stability can turn out to be nearly impossible. The experiences I had such as the difficulty to set up appointments provides a glimpse into management challenges.

Perceptions of emotional complexity of TMTs and perceived internal and external NGO effectiveness

Emotions lurk behind behaviors, animate our decisions, and are essential to leadership (Barsade & Gibson, 2007). The dominant view about employee emotions in the 20th century was that workers who experience positive affect at work will be productive and effective (Staw, Bell, & Clausen, 1986). The literature on emotional complexity is still in its infancy, however, it invites us to consider that perhaps what contributes to organizational effectiveness is not only the ability to experience positive emotions at the workplace but instead the ability to experience an array of differentiated emotions, that can be both positive and negative, that experiential processes (Denes-Raj & Epstein, 1994) are associated with higher perceptions of effectiveness. The findings of the current study indicate that, in fact, this is the case. Those who perceived their TMT's to be more emotionally complex, being able to experience a wide range of emotions and differentiate among them, ultimately viewed their organization to be more effective. This finding is particularly important for organizations who work in conflict and war zones.

The reality under which NGOs operate is harsh, stressful, and often frustrating. In this context, negative emotions are prevalent, but the ability to move into positive emotions as well is key. Thus, it does not come as a surprise to find that being able to experience a wide range of emotions, is associated with higher perceived effectiveness. Working with NGOs in the Palestinian Territories is a form of activism, and with activism comes a wide range of emotions. While most studies of emotions and activism have often attempted to uncover the emotions most

relevant to politics (Goodwin, Jasper, Polletta, 2001), what the current study indicates is that we should also dedicate some time exploring the range of emotions activists need to experience to be effective at their work. That both positive and negative emotions such as anger and hope can be facilitative in interveners' work.

Perceptions of job adaptability of TMTs and perceived internal and external NGO effectiveness.

Perceptions of TMTs job adaptability were expected to be positively associated with perceived internal and external effectiveness. In accordance with study hypotheses (2c and 2d) it was found that perceptions of higher levels of job adaptability in TMTs was associated with higher perceptions of external effectiveness, while no relationship was found between perceived job adaptability of TMTs and perceived internal effectiveness. One factor that may explain these results has to do with the distinct constructs of internal versus external effectiveness. Internal effectiveness was operationalized in terms of performance indicators that had to do with the day-to-day activities of organizations that are managerial in their nature (e.g. clarity of goals, communications, procedures, etc.), where the operationalization of external effectiveness was more oriented towards external factors that included the opinions of the donors and stakeholders, serving the population and fulfilling the overall mission of the organization by meeting its goals. Furthermore, job adaptability consisted of several sub-dimensions that included interpersonal and cultural adaptability, tolerance for uncertainty, and learning new things, among others. In retrospect, it seems more plausible to find relationship between job adaptability and perceived external effectiveness, and not internal effectiveness. In other words, the study's conceptualization of job adaptability suggests adaptation to be a responsiveness to something external, including adaptation to a different culture, person, or realities of external environment such as ambiguity and emergencies.

Integrative complexity and perceptions of internal and external effectiveness

Lewis and Jacobs (1992) argued that because of the increasingly complex nature of organizational life, only leaders who can cognitively deal with the complexities of their settings will be able to function effectively. The current study hypothesized that participants' integrative complexity will be positively associated to perceived internal and external effectiveness. Contrary to the hypothesis of the study, it was found that the higher the level of a leader's integrative complexity, the less she or he perceived their organization to be externally effective. This finding was surprising, as we had expected to find that leaders who had more nuanced understandings of their NGO and of the context in which they worked would be able to see more areas of impact of their organization's efforts. However, in retrospect, this finding is in alignment with prior research on the implications of integrative complexity on perceptions.

First, it is important to note that unlike all other measures utilized in the currently study, the integrative complexity measure was an individual-level assessment of each leader's cognitive structure: of their ability to differentiate and integrate various elements related to a specific issue or topic. In other words, while all other variables revolved around the leader's *perceptions of their TMTs*, the integrative complexity measure was a direct assessment of the cognitive structure of each individual surveyed. Thus, it is logical that these different measures of complexity yielded different results.

The current study assessed individual-level integrative complexity by asking participants to write down their thoughts regarding the Israeli- Palestinian conflict. Those who were low on integrative complexity expressed a more narrow and unidimensional understanding of the complex and changing issues involved in the Israeli-Palestinian conflict. For example, one of the participants expressed the following thought "it [*the Israeli Palestinian conflict*] is an

occupation, we need to throw them out and end it". On the other hand, an individual who was high on integrative complexity said the following " *To solve the Israeli-Palestinian conflict, multiple issues need to be addressed and agreed upon. This includes, the evacuation of the settlements, borders, water, status of the refugees, and Jerusalem. To reach a solution, the leaders of both sides need to negotiate, occupation needs to end, and Palestinian violence needs to stop*". As demonstrated by the above quotes, those who are higher on integrative complexity recognize the multiplicity of issues, and more importantly, the multilevel efforts that need to be invested in order to resolve the conflict.

Given the above, it is plausible to argue that those who measured high on integrative complexity better understood the extraordinary complexity and constraints imposed by the situation in which they worked, and following that, the limitations of their own work as change agents. In other words, a more nuanced understanding of the problems they faced may have led to a more realistic assessment of their ability to have a positive impact. In such settings, a comprehensive change may need intervention on multiple levels. High-complexity leaders may better understand that real change needs to happen on various levels: top-down, involving leaders and elite decision-makers; middle-out, involving mid-level leaders and community networks, structures, and processes; and bottom-up, relating to grass-roots organizations and the general public (Lederach, 1997; Kriesberg, 2005; Coleman, 2003). Relevant to this argument is what Epstein (1994) termed experiential and rational systems. He argued that people have two fundamental ways of knowing, one being associated with feelings and experience and the second being associated with intellect. While the rational system is deliberate, verbally mediated, and primarily conscious analytical system that functions by an individuals' understanding of conventionally established rules of logic and evidence, the experiential system operates in an

automatic, holistic, associationistic way, and is linked with the experience of affect (Dense-Raj & Epstein, 1994). According to the cognitive-experiential self-theory (CEST) behaviors are guided by the joint operation of the two systems, with their relative influence being determined by the nature of the situation and the nature of the emotional involvement. Given that integrative complexity is negatively associated with perceived external effectiveness, this suggests that, in fact, when people use their cognitive system, they view their work to be less effective, while processing it experientially is associated with greater perceptions of organizational effectiveness (for more details see the discussion on emotional complexity).

A complementary perspective that may shed light on the results on integrative complexity comes from the literature on the external environment and its relationship to the functioning of organizations (Pfeffer & Salnsick, 1978; Burke, 2002). The importance of the environment in terms of understanding organizations was first advanced by open system theory (Katz & Kahn, 1978). The premise of the idea was that if you wanted to understand the choices and decisions organizations make, one should focus less on organizational internal dynamics, leaderships' values and beliefs, and place more emphasis on the context in which organizations were located and the pressures and constraints they had to face. This approach was consistent with the idea of situationalism in social psychology (Pfeffer & Salnsick, 1978). Based on the results of the current study, one can argue that participants saw the external environment as integral part of perceived external effectiveness. In other words, their perceptions of their NGO's level of external effectiveness could not be separated from the larger context, in which military occupation, violence, poverty, and a challenging infrastructure dominated.

Interaction effect between perceived behavioral and emotional complexity of TMTs and NGO effectiveness.

An exploratory analysis revealed an interaction effect between behavioral and emotional complexity on perceptions of NGO effectiveness in active conflict settings. Put simply, the highest levels of perceived internal and external organizational effectiveness were found when TMTs were perceived to be high on behavioral complexity and low on emotional complexity. The second highest level of NGO effectiveness was found with perceptions of high levels of emotional complexity and low levels of behavioral complexity. Third was with high levels of both behavioral and emotional complexity, and least effective NGOs were associated with low levels of both behavioral and emotional complexity.

Interaction effects are interesting to find, however, their theoretical interpretation can be challenging. Evans (1991) warned psychologists about the misuse and interpretations of multiplicative composites. Evans (1991) relied on Schmidt and Wilson (1975) who demonstrated empirically that slight changes in the means and standard deviations of the composite would markedly change the size of the correlation coefficient. Therefore, it is strongly encouraged to examine the added explained variance of the interaction term beyond the main effects. The results showed that the added explained variance ranged between 2-3%. Even though there is no agreed upon cut off of what constitutes high or low contribution of interaction term, one can argue that 2-3% out of 40% does not have significant magnitude.

That being said, one should consider the possibility that in fact the interaction is meaningful, and try and make sense of it. It does not come as a surprise given the environment in which these NGOs operate that the highest levels of perceived effectiveness were associated with a combination of high behavioral complexity and low emotional complexity among the TMTs. For a long time, behaviors have been considered the best predictors of performance, with very little attention being paid to emotions (Barsade & Gibson, 2007). It is also to be expected

that lower degrees of both behavioral and emotional complexity were associated with low perceived effectiveness. What is interesting about the interaction finding is that the combination of high emotional complexity and low behavioral complexity trumped the combination of being high on both. In other words, if we take these findings as being meaningful, the results suggest that being high on both behavioral complexity and emotional complexity is not an optimal combination for perceived organizational effectiveness in these particular settings. One possible explanation is that being high on both creates a sense of instability that is associated with lower effectiveness. In other words, being high on both emotional and behavioral complexity may create “stimulus overload”. A second potential explanation is related to organizational climate. Perhaps the presence of TMTs with high emotional complexity creates a more positive climate at the workplace (Litwin, Humphrey, & Wilson, 1978), which consequently leads individuals to rate their organization as more effective.

The above two explanations are preliminary in their nature, and subsequent research needs to be done to better understand the essence of the interaction between behavioral and emotional complexity in these work environments.

Perceptions of Top Management resilience and perceived internal and external NGO effectiveness.

Perceptions of high organizations resilience were expected to be associated positively with perceived internal and external effectiveness. Surprisingly, no significant relationships were found. An exploratory analysis testing a mediation role of TMTs resilience yield no results (Figure 3 and 4). However, the SEM results indicated a good measurement fit for Model 2 (figure 4). This implies that perhaps future research should explore what other mediating roles resilience could play.

One explanation for the lack of any significant results has to do with the administrated scale. The Brief Resilience Scale (Smith, Dalen, Wiggins, Tooley, Christopher, and Bernard (2008) is fairly new. Even though the measure was previously validated with high reliability, the current study exhibited, relatively, low reliability (Cronbach alpha=.64), which may provide a potential explanation for the absence of any relationship between perceived organizational resilience and perceived internal and external effectiveness. Replicating the current study will provide us with an opportunity to learn whether the low reliability of the scale is a function of the specific characteristics of the current participants or whether it is a result of the scale itself, which would require its adjustment.

Control variables and perceived internal and external effectiveness

Even though no explicit hypotheses were made regarding individual control variables (e.g. sex, age, number of years working at the organization, years of experience in the field), and organizational control variables (e.g. including sex, age, experience, size of the organizations, years of operations, field, branch), it was interesting to discover that none of the control variables played any moderating effect between the various relationships among the independent and outcome variables. This may be the result of the strong context in which these organizations operate under. However, there was one significant correlation that is worth noting. Small sized NGOs (up to 30 staff members) was found to be positively correlated with perceived adaptability of TMTs. This suggests that small organizations are perceived to be more adaptable. This finding is not surprising, given that large organizations tend to be more bureaucratic in nature, and thus, are perceived to be less adaptive to external changes.

