

Examining the Role of Aggression and Victimization in the Development of  
Psychopathology in Ugandan Adolescents

A Dissertation  
SUBMITTED TO THE FACULTY OF  
UNIVERSITY OF MINNESOTA  
BY

Kathryn F. Hecht

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

Dante Cicchetti, Advisor  
Bonnie Klimes-Dougan, Co-Advisor

June 2015

© Kathryn F. Hecht 2015

## Acknowledgements

This study was funded in part by an Internationalization Triangle grant from the University of Minnesota's College of Education and Human Development. I would like to thank my dissertation committee: Professors Dante Cicchetti, Bonnie Klimes-Dougan, W. Andrew Collins and Michael Maratsos for their time and thoughtful feedback. My gratitude goes to students and teachers of our partner school in northern Uganda for their continued participation in this study and for welcoming our undergraduate study abroad research assistants with open arms (and song and dance!) over the past three summers. Special thanks are owed to school founder Beatrice Aruyu for her unwavering support on this project. I would also like to acknowledge the efforts of the following volunteers and research assistants who were invaluable assets to recruitment and data collection: Anne Biehl, Savanha Winkel, Kristen Johnson, Molly Brown, Bethany Heimenz and the rest of the 2012 UMN Uganda Study Abroad cohort. Of special note are the efforts of William Carlson, whose problem solving and management of in-country logistics will leave me indebted to him for years to come. I would also like to acknowledge Peter Ralston, without whose extraordinary support and logistical cunning this project never would have happened. My immense gratitude goes to advisor and inspiration Dr. Dante Cicchetti for his incredible mentorship over the course of this study and my graduate career. Thanks to Sam Daley for his infinite enthusiasm and encouragement, Karen Miller for keeping me sane and laughing, and David Johnson for bending the rules of an independent study in 2005 and showing me what good teaching can do. Finally, thanks to my friends and my family, Jim, Jean, Mike and Kay, for 26 years of unconditional love.

**Dedication**

This thesis is dedicated to the life and legacy of an outstanding mentor, researcher and friend, Dr. Nicki R. Crick.

## **Abstract**

Positive peer relationships play an important role in child development, serving not only as protective factors during and after exposure to adversity such as war or armed conflict, but also providing a training ground to develop the wide range of social skills and behaviors necessary for effective functioning within any given cultural context. Alternately, negative peer experiences such as relational and physical aggression and victimization can serve as powerful risk factors for later psychopathology; in particular, research supports a link between depression and forms of aggression as well as victimization. However, this relation has primarily been explored in North American and European contexts. Further, child aggressive behavior and depressive symptoms both appear to be more prevalent in contexts where children have been exposed to armed conflict. Little information is available on how different forms of aggression and victimization relate to depression in youth in more diverse cultural contexts, particularly in war-affected populations. The present study addresses this gap through examinations exploring the prevalence and gender differences of different forms of aggression as well as the relationship between relational and overt forms aggression/victimization and depression in a sub-Saharan, war-affected setting. Participants include a cross-sectional sample of 258 adolescents ( $M=16.26$  