Theoretical implications for studying complexity

The idea of complexity is central to the current study. The last decade has seen a rapidly growing interest in using complexity theory in the social sciences (Byrne, 1998). From economics (Grandmont, 1985), to political science (Kiel & Elliott, 1992), social psychology (Nowak & Vallacher 2005), to conflict Resolution (Coleman, Vallacher, Nowak, Bui-Wraszinska, 2006). Interestingly, the findings of the current study, specifically, the different conceptualizations and operationalizations of integrative complexity, behavioral and emotional complexity pose an important question regarding our understanding of the concept of complexity: how best to define it, operationalize and measure it. What is clear is that increasingly scholars agree on the importance of studying complexity. However, there is far less consensus around how to define and measure it. A comprehensive discussion of the various theoretical definitions and measurements of complexity is beyond the scope of this section. However, I wish to illustrate some of the challenges we are facing by focusing the discussion on the constructs of integrative complexity, behavioral complexity, and emotional complexity.

The premise of the current study was that organizations that employ more complex individuals operating in the demanding settings of active conflict zones will be associated with greater work effectiveness. In order to investigate the complexity of individuals, I measured differences in the complexity their cognitions, behaviors and emotions, using established definitions and measure of these constructs. Taking a closer look at the theoretical definitions of these constructs, we see significant differences between them. *Integrative complexity* was defined in terms of two components, the first being differentiation: the ability to perceive different dimensions within a domain or problem of interest and the second being integration: the

capacity to develop conceptual connections among differentiated dimensions (Schroder, Driver, & Sreufert, 1967). *Behavioral complexity* was defined as the array of differentiated and competing behaviors displayed by workers (Lawrence, Lenk, Quinn, 2009).

Finally, *Emotional complexity* was defined as the range and differentiation of emotional experiences (Kang & Shaver, 2004). While integrative complexity was measured by presenting participants with scenarios and asking them to write a paragraph that summarizes their thoughts on the conflict, behavioral complexity was measured using the competing values framework (CVF), which is defined by two dichotomous or competing values: flexible versus stable structures and internal versus external focus (Quinn, 1984). Furthermore, emotional complexity was measured by asking somewhat generic questions around the array of emotional experiences and the extent to which they were differentiated.

Thus, the question that presents itself is: how consistent and precise the field of psychology in its approach to understanding and measuring complexity? To make progress in this area of research, psychologists will need to be more specific and precise around what dimensions of complexity are we measuring. The field needs to have a more specified, fundamental understanding of the general construct of complexity and its various dimensions, and their distinctions. The current study demonstrated how important specificity is in terms of the results. For example, outcomes can change depending whether we are studying cognitive, behavioral, or emotional complexity, or perceptions of complexity versus cognitive structure. Therefore, future work in the field, especially theoretical should aim at better developing our understanding of complexity, and how its different aspects relate to each other, particularly, as they apply to social sciences.

Limitations

The current research study had several limitations. First, the study was a cross sectional design. While, it allowed for exploring the relationships among various variables, such a design make it hard to make causal inferences due to the lack of highly controlled environments and absence of participant randomization which makes causal inferences possible. Another limitation associated with cross sectional designs is that the data and their analyses are ultimately a snapshot into reality at very specific time. In other words, the situation may provide different results if different time and circumstances are chosen. Second, the sample size was relatively small (N=133). This was due to the fact that data collection had to be conducted and completed in an active conflict zone, making it challenging for both the researcher and the participants. While as a researcher I had to navigate a challenging infrastructure such as blocked roads, checkpoints, unavailability of physical addresses of organizations, the participants were attempting to commit to participating in the study while dealing with a demanding reality that required them to constantly adjust their schedules, physical location, activities, and other emerging demands requiring high mobility. The sample size was particularly small when it comes to the integrative complexity variable. Only 54 of the 133 participants answered the question assessing integrative complexity, which was the most time consuming question to answer. As a result, the analysis of integrative complexity and its relationship to the other variables were performed separately, because of the distinct nature of the measures (individual-assessment versus perceptions of teams), and in order to avoid reducing statistical power of the analyses.

Second, all data analyses were performed on the individual level, and no analysis were conducted on the organizational level. In order to aggregate data to the organizational level,

individual-level responses must exhibit a specified level of within-unit agreement and between unit variability, Intra-Class Correlation being .12 or larger (Bliese, 2000). The current study did not meet the criteria to be able to aggregate to the organizational level. Ultimately, if we are interested in understanding the characteristics of effective NGOs, it will be necessary to conduct analyses on both the individual and organizational levels.

Third, except for the individual integrative complexity variable, all other variables are assessed using measures of perceptions, including internal and external effectiveness, job adaptability, and organizational resilience. Ideally, the study should have relied on objective measures of these variables. Conducting a feasible study demanded making some methodological compromises, including the choice to use perceptual survey measures instead of more objective ones. For example, the external effectiveness of organizations could potentially be assessed more objectively if NGOs annual budget reports were systematically available. However, unlike the private sector, NGOs often report only to their donors and are not required to release their annual budget reports to the public. Besides, in a highly politicized and scrutinized environment such as the Palestinian Territories, asking NGOs to voluntarily share their budgets could seriously compromise the integrity of the results due to emerging suspicions or directly asking the population they serve the impact these organizations had on them (Ramalingam, Mitchell, Borton, & Smart, 2009). In fact, an online search for NGOs budget yield little results.

Implications for future research

Future research should: first, develop and employ measures for NGO assessment in conflict zones that go beyond perceptions. It was found that integrative complexity was associated negatively with perceived internal and external effectiveness. What we still do not

know is whether in reality those who were more cognitively complex were in fact more effective in their work, but perceived the effectiveness of their organization in harsher terms. Employing objective measures of internal and external effectiveness is crucial in order for us to be able to answer such a question.

Second, one interesting exploratory finding was that the perceived behavioral complexity and emotional complexity of TMTs were found to have an interaction effect. Future studies should examine more closely the definitions, measurements and relationships between behavioral and emotional complexity and see whether the current results can be replicated, which can potentially open a new line of research. Third, surprisingly, perceived organizational resilience did not have any effect on perceived internal and external effectiveness. This may be due to the measure itself, which asks participants questions around the extent to which their organization bounces back quickly. It would be interesting to see whether the results would be different if we used a measure of organizational resilience that utilizes resilience indicators instead of self report perceptions regarding organizational resilience.

Implications for conducting research in Conflict Zones

Romano (2006), who has conducted multiple research projects in conflict zones noted that he “generally tries to keep two somewhat contradictory phrases in mind when considering a research project [in a conflict zone]: nothing risked nothing gained versus dead researchers tell no tales” (p. 441). By nature, conducting research in conflict zones entails taking a certain amount of risk in terms of physical safety and the ability to complete the study, especially since catastrophic escalations and episodic violence are some of the main characteristics of intractable conflicts (Coleman, 2003). However, decades of media coverage and violent images from the Middle East can also be somewhat misleading in terms of ones’ safety. In settings of intractable

conflicts that go on for decades (Coleman, 2003; Kriesberg, 2006), locals create a sense of normalization (Bar-Tal, 1998), and for the better or worse, learn to live with the reality of conflict. In other words, high intensity violence with catastrophic fatalities occurs in episodes in the Middle East, a time during which researchers should think carefully about whether to proceed with their research because of personal safety, feasibility of the study, and ethical issues arising from conducting research during high levels of human suffering and bloodshed. When physical violence de-escalates, the picture is still gloomy, given the presence of structural violence (Galtung, 1969), the military occupation of the Palestinian Territories, and the false and tentative sense of peace. However, under such conditions, it is less challenging for researchers to conduct their research.

Romano (2006) concluded his research experience in the Middle East by encouraging researchers to pay extra attention to 1) research ethics 2) the various factors that may effect how people respond to your research questions 3) how the various parties to the conflict will react to your presence 4) the feasibility and flexibility of the research you plan to conduct on the ground 5) the level of risk you are willing to take in order to succeed in conducting your study. These points capture comprehensively my research experience in the Palestinian Territories. I found myself struggling with some ethical issues when approaching NGOs' senior staff due to the time demands of the study, their resource constraints, and my privileges as a researcher including my freedom of movement and my academic affiliation and the prestige that comes along with it. Being aware of my position as a researcher and the reality of the place helped me in terms of being sensitive to the framing of my study, local customs, and being flexible in terms of my data collection plan, and adapting it as necessary.

McCormick and White (2000) argued that one can use *self as an instrument* as an indicator of specific hypotheses, that is, that specific feelings and experiences may suggest specific conditions. As I have noted earlier, while collecting data I encountered several challenges including bad infrastructure, checkpoints, time constraints, and the need to adapt to unfolding events. It is important to note that these challenges are the reality under which NGOs have to operate under on a daily basis. While my data collection experience offers a glimpse into the life of these NGOs, it is mirrored in the hypotheses and results of this study. To navigate such challenges, interveners need to exhibit behavioral and emotional complexity, and be able to adapt to the external environment to be effective.

In his book on complexity science and the social sciences, David Byrne (1998) stated that “complexity offers the possibility of an engaged science not founded in pride, in the assertion of an absolute knowledge as the basis for social programs, but rather in a humility about the complexity of the world coupled with a hopeful belief in the potential of human beings for doing something about it (p. 45)”. It is in the spirit of such a statement, the current study was carried out, in the hope to get one step closer to helping organizations and people who have dedicated their lives to the alleviation of human suffering, and the prosperity of shattered societies.

References

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103* (3), 411-423.
- Angoff, W. H. (1984). Scales, norms, and equivalent scores. Princeton NJ: Education Testing Service.
- Azar, E. E. (1983). The theory of protracted social conflict and the challenge of transforming conflict situations. *Monograph Series in World Affairs*, *20*, 81–99.
- Azar, E. E. (1990). *The management of protracted social conflict: Theory and cases*. Hampshire, England: Dartmouth.
- Bailey, C. A. (2007). *A guide to qualitative field research* (2nd Ed.). Thousand Oaks, California: Pine Forge Press.
- Baker-Brown, G., Ballard, E. J., Bluck, S., de Vries, B., Suedfeld, P., & Tetlock, P. E. (1992). The conceptual/integrative complexity scoring manual. In C. P. Smith, J. W. Atkinson, D. C. McClelland, & J. Veroff (Eds.), *Motivation and Personality: Handbook of thematic content analysis* (pp. 401-418). New York: Cambridge University Press.
- Bar-Tal, D. (1998). Societal beliefs in times of intractable conflict: the Israeli case. *International Journal of Conflict Management*, *9*, 22-50.
- Bar-Tal, D. (2007). Social–psychological foundations of intractable conflict. *American Behavioral Scientist*, *50*, 1430–1453.
- Barsade, S. G. & Gibson, D. E. (2007). Why Does Affect Matter in Organizations? *Academy of Management Perspectives*, *21*, 36-59.
- Bartoli, A. (in press): *Contributions of NGOs to conflict resolution activities*. Submitted for publication: Brill.

Baumeister, R. F. (Bratslavsky, E., Finkenauer, C., & Vohn, K. D. (2001). Bad is stronger than good. *Review of general psychology*, 53, 279-307.

Bass, B. M. (1960). *Leadership, Psychology, and Organizational Behavior*. Harper: New York.

Bass, B. M. (1988). The inspirational processes of leadership. *Journal of management development*, 7 (5), 21-31.

Blake, R. R. and J. S. Mouton (1964). *The Managerial Grid: Key Orientations for Achieving Productivity through People*. Gulf Publishing Company: Houston, TX.

Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions*. San Francisco, CA: Josey-Bass.

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., Vohs, K. D. (2001). Bas is stronger than good. *Review of general psychology*, 5(4), 323-370.

Boutros-Ghali, Boutros. 1992. *An Agenda for Peace: Preventive Diplomacy, Peacemaking, and Peacekeeping*. New York: United Nations.

Burgess, R. G. (1986). *Field research: a sourcebook and field manual*. New York : Routledge Press.

Burke, W.W (2002). *Organization change: Theory and practice*. Thousand Oaks, CA: Sage.

Bryant, F. B., & Yarnold, P. R. (1995). Principle-components analysis and exploratory and confirmatory factor analysis. In L. G. Grimm & P. R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 99–136). Washington, DC: American Psychological Association.

- Brynen, R., Awartani, H., & Woodcraft, C. (2000). The Palestinian Territories, in S. Forman., & S. Patrick (eds), *good intentions: pledges if aid for post conflict recovery*. Lynne Rienner publications: Boulder London.
- Burns, J. M. (1978). *Leadership*. New York: Harper.
- Bullis, R. C. (1992). *The impact of leader behavioral complexity on organizational performance*.: Texas Tech University.
- Byrne, D. S. (1998). *Complexity theory and the social sciences*. London: Routledge.
- Campbell, D., T. (1960) "Blind variation and selective retention in creative thought as in other knowledge processes." *Psychological Review*, 67, 380-400.
- Campbell, J. P. 1977. On the nature of organizational effectiveness. In P. S. Goodman, J. M Pennings, *New Perspectives on Organizational Effectiveness* (pp. 13-55). San Francisco: Jossey-Bass.
- Cannella, A. A., Jr., & Monroe, M. J. (1997). Contrasting perspectives on strategic leaders: Toward a more realistic view of top managers. *Journal of Management*, 23(3), 213-237.
- Cannella, A., A. (2008). Top Management Team behavioral integration and the performance of service organization. *Group and Organization Management*, 33 (6), 712-735.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: a typology of composition models. *Journal of applied psychology*, 83(2), 234-246.
- Cicchetti, D., & Rogosch, F. A. (1997). The role of self-organization in the promotion of resilience in maltreated children. *Development and Psychopathology*, 9, 797-815.
- Coleman, P. T. (2003). Characteristics of protracted, intractable conflict: Towards the development of a meta-framework - I. First paper in a three-paper series. *Peace and Conflict: Journal of Peace Psychology*, 9(1), 1-37.

- Coleman, P. T., Bui-Wrzosinska, L., Vallacher, R., & Nowak, A. (2006). Protracted conflicts as dynamical systems: Guidelines and methods for intervention. In A. Schneider & C. Honeyman (Eds.), *The negotiator's fieldbook* (pp. 61–74). Chicago: American Bar Association Book.
- Coleman, P. T., Vallacher, R., Nowak, A., & Bui-Wrzosinska, L. (2007). Intractable conflict as an attractor: Presenting a dynamical model of conflict, escalation, and intractability. *American Behavioral Scientist*, 50(11), 1454-1475.
- Collins, J. (1994). *Built to Last: successful habits of visionary companies*. New York: Harper Collins Publishers.
- Connor, K. M., Davidson, J. R. (2003). Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). *Depression anxiety*, 18(2), 76-82.
- Conrad, M., & Hammen, C. (1993). Protective and resource factors in high- and low-risk children: A comparison of children with unipolar bipolar, medically ill, and normal mothers. *Development and Psychopathology*, 5, 593-607.
- Coutu, D. L. (2002). How resilience works. *Harvard Business Review*, 80(3), 46–55.
- DeBono, E. (1990). *I Am Right, You Are Wrong*. Viking : New York.
- De Mars, W. (2005). *NGOs and Transnational Networks: Wild Cards in World Politics*. Ann Arbor: Pluto Press.
- Denison, D. R., Hooijberg, R., & Quinn, R. E. (1995). Paradox and performance: Toward a theory of behavioral complexity in managerial leadership. *Organization Science*, 6(5), 524-536.
- Denes-Raj, V., Epstein, S., & Cole, J (1995). The generality of the ratio-bias phenomenon. *Personality and Social Psychology Bulletin*, 10, 1083-1092.
- Dorner, D. (1996). *The logic of failure: recognizing and avoiding error in complex situations*. Basic Books: NY.

- Driver, M. J. (1965). *A structural analysis of aggression, stress, and personality in an Inter-Nation simulation*(Institute Paper No. 97). Lafayette, IN: Purdue University, Institute for Research in the Band Management Sciences.
- Echeverria, R. (1994). *Ontologia del lenguaje* (ontology of language). Santiago de Chile: Dolmen Edicions.
- Epstein, S. (1994). Integration of the cognitive and the psychodynamic unconscious. *American Psychologist*, *49*, 709-724,
- Espirito, S. S. D. (2001). *Examining performance variables of nongovernmental organizations*. Retrieved February 18, 2010, from <http://wwwlib.umi.com/pqddpdf/caff665d816a88a3a7d3a781cf69be9b/2837260>
- Evans, M.G. (1991), "The Problem of Analyzing Multiplicative Composites: Interactions Revisited," *American Psychologist*, *46*, 6-15.
- Fitness, J. (1996). Emotion knowledge structures in close relationships. in G.J.O. Fletcher & J. Fitness (Eds.), *Knowledge structures in close relationships* (pp. 155-217). Mahwah, NJ: Erlbaum.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden- and-build theory of positive emotions. *American Psychologist*, *56*, 218-226.
- Fowler, A. F. (1996). Assessing NGO performance: difficulties, Dilemmas, and a way ahead, In M. Edwards, & D. Hulme (Eds.), *beyond the magic bullet. NGO performance and accountability in the post-Cold War world*. Kumarian Press: UK.
- Galtung, J. (1969). Violence, peace and peace research. *Journal of Peace Research*, *3*, 176-191.
- Ganor, M., & Ben-Lavy, Y. (2003). Community resilience: lessons derived from Gilo under fire. *Journal of Jewish communal services*, *Winter/Spring*, 105-108.
- Garnezy, N. (1971). Vulnerability research and the issue of primary prevention. *American*

- Journal of Orthopsychiatry*, 41, 101-116.
- Garnezy, N. (1974). The study of competence in children at risk for severe psychopathology. In E. J. Anthony & C. Koupernik (Eds.), *The child in his family: Vol. 3. Children at psychiatric risk* (pp. 77-97). New York: Wiley.
- Gottman, J. M., Murray, J. D., Swanson, C. C., Tyson, R., & Swanson, K. R. (2002). *The mathematics of marriage*. Cambridge, MA: MIT Press.
- Goodman, P. S., Pennings, J. M., and Associates. 1977. *New Perspectives on Organizational Effectiveness*. San Francisco: Jossey-Bass.
- Goodwin, Jeff & Jasper, James M. & Polletta, Francesca (2001) "Introduction: Why Emotions Matter," in Goodwin, Jasper, and Polletta eds., *Passionate Politics: Emotions and Social Movements* (Chicago: University of Chicago Press).
- Grandmont, J. M. (1985). On Endogenous Competitive Business Cycles. *Econometrica*, 53, 995-1045.
- Guo, S., (2005). "Analyzing grouped data with hierarchical linear modeling", *Children and Youth Services Review* 27: 637-652.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9,193-207.
- Hambrick, D. C. (1994). Top management groups: A conceptual integration and reconsideration of the "team" label. In B. Staw & L. L. Cummings (Eds.), *Research in Organizational Behavior: Vol. 16*. (pp. 171-213). Beverly Hills, CA: JAI Press.
- Hambrick, D. C., & Finkelstein, S. (1996). *Strategic leadership: Top executives and their effects on organizations*. Belmont, CA: West.
- Hart, S. L., & Quinn, R. E. (1993). Roles executives play: CEOs, behavioral complexity, and firm performance. *Human Relations*, 46(5), 543-574.
- Hampden-Turner, C. (1981). *Maps of the Mind*. New York: MacMillan.

- Harvey, O. J., Hunt, D., & Schroder, H. M. (1961). *Conceptual system and personality organization*. New York: Wiley.
- Hawley, K. (1993). *From grants to contracts: a practical guide for voluntary organizations*. London: National Council of Voluntary Organizations/Directory of Social Change.
- Hoffman, D. A. (1997). An overview of the logic and rationale of hierarchical linear models. *Journal of management*, 23, 732-744.
- Holling, C. (1973). Resilience and stability of ecological systems. *Annual Review of ecology and systematics*, 4, 1-23.
- Hooijberg, R., & Quinn, R. E. (1992). Behavioral complexity and the development of effective managers. In R. L. Phillips & J.G. Hunt (Eds.), *Strategic management: A multiorganizational-level perspective*. New York: Quorum.
- Hooijberg, R., & Quinn, R. E. (1992). Behavioral complexity and the development of effective managers. In R. L. Phillips & J.G. Hunt (Eds.), *Strategic management: A multiorganizational-level perspective*. New York: Quorum.
- Hooijberg, R. (1996). A multidirectional approach toward leadership: An extension of the concept of behavioral complexity. *Human Relations*, 49(7), 917-946.
- Hooijberg, R., Hunt, J. G., Dodge, G. E. (1997). Leadership complexity and development of the leaderplex model. *Journal of management*, 23, 375-408.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Hunsaker, P. L. (2007). Using social simulations to assess and train potential leaders to make effective decisions in turbulent environments. *Career Development International*, 12, 4, 341-360.
- Hunt, J.G. (1991). *Leadership: A new synthesis*. Newbury Park, CA: Sage.

- Hunter, A. J., & Chandler, G. E. (1999). Adolescent resilience. *Image: Journal of Nursing Scholarship*, 31, 243–247.
- Jordan, Lisa, and Peter Van Tuijl, eds. 2006. *NGO Accountability: Politics, Principles and Innovations*. Sterling: Earthscan.
- Kang, S. M., & Shaver, P. R. (2004). Individual differences in emotional complexity: their psychological implications. *Journal of Personality*, 72, 4, 687-726.
- Kanter, R.M., Brinkerhoff, D. (1981). Organizational performance: recent developments in measurement. *Annual review of sociology*, 7, 321-349.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations*, 2nd Ed. New York, NY: John Wiley and Sons.
- Kelly, G. (1955). *The psychology of personal constructs*. New York: Norton.
- Kets de Vries, M. F. K, Millier, D. (1985). Narcissism and Leadership: An Object Relations Perspective. *Human Relations*, 38, 583-601.
- Kiel, L. D., Elliott, E. (1992). Budgets as Dynamic Systems: Time, Chance, Variation and Budget Heuristics. *Journal of Public Administration Research and Theory*, 2, 139-156.
- Kotter, J. P. (1982). What effective general managers really do. *Harvard Business Review*, 60(6), 156-167.
- Kreft, I., deLeenw, J. (1998). *Introducing multilevel modeling*. London: Sage.
- Kriesberg, L. (2005). Nature, dynamics, and phases of intractability. In C. A. Crocker, F. O.Hampson & P. Aall (Eds.), *Grasping the nettle: Analyzing cases of intractable Conflict* (pp. 65–98). Washington, DC: United States Institute of Peace Press.

- Kugler, K., Coleman, P. T. (in progress). *Moral conflict and complexity: the dynamics of constructive versus destructive discussions over polarizing issues.*
- Lane, R. D., Sechrest, L., & Riedal, R. (1998). Sociodemographic correlates of alexithymia. *Comparative Psychiatry, 39*, 377-385.
- Lawrence, P. R. and J. W. Lorsch (1967). *Organization and Environment*. Harvard Business School, Division of Research: Boston, MA.
- Lawrence, K. A., Lenk, P., Quinn, R. E. (2009). Behavioral complexity in leadership: The psychometric properties of a new instrument to measure behavioral repertoire. *The Leadership Quarterly, 20*, 87-102.
- Lederach, J. P. (1997) *Building Peace: Sustainable Reconciliation in Divided Societies*. United States Institute of Peace Press, Washington, DC.
- Lee, H., Her, P. M., Kardes, F. R., Kim, C. (1999). Motivated search: effects of choice accountability, issue involvement, and prior knowledge on information acquisition and use. *Journal of Business Research, 45 (1)*, 75-88.
- Levi, A., & Tetlock, P. E. (1980). A cognitive analysis of Japan's 1941 decision for war. *Journal of Conflict Resolution, 24*, 195-211.
- Litwin, G. H., Humphrey, J. W., & Wilson, T. B. (1978). Organizational climate: A proven tool for improving performance. In W W Burke (Ed.), *The cutting edge: Current theory and practice in organization development* (pp. 187-205), San Diego: University Associates.
- Losada, M. (1999). The complex dynamics of high performance teams. *Mathematical and Computer Modeling, 30*, 179-192.
- Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *American psychologist, 56 (3)*, 227-238.
- Masten, A. S., & Curtis, W. J. (2000). Integrating competence and psychopathology: Pathways toward a comprehensive science of adaptation in development. *Development and Psychopathology, 12*, 529-550.

- Masten, A. S., & Reed, M.-G. (2002). Resilience in development. In S. R. Snyder & S. J. Lopez (Eds.), *The handbook of positive psychology*. Oxford, England: Oxford University Press.
- Masen, A. S., & Obradovic J. (2006). Competence and resilience in development. *Annals of the New York Academy of Sciences*, 1094, 13-27.
- McCormick, D. W., White, J. (2000). Using onne's self as an instrument for organizational diagnosis. *Organization development journal*, 18(3), 49-63.
- Mintzberg, H. (1973). *The nature of managerial work*. New York: Harper and Row.
- Mintzberg, H. (1975). The manager's job: Folklore and fact. *Harvard Business Review*, 53, 49, 63-74.
- Murnighan, J. K and D. Conlon (1991). The Dynamics of Intense Workgroups: A Study of British String Quartets. *Administrative Science Quarterly*, 36, 2, 165-186.
- Muthén, L. K. & Muthén, B. O. (2004). *Mplus user's guide* (3rd ed.). Los Angeles: Muthén & Muthén.
- Norman, S., Luthans, B. and Luthans, K. (2005). The Proposed Contagion Effect of Hopeful Leaders on the Resiliency of Employees and Organizations. *The Journal of Leadership and International Studies* 12(2) 56-64.
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacity, and strategy for disaster readiness. *Community psychology*, 41, 127-150.
- Nowak, A., Vallacher, R. R. (2005). Information and influence in the construction of shared reality. *IEEE: Intelligent Systems*, 1, 90-93.
- O'Reilly, C. A., Snyder, R. C., & Booth, J. N. (1993). Effects of executive team demography on organizational change. In G. Huber & W. Glick (Eds.), *Organizational change and redesign: Ideas and insights for improving performance* (pp. 147-175). New York: Oxford Press.

- Pfeffer, J., Salancik, G. (1978). *The external control of organizations*. New York: Harper and Row.
- Pruitt, D. G., Lewis, S. A. (1975). development of integrative solutions in bilateral negotiation. *Journal of personality and social psychology*, 31(4), 621-633.
- Pulakos, E. D., Aarad, S., Donovan, M. A., Plamandon, K. E. (2000). Adaptability in the work place: development of taxonomy of adaptive performance. *Journal of Applied Psychology*, 85 (4), 612-624.
- Ramalingam, B., Mitchell, J., Borton, J., Smart, K. (2009). *Counting what counts: performance and effectiveness in the humanitarian sector*. Retrieved February, from www.alnap.org/pool/files/8rhach1.pdf.
- Rathunde, K. (2000). Broadening and narrowing in the creative process: a commentary on fredrickson's "broaden and build" model. *Prevention and treatment*, 3(6), 1-6.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Roling, N., and H. de Zeeuw (1987). *Improving the quality of rural poverty alleviation. Final report of the working party on the small farmer and development cooperation*. Wageningen: International agricultural centre.
- Romano, D. (2006). Conducting research in Middle East's conflict zones. *Political science and politics*, 39(3), 439-442.
- Robb, D. (2000). Building Resilient Organizations. *OD Practitioner*, 32(3), pp 27 -32.
- Rothenberg, A . (1979). *The emerging goddess*. University of Chicago Press: Chicago, IL.
- Russell, J. A., & Barrett, L. F. (1999). Core affect, prototypical emotional episodes, and other things called emotion: dissecting the elephant. *Journal of personality and social psychology*, 76, 805-819.

- Sale, K. (1980). *Human scale*. New York: Coward, McCann and Geoghegan.
- Schreiber, J. B., Stage, F. K., King, J., Nora, A., & Barlow, E. A. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *Journal of Education Research*, 99, 323–337.
- Schroder, H. M., Driver, M. J., & Streufert, S. (1967). *Human information processing*. New York: Holt, Rinehart.
- Schmidt, F. L., and Wilson, T. C. (1975). Expectancy Value Models of Attitude Measurement: A Measurement Problem. *Journal of Marketing Research*, 12, 366-368.
- Schneider, G. A., Gianbra, L. M. (1971). Performance in concept identification as a function of cognitive complexity. *Journal of personality and social psychology*, 19 (3), 261-273.
- Schneider, G. A., Giambra, L. M. (1971). Performance in concept identification as a function of cognitive complexity. *Journal of personality and social psychology*, 19(3), 261-273.
- Seager, T.P. (2008). The sustainability spectrum and the sciences of sustainability. *Business Strategy and the Environment*, 17, 444-453.
- Senge, P. M. (1990). *The Fifth Discipline*. Double-day/Currency: New York.
- Snijders, T., & Bosker, R. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Thousand Oaks, CA: Sage.
- Smith, K., & Berg, D. (1987). *Paradoxes of Group Life: Understanding Conflict, Paralysis, and Movement in Group Dynamics*. Jossey-Bass: San Francisco, CA.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 15, 194-200.

- Staw, B., Bell, N. and Clausen, J. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. *Administrative Science Quarterly*, 31: 56-77.
- Streuffert, S. (1970). Complexity and complex decision-making: Convergences between differentiation and integration approaches to the prediction of the task performance. *Journal of Experimental Social Psychology*, 6, 494-509.
- Streufert, S., & Fromkin, H. L. (1972). Cognitive complexity and social influence. In Tedeschi, J. T. (Ed.) *The Social Inference Process*. Chicago: Aldine Atherton.
- Streufert, S., & Streufert, S. (1978). *Behavior in the complete environment*. Washington, DC: Winston.
- Streufert, S. and R. W. Swezey (1986). *Complexity, Managers and Organizations*. Academic Press: Orlando, FL.
- Streufert, S. and Nogami, G. Y. (1989) Cognitive style and complexity: Implications for I/O Psychology. In C.L. Cooper and I. Robinson (Eds.): *International Review of Industrial and Organizational Psychology*. London: John Wiley.
- Suedfeld, P., & Rank, A. D. (1976). Revolutionary leaders: Long-term success as a function of changes in conceptual complexity. *Journal of Personality and Social Psychology*, 34,169-17.
- Suedfeld, P., Tetlock, P. (1977). Integrative complexity of communication in international crises. *Journal of conflict resolution*, 21(1), 169-184.
- Suedfeld, P., Tetlock, P. E., & Streufert (1992). Conceptual/Integrative complexity: the development and current state of the construct, In Charles P. Smith (ed), *motivation and personality: handbook of thematic content analysis*, pp (393-400). Cambridge University Press: NY.
- Sommers, S. (1981). Emotionally reconsidered: the role of cognition in emotional responsiveness. *Journal of personality and social psychology*, 51, 417-422.
- Tetlock, P. (1981). Pre to postelection shifts in presidential rhetoric impression management of cognitive adjustment. *Journal of personality and social psychology*, 41(2),

207-212.

- Tetlock, P. E., Hannum, K. A., & Micheletti, P. M. (1984). Stability and change in the complexity of senatorial debate: Testing the cognitive versus rhetorical style hypotheses. *Journal of Personality and Social Psychology*, *46*, 979-990.
- Tetlock, P. E. (1985). Integrative complexity of American and Soviet foreign policy rhetoric: A time-series analysis. *Journal of Personality and Social Psychology*, *49*, 1565-1585.
- Tetlock, P.E., Bernzweig, J., & Gallant, J.L. (1985). Supreme court decision making: cognitive style as a predictor of ideological consistency of voting. *Journal of Personality and Social Psychology*, *48*, 1227-1239.
- Tetlock, P.E., Peterson, R.S., & Berry, J.M. (1993). Flattering and unflattering personality portraits of integratively simple and complex managers. *Journal of Personality and Social Psychology*, *64*, 500-514.
- Ullman, J. B. (2001). Structural equation modeling. In B. G. Tabachnick & L. S. Fidell (Eds.), *Using multivariate statistics* (4th ed., pp. 653–771). Boston, MA: Allyn & Bacon.
- United Nations Office for the Coordination of Humanitarian Affairs (2007). *The closure of the Gaza Strip: the economic and humanitarian consequences*. Retrieved April 21, 2010 from <http://unispal.un.org/pdfs/GSclosure.pdf>.
- Van de Ven, A. (1983). Review of In Search of Excellence. *Administrative Science Quarterly*, *28*, 4, 621-624.
- Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the resilience scale. *Journal of Nursing Measurement*, *1*, 165-178.
- Waldman, D. A., Javidan, M., & Varella, P. (2004, June). Charismatic leadership at the strategic level: A new application of upper echelons theory. *Leadership Quarterly*, *15*(3), 355.
- Walker, M. (2001). Resilience in ecosystemic context: evolution of the concept. *American Journal of Orthopsychiatry*, *71*, 290-297.

- Wessman, A., & Ricks, D. (1966). *Mood and personality*. New York: Holt, Rinehart & Winston.
- World Bank (2009). *West Bank and Gaza: the economic effects of restricted access to land in the West Bank*. Retrieved May 5, 2010 from: <http://siteresources.worldbank.org/INTWESTBANKGAZA/Resources/EconomicEffectsofRestrictedAccessToLandintheWestBankOct.21.08.pdf>
- Quinn, R. E. (1984). Applying the competing values approach to leadership: Toward an integrative framework. In J. G. Hunt, D. -M. Hosking, C. A. Schriesheim, & R. Stewart (Eds.), *Leaders and managers: International perspectives on managerial behavior and leadership* (pp. 10-22). New York: Pergamon.
- Quinn, R.E., Spreitzer, G.M. & Hart, S. (1991). Challenging the assumptions of bipolarity: Interpenetration and managerial effectiveness. Pp. 222-252 in S. Srivastva & R. Fry (Eds.) *Executive and organizational continuity*. San Francisco: Jossey-Bass.
- Zaleznik, A. (1977), "Managers and Leaders: Are They Different?". *Harvard Business Review*, 55, 67-80.
- Zaleznik, A. (1989). *The Managerial Mystique: Restoring Leadership in Business*. Harper and Row: New York.

Table 1:
Respondent sample Characteristics (n=133)

Characteristic	n	%	Mean	SD	Range
<u>Sex:</u>					
Female	70	52.6	-----	-----	-----
Male	63	47.4	-----	-----	-----
Age			34.87	10.70	19-61
Number of years at the organization			5.48	.52	1-21
Number of years in the NGOs' field			8.71	7.60	1-40

Table 2

Respondents representation of surveyed organizational fields (total n=133)

Field	n	% of total respondents
Community development	30	22.6
Children and Youth	29	21.8
Human Rights	19	14.3
Women Empowerment	17	12
Agriculture	15	11.3
Health and Psychological Counseling	7	5.3
Advocacy	5	3.8
Education	4	3
Other	4	3
Culture	3	2.2

Table 3

Organizational Characteristics (total n=26)

Characteristic	n (organizational)	% of total respondents (based on n=133)
<u>Existence of other branch</u>		
Yes	21	78.9
No	5	21.1
<u>Size</u>		
Small	12	44.4
Medium	10	33.8
Large	4	24.8
<u>Staff Nationality</u>		
Exclusively Palestinian	21	78.9
Multi-National	5	20.1

Table 4

*Descriptive statistics for all independent and dependent variables (N=133)**

Variable	Number of items	Range of scale	Mean	SD	Cronbach Alpha
Behavioral complexity	36	(1-5)	3.93	2.31	.87
Emotional complexity	14	(1-5)	3.34	.48	.76
Integrative complexity	1	(1-7)	3.30	1.72	.85**
Job adaptability	38	(1-5)	3.99	.55	.95
Organizational resilience	6	(1-5)	3.65	.50	.64
Perceived internal effectiveness	13	(1-4)	3.18	.48	.92
Perceived external effectiveness	7	(1-5)	3.90	.49	.84

*Notes: *all data is based on an N=133, except integrative complexity, n= 54; ** this value refers to inter-rater reliability*

Table 5

Correlation matrix of all independent and dependent variables (N=133; n=54 for Integrative Complexity)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age	-----														
2. Sex	-.21*	-----													
3. Years at organization	.68***	-.13	-----												
4. Years in NGOs field	.79***	-.22*	.72***	-----											
5. Size of NGO	.00	-.02	.15	.02	-----										
6. Employee Diversity	.00	-.08	.12	.01	-.10	-----									
7. Existence of Branches	-.01	-.13	-.10	-.13	-.14	-.00	-----								
8. Field of the NGO	.22*	.11	.18*	.18	.12	-.03	-.02	-----							
9. Behavioral complexity	-.00	-.14	-.06	.00	-.08	-.12	-.02	.08	-----						
10. Emotional complexity	.11	.00	.01	.06	-.05	-.00	-.00	.28	.38***	-----					
11. Integrative complexity	.11	.01	.12	.16	-.08	-.28*	-.26*	.05	.19*	.03	-----				
12. Job adaptability	.13	-.12	.02	.06	-.20*	-.10	-.01	.09	.70***	.32***	.17	-----			
13. Org Resilience	.11	-.14	-.09	.10	-.09	-.07	-.06	-.02	.46***	.28***	.03	.66***	-----		
14. Internal effectiveness	-.13	-.08	-.03	.02	-.06	-.06	.07	.02	.65***	.39***	-.12	.55***	.45***	-----	
15. External effectiveness	.04	-.03	-.14	-.10	-.07	-.03	-.09	-.04	.59***	.34***	-.28*	.56***	.39***	.66***	-----

*P<.05, **P<.01, ***P<.000

Table 6

Confirmatory Factor Analysis: Factor loadings of manifest variables on latent constructs

Factor	Loading	p
Job adaptability		
Handling emergency	.86	.000
Coping with Stress	.80	.000
Problem solving	.79	.000
Ambiguity tolerance	.82	.000
Learning	.90	.000
Interpersonal adaptability	.87	.000
Cultural adaptability	.84	.000
Physical adaptability	.68	.000
Behavioral Complexity		
Collaborate	.70	.000
Create	.85	.000
Control	.73	.000
Compete	.86	.000

Table 6 (continued)

Confirmatory Factor Analysis: Factor loadings of manifest variables on latent constructs

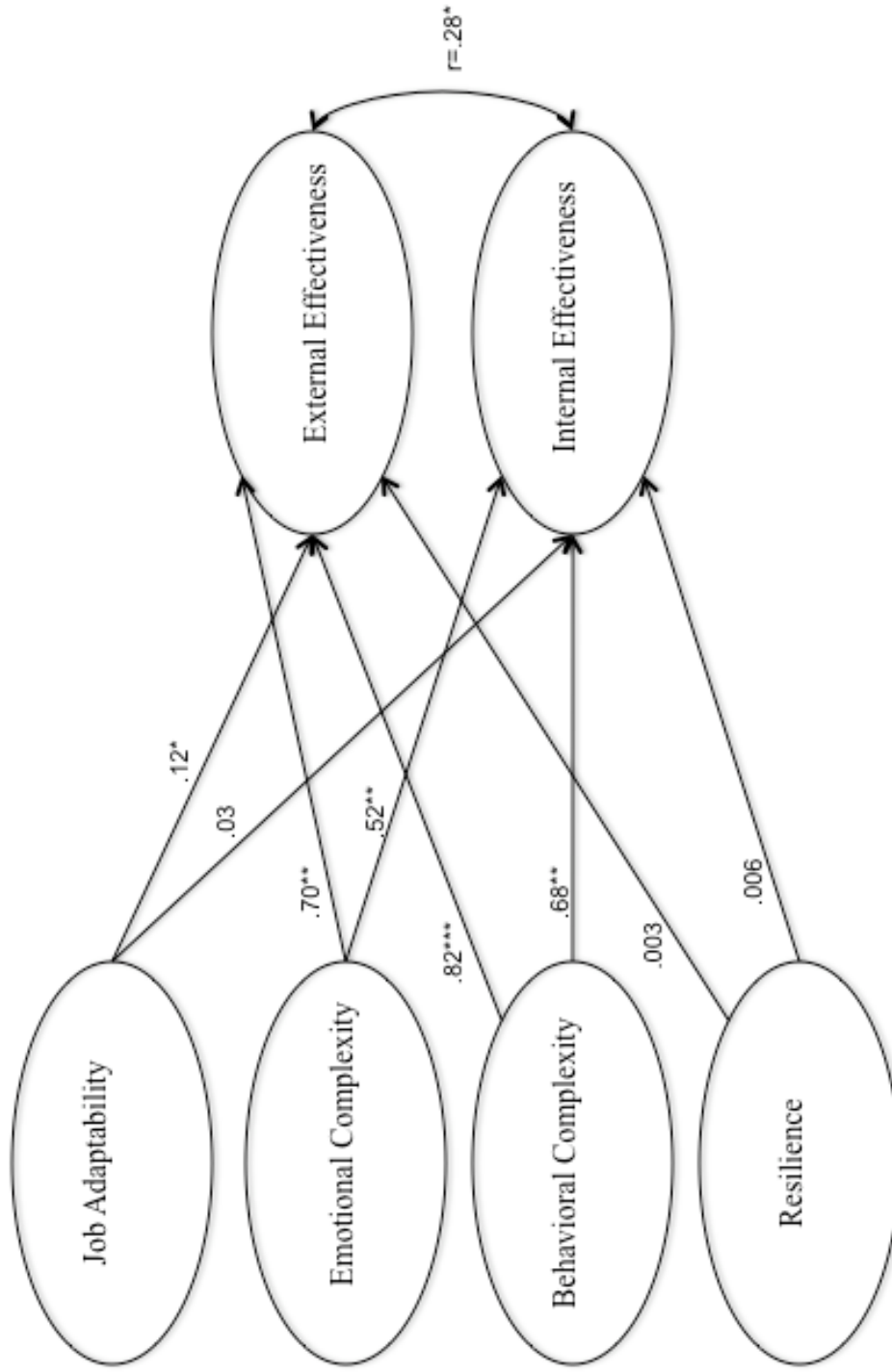
Factor	Loading	p
Internal effectiveness		
(Items)		
1	.69	.000
2	.69	.000
3	.73	.000
4	.77	.000
5	.75	.000
6	.75	.000
7	.74	.000
8	.69	.000
9	.59	.000
10	.67	.000
11	.65	.000
12	.64	.000
13	.37	.000

Table 6 (continued)

Confirmatory Factor Analysis: Factor loadings of manifest variables on latent constructs

Factor	Loading	p
External effectiveness		
(Items)		
1	.72	.000
2	.34	.000
3	.69	.000
4	.69	.000
5	.72	.000
6	.64	.000
7	.72	.000
Emotional complexity		
One averaged item	1.00	.000
Organizational Resilience		
One averaged item	1.00	.000

Figure 1
Structural Equation Model for all variables



$X^2(97)=177.74$; CFI=.90; TLI=.89; RMSEA=.06; *= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$

Table 7:
Correlation Matrix for behavioral complexity subscales (n=133)

Subscale	1	2	3	4
Collaborate	---			
Create	.60*	---		
Control	.48*	.61*	---	
Compete	.60*	.71*	.70*	---

*P<.000

Table 8:

Correlation Matrix for Job adaptability subscales (n=133)

Subscale	1	2	3	4	5	6	7	8
Handling emergency	---							
Coping with Stress	.77*	---						
Problem solving	.63*	.63*	---					
Ambiguity tolerance	.69*	.70*	.66*	---				
Learning	.76*	.68*	.73*	.63*	---			
Interpersonal adaptability	.73*	.72*	.64*	.74*	.77*	---		
Cultural adaptability	.71*	.68*	.60*	.68*	.75*	.78*	---	
Physical adaptability	.63*	.56*	.47*	.51*	.64*	.55*	.61*	---

*P<.000

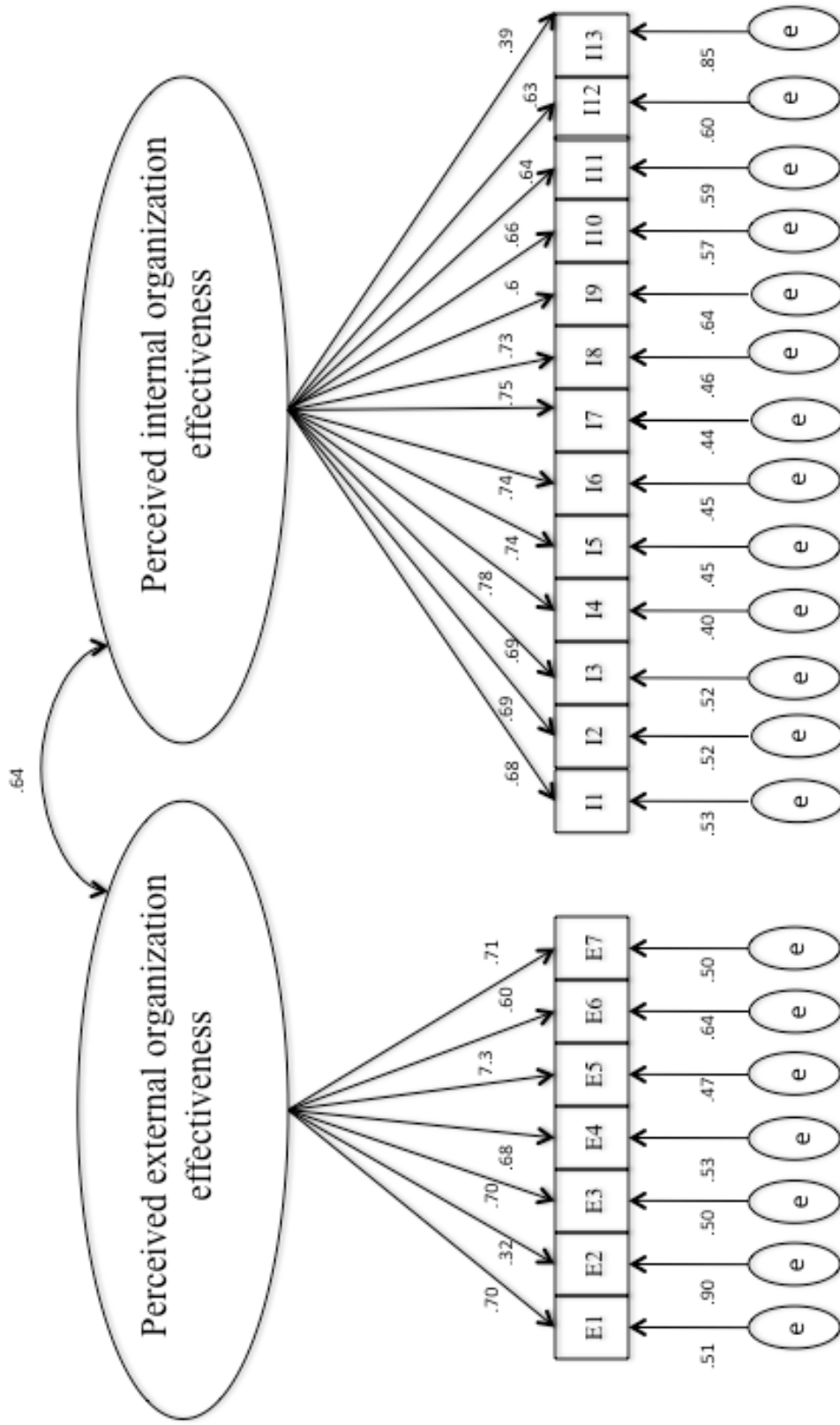


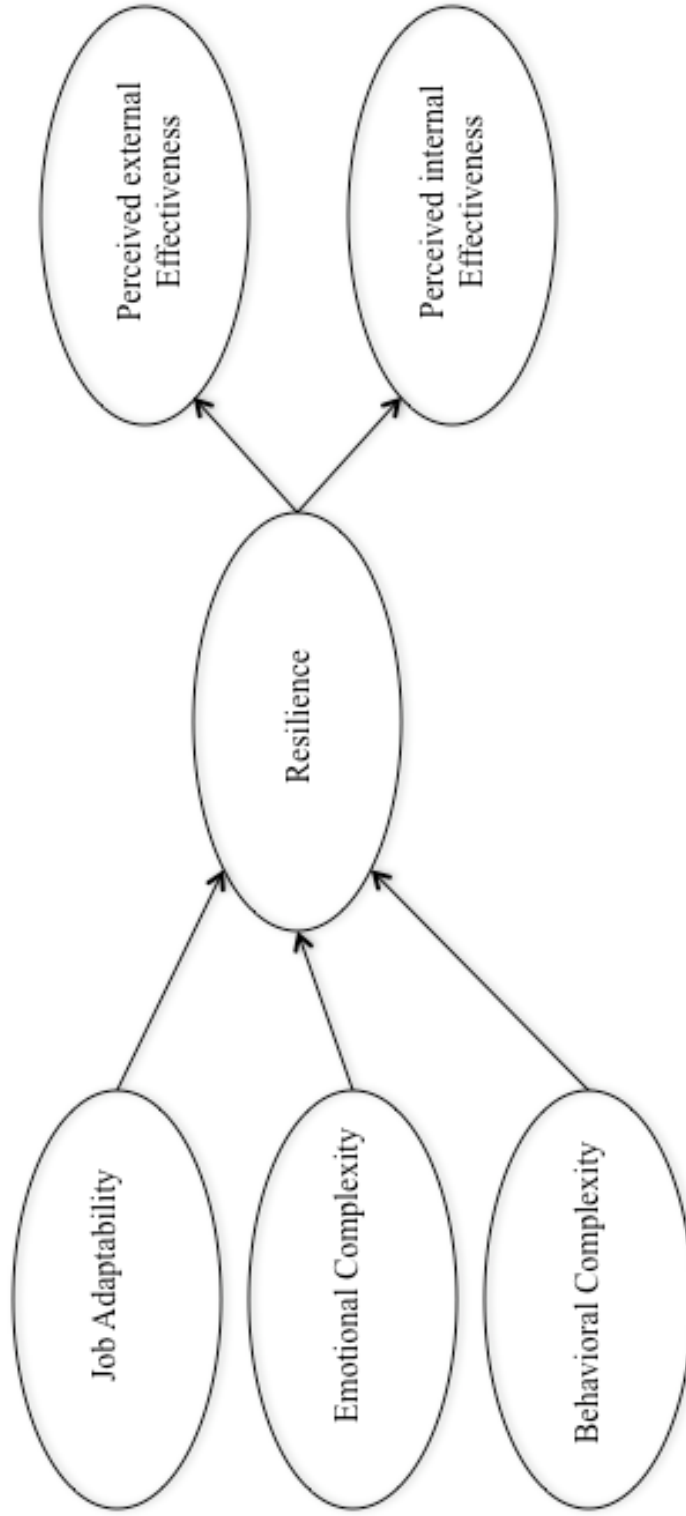
Figure 2: Results for the Confirmatory Factor Analysis. Non-Normed Fit Index= .93; Root Mean Square Error of Approximation= .06; Chi-Square= 244.72; Degree of Freedom= 165; P Value= 0.00; e=error.

Table 9:
Model Fit Statistics

Statistic	Mediator Model 1	Mediator Model 2
Chi-Squared df	243.45 99	177.74 97
CFI	0.90	0.95
TLI	0.88	0.93
AIC	2756.56	2694.86
BIC	2903.97	2848.04
RMSEA	0.11	0.08
SRMR	0.12	0.04
Assessment	Rejected	Acceptable

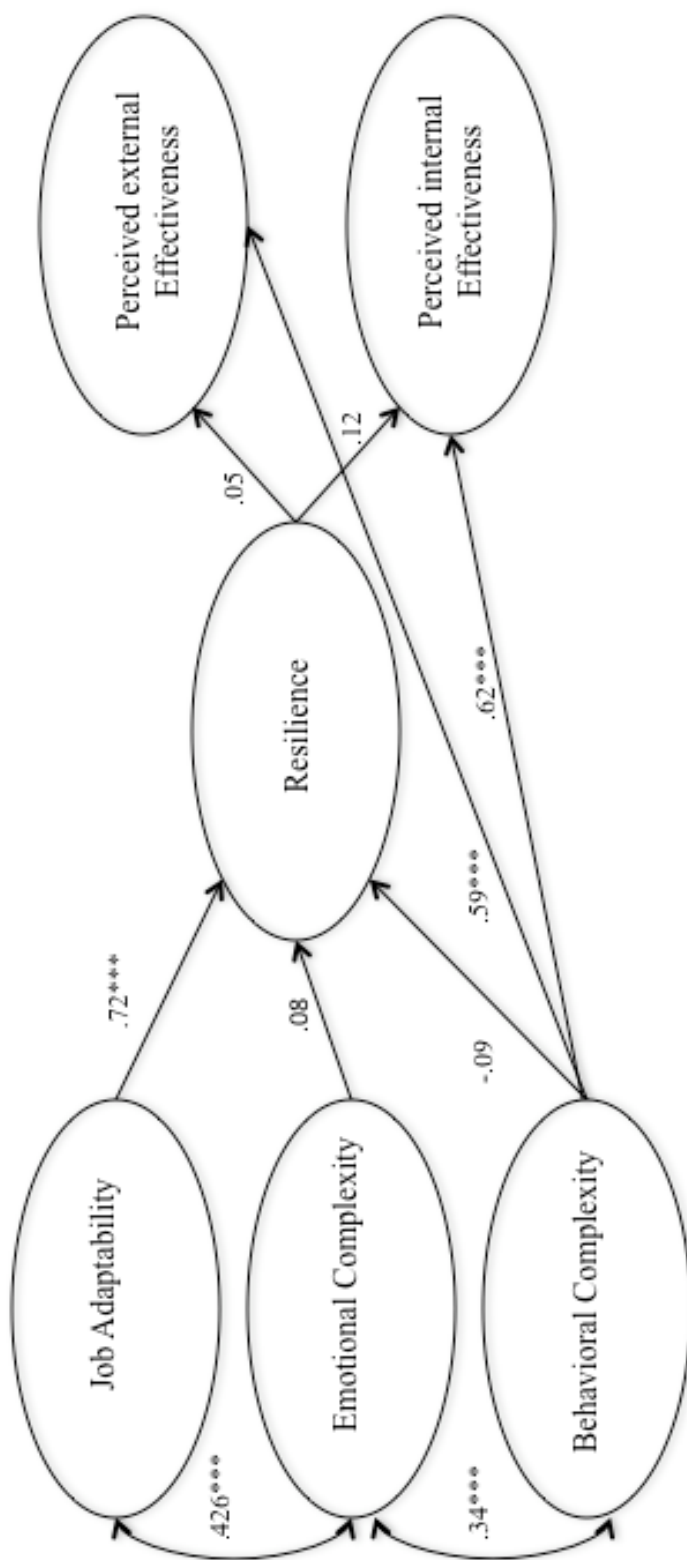
Note: CFI= Comparative Fit Index. CFI greater than .95 for continuous indicates adequate fit (Hu & Bentler, 1999). TLI=Tucker-Lewis Index, also referred to as NNFI=Non-Normed Fit Index >.95 indicates adequate fit (Hu, Bentler, 1999). AIC=? BIC? RMSEA=Root Mean Square Error of Approximation. RMSEA<0.06 indicates adequate fit (Hu & Bentler, 1999). SRMR= Standard Root Mean Square Residual (SRMR)<.08 indicates adequate fit (Hu & Bentler, 1999).

Figure 3:
Proposed structural equation modeling: Testing for mediator model 1



This model did not meet the criteria for good model fit.

Figure 4:
Proposed Structural Equation Model: Testing for mediator model 2



$X^2(97)=177.74$, CFI=.95, TLI=.93, RMSEA=.08

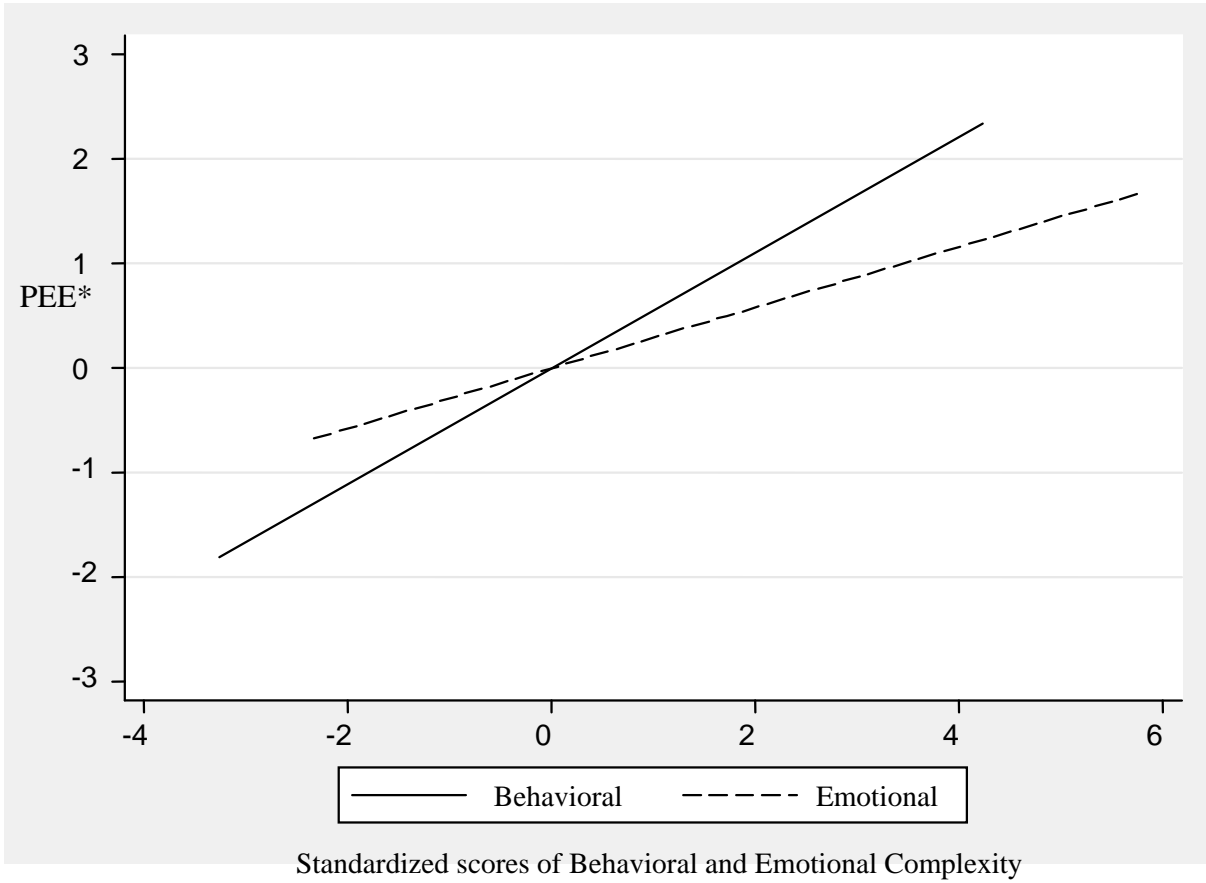
*: $P < .05$

** : $P < .01$

***: $P < .001$

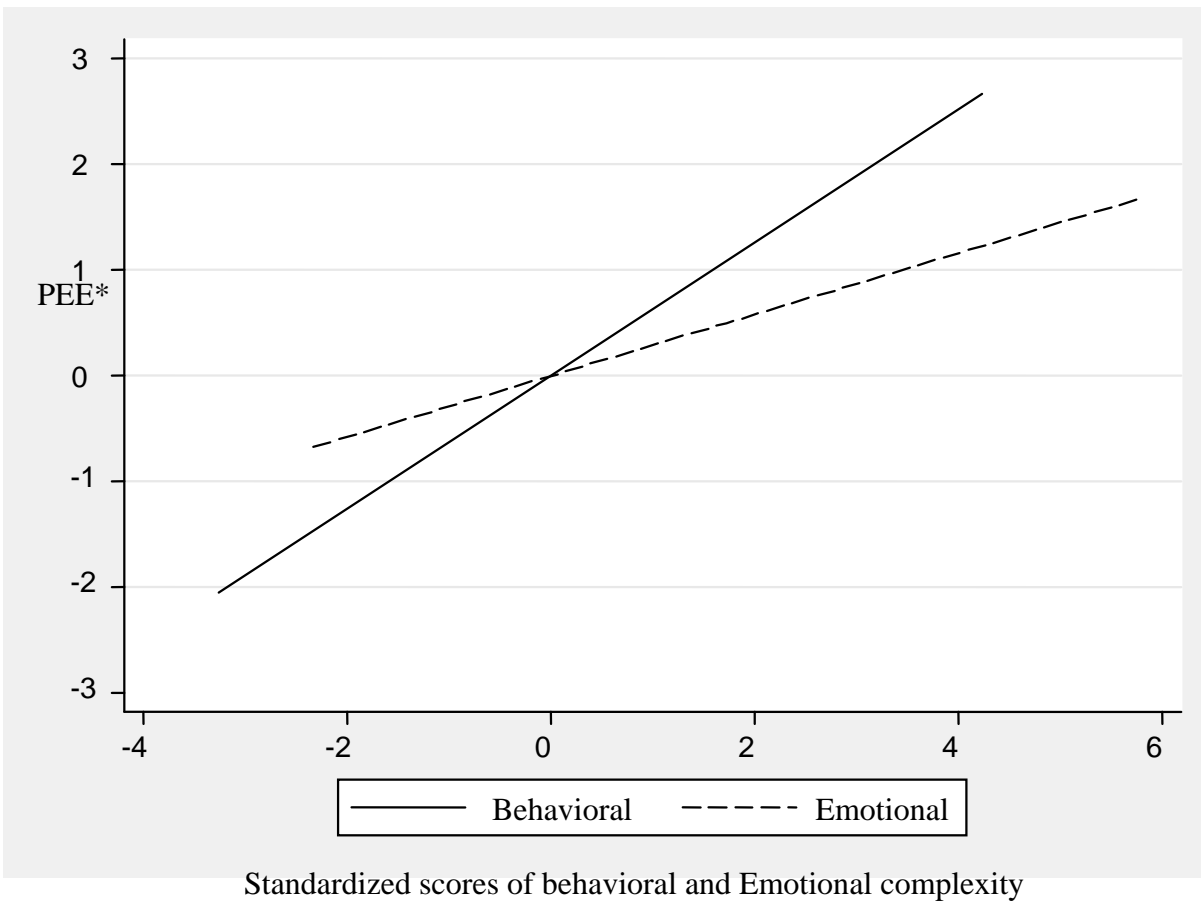
Figure 5

Univariate plot of Behavioral and Emotional Complexity to Perceived External Effectiveness
(using best linear fit)



Note: * PEE=standardized scores for Perceived external Effectiveness

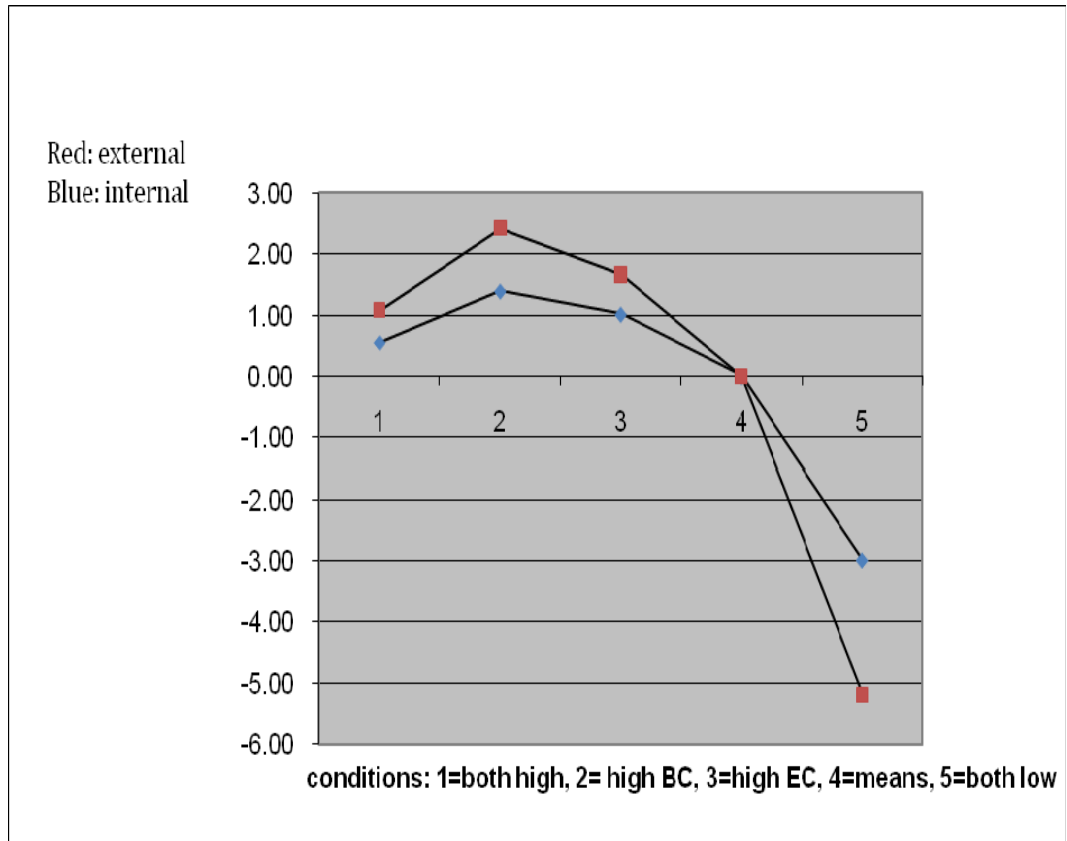
Figure 6
 Univariate plot of Behavioral and Emotional Complexity to Perceived Internal Effectiveness
 (using best linear fit)



Note: * PEE=Standardized scores for Perceived internal effectiveness

Figure 6

Interaction effect of dichotomized scores of behavioral and emotional complexity



Appendix A: Cover Page

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Dear, Participant

Thank you for considering to participate in the current survey, addressing the practices of NGOs operating in conflict zones. Your participation will help a great deal in identifying some of the challenges faced by NGOs operating in difficult circumstances and it will shed some insights into best practices.

I would like to emphasize the following:

- All of your answers will be kept anonymous, since no identifying information such as name and email address will be collected
- The aim of the study is to explore patterns occurring with all NGOs in the field; it is not aimed specifically at evaluating your individual organizations.
- There is no right or wrong answer.
- If at any point you feel any discomfort participating in the study, please know that you can withdrawal, without any penalty attached.
- If you are interested in participating, please check the following box:
-

If you have any questions, please do not hesitate to contact me via email at nm2140@columbia.edu

Sincerely,

Naira Musallam

Columbia University

Institutional Review Board

New York, NY Telephone: 2126784105

Appendix B: General information (control variables)

General information:

Age: _____

Sex: 1) Male 2) Female

Nationality: _____

Number of working years at the current organization: _____

Number of working years in None Governmental Organizations (NGOs):

Number of employees in the current organization: _____

Background of employees in the organization:

1) Palestinian

2) Multi-national

Are there other branches of the current organization? 1) Yes 2) No

In what sector your organization work: 1) Children and Youth 2) Business development 3)

Agriculture 4) community development 5) Culture 6) Health and psychological counseling 7)

Education 8) Women 9) human rights 10) Other: _____

Appendix C: Integrative complexity scenario

The Israeli Palestinian Conflict has been going on for many years now. Please take the next 5-7 minutes to describe your teams' thoughts regarding it. Here are some important reminders:

- There is no wrong or right answer
- Try to use this entire page to discuss your thoughts/feelings
- This question is not specific to any domain within the Israeli-Palestinian conflict, so please feel free to discuss anything you wish to.
- You can answer either in Arabic or in English

Appendix D: Job Adaptability

In general, to what extent do, the following statements apply to your staff at the organization

		Never	Rarely	Not sure	Sometimes	Always
1	React with appropriate and proper urgency in life threatening, dangerous, or emergency situations.	1	2	3	4	5
2	Remain composed and cool when faced with difficult circumstances or a highly demanding workload/schedule	1	2	3	4	5
3	Employ unique types of analyses and generate new, innovative ideas in complex areas	1	2	3	4	5
4	Take effective action when necessary without having to know the total picture or have all the facts at hand	1	2	3	4	5
5	Demonstrate enthusiasm for learning new approaches and technologies for conducting work	1	2	3	4	5
6	Flexible and open-minded when dealing with others	1	2	3	4	5
7	Take action to learn about and understand the climate, orientation, needs, values, etc. of other groups, organizations, or cultures	1	2	3	4	5
8	Adjust to challenging environmental states such as extreme heat, humidity, cold, dirtiness, etc	1	2	3	4	5
9	Quickly analyze options for dealing with danger or crises and their implications	1	2	3	4	5
10	Do not overreact to unexpected news or situations	1	2	3	4	5
11	Turn problems upside down and inside-out to find fresh, new approaches	1	2	3	4	5
12	Readily and easily change gears in response to unpredictable or unexpected events and circumstances	1	2	3	4	5
13	Do what is necessary to keep knowledge and skills current	1	2	3	4	5
14	Listen to and consider others' viewpoints and opinions, and alter their own opinion when it is appropriate to do so	1	2	3	4	5
15	Integrate well into and is comfortable with different values, customs and cultures	1	2	3	4	5
16	Frequently push themselves physically to complete strenuous or demanding tasks	1	2	3	4	5
17	Make split second decisions based on clear and focused thinking	1	2	3	4	5
18	Manage frustration well by directing effort to constructive solutions rather than blaming others	1	2	3	4	5
19	Integrate seemingly unrelated information and develop creative solutions	1	2	3	4	5

		Never	Rarely	Not sure	Sometimes	Always
20	Effectively adjust plans, goals, actions, or priorities to deal with changing situations	1	2	3	4	5
21	Quickly and proficiently learn new methods or how to perform previously unlearned tasks	1	2	3	4	5
22	Open and accepting of negative or developmental feedback regarding work	1	2	3	4	5
23	Willingly adjust behavior or appearance as necessary to comply with or show respect for others' values and customs	1	2	3	4	5
24	Adjust weight/muscular strength or become proficient in performing physical tasks as necessary for the job.	1	2	3	4	5
25	Maintain emotional control and objectivity while keeping focused on the situation at hand	1	2	3	4	5
26	Demonstrate resilience and the highest levels of professionalism in stressful circumstances	1	2	3	4	5
27	Entertain wide ranging possibilities others may miss, thinking outside the given parameters to see if there is a more effective approach	1	2	3	4	5
28	Impose structure for oneself and others that provide as much focus as possible in dynamic situations	1	2	3	4	5
29	Adjust to new work processes and procedures	1	2	3	4	5
30	Work well and develop effective relationships with highly diverse personalities	1	2	3	4	5
31	Understand the implications of one's actions and adjust their approach to maintain positive relationships with other groups, organizations, or cultures.	1	2	3	4	5
32	Don't need things to be black or white, and refuse to be paralyzed by uncertainty or ambiguity	1	2	3	4	5
33	Anticipate changes in the work demands and search for and participate in assignments or training that will prepare them for these changes	1	2	3	4	5
34	Demonstrate keen insight of others' behavior and tailor their own behavior to persuade, influence, or work more effectively with them.	1	2	3	4	5
35	Step up to take action and handle danger or emergencies as necessary and appropriate.	1	2	3	4	5
36	Act as a calming and settling influence that others look to for guidance.	1	2	3	4	5
37	Develop innovative methods of obtaining or utilizing resources when insufficient resources are available to do the job.	1	2	3	4	5
38	Take action to improve work performance deficiencies.	1	2	3	4	5

Appendix E: Top Management Teams Resilience

To What Extent do the following statements apply to your management team's experience

		Never	Rarely	Sometimes	Often	Always
1	Our management team tends to bounce back quickly after hard times	1	2	3	4	5
2	Our management team has a hard time making it through stressful events	1	2	3	4	5
3	It does not take our management team long to recover from stressful event	1	2	3	4	5
4	It is hard for our management team to snap back when something bad happens	1	2	3	4	5
5	Our management team usually comes through difficult times with little trouble	1	2	3	4	5
6	Our management team tends to take a long time to get over set-backs in my life	1	2	3	4	5

Appendix F: Behavioral Complexity

In general, I would describe our management team as being skilled in the following

		Strongly disagree	Disagree	Neither agree nor Disagree	Agree	Strongly agree
1	Making it legitimate to contribute opinions.	1	2	3	4	5
2	Encouraging career development.	1	2	3	4	5
3	Being aware of when people are burning out.	1	2	3	4	5
4	Meeting with our target population to discuss their needs.	1	2	3	4	5
5	Initiating bold projects	1	2	3	4	5
6	Inspiring direct reports to be creative.	1	2	3	4	5
7	Seeing that organizational procedures are understood	1	2	3	4	5
8	Emphasizing the need for accuracy in work efforts.	1	2	3	4	5
9	Providing tight project management.	1	2	3	4	5
10	Showing an appetite for hard work.	1	2	3	4	5
11	Emphasizing the need to compete.	1	2	3	4	5
12	Produces faster results	1	2	3	4	5
13	Employing participative decision	1	2	3	4	5
14	Seeing that everyone has a development plan.	1	2	3	4	5
15	Encouraging people to have work/life balance.	1	2	3	4	5

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
16	Identifying the changing needs of the targeted population	1	2	3	4	5
17	Starting ambitious programs.	1	2	3	4	5
18	Encouraging direct reports to try new things.	1	2	3	4	5
19	Making sure formal guidelines are clear to people.	1	2	3	4	5
20	Expecting people to get the details of their work right.	1	2	3	4	5
21	Keeping projects under control.	1	2	3	4	5
22	Modeling an intense work effort.	1	2	3	4	5
23	Developing a competitive focus.	1	2	3	4	5
24	Producing faster project outcomes.	1	2	3	4	5
25	Maintaining an open climate for discussion	1	2	3	4	5
26	Coaching people on career issues	1	2	3	4	5
27	Recognizing feelings.	1	2	3	4	5
28	Anticipating what the targeted population will want next.	1	2	3	4	5
29	Launching important new efforts.	1	2	3	4	5
30	Getting unit members to exceed traditional performance patterns.	1	2	3	4	5
31	Insuring that organization policies are known.	1	2	3	4	5
32	Emphasizing accuracy in work efforts.	1	2	3	4	5
33	Closely managing projects.	1	2	3	4	5
34	Demonstrating full exertion on the job	1	2	3	4	5
35	Insisting on being better than other organizations	1	2	3	4	5
36	Providing fast responses to emerging issues.	1	2	3	4	5

Appendix G: Emotional Complexity

**Please, think about how the management team in your organization would describe their experience at work.
To what extent do the following statements apply?**

		Does not describe the team at all	Does not quite describe the team	Describes the team fairly well	Describes the team well	Describes me very well
1	Our management team doesn't experience many different feelings at work	1	2	3	4	5
2	Our management team is aware of the different nuances or subtleties of a given emotion	1	2	3	4	5
3	Our management team has experienced a wide range of emotions throughout our work	1	2	3	4	5
4	Each emotion has a very distinct and unique meaning for our management team	1	2	3	4	5
5	Our management team usually experiences a limited range of emotions at work	1	2	3	4	5
6	Our management team tends to draw fine distinctions between similar feelings (e.g., depressed and blue, annoyed and irritated)	1	2	3	4	5
7	Our management team experiences a wide range of emotions at work	1	2	3	4	5
8	Our management team is aware that each emotion has a completely different meaning	1	2	3	4	5
9	Our management team doesn't experience a variety of feelings on an everyday basis	1	2	3	4	5
10	If emotions are viewed as colors, our management team can notice even small variations within one kind of color (emotion)	1	2	3	4	5
11	Feeling good or bad - those terms are sufficient to describe most of our management team members' feelings at work	1	2	3	4	5
12	Our management team is aware of the subtle differences between feelings they have at work	1	2	3	4	5
13	Our management team tends to experience a broad range of different feelings at work	1	2	3	4	5
14	Our management team is good at distinguishing subtle differences in the meaning of closely related emotion words.	1	2	3	4	5

Appendix H: External Effectiveness

To what extent do the following statements apply to your organization overall:

		Never	Rarely	Sometimes	Very Often	Always
1	Specific objectives are met within budget constraints	1	2	3	4	5
2	Overall goals are accomplished	1	2	3	4	5
3	Those served feel the services of the organization are necessary and valuable	1	2	3	4	5
4	Maintain funding sufficient to continue at least its prior years' level of services	1	2	3	4	5
5	My organization has made a difference in the quality of life of those we serve	1	2	3	4	5
6	Our funding agencies believe our organization has made a difference in the quality of life of those we serve.	1	2	3	4	5
7	Places a priority on assessing the services we provide	1	2	3	4	5

Appendix I: Internal effectiveness

The following statements refer to various goals and procedures that your organization utilizes in its work. To what extent is your organization good at the following:

Item		Poor	Fair	Good	Excellent
1	Goal clarity	1	2	3	4
2	Clarity of program activities	1	2	3	4
3	Goal setting	1	2	3	4
4	Organizational Activities	1	2	3	4
5	Decisions making structure & process	1	2	3	4
6	Performance assessment	1	2	3	4
7	Intervention strategy	1	2	3	4
8	Goal determination	1	2	3	4
9	Communication	1	2	3	4
10	Change in decision making	1	2	3	4
11	Interdependence within the organization and outside the organization	1	2	3	4
12	Long term decisions	1	2	3	4
13	Diversity of funding resources	1	2	3	4

APPENDIX J

Scoring Manual for Integrative Complexity (As it appears in Baker-Brown, Ballard, Bluck, De
Varies, Suedfeld, & Tetlock, 1992, p. 407-418).

Score of 1:

There is no sign of either conceptual differentiation or integration at this scoring level. The author relies, without qualification, on a simple one dimensional rule for interpreting events or making choices.

Score of 2:

In a statement assigned a score of 1, the author ignores or rejects alternative perspectives on an issue. In a statement assigned a score of 2, the author recognizes the potential for looking at the same issue in different ways or along different dimensions. Differentiations are, however, emergent rather than fully developed. The author may, for example, qualify a normative rule or casual generalization, or display awareness of alternative futures. The author may also discuss past events in a way that suggests, but does not develop, new interpretations. On the whole, this scale value represents a transition level between the categorical structure of the score of 1 and the differentiated structure of the score of 3.

Score of 3

The crucial aspect of a score of 3 is the clear specification of at least two distinct ways of dealing with the same information or stimulus. The author recognizes that these different perspectives or dimensions can be held in mind simultaneously. The author may also specify conditions under

which these perspectives or dimensions are applicable. However, there is no evidence of conceptual integration. Differentiation is the key element of a score of 3.

Score of 4

In the score of 4, we seek signs of the emergence of the second major scoring element, integration. That is, we begin to find indications of the ability to integrate different and sometimes conflicting alternatives. Conceptual integration is not clearly apparent at this level, however. Instead, the integration of alternatives is implicit.

A score of 4 must show two features. First, there must be a clear representation of alternatives. Second, there must be an implicit recognition of a dynamics relationship signifies the emergence of integration, although at this level it is expressed in a tentative and often uncertain manner the clear description of the relationship is often withheld until further information is received. In summary, there is only a suggestion that interaction exists between the alternatives, there is no overt statement specifying the nature of this interaction.

Score of 5

A score of 5 indicates the explicit expression of integration. Thus far, our explanation of the scoring technique has focused on various ways of delineating levels and indicators of differentiation. The one exception to this trend was the description of a 4, which may be viewed as the transition point between an expression solely defined by differentiation and one where evidence of integration appears. Whereas a score of 4 signifies the emergence of integration expressed in a tentative or uncertain manner, a score of 5 indicates that integration is clearly evident.

Score of 6

In general, a score of 6 involves a high level interaction indicating that the author working with multiple levels of schemata. The alternatives at this level are dynamic: they are expressed as plans, processes, or courses of action made up of several moving parts, and as such we may often refer to them as systems or networks. One of the indicators of a score of 6 is the specific explanation of both the “moving parts” within a system and also how those parts affect each other or the system.

At this level alternatives are readily accepted, compared or contrasted, and integrated so as to present at least one outcome. Global overviews or organizational principles (temporal, casual, ideological) are often presented. The emergence of this type of principle is the second main indicator of the score of 6.

Score of 7

The unique characteristic of a score of 7 is presence of an overarching viewpoints pertaining to the nature (not merely the existence) of the relationship or connectedness between alternatives. In a score of 7, these alternatives are clearly delineated and are described in reasonable detail. How each alternative may be seen to be part of some overarching view, or how some overarching view encompasses these alternatives, is made evident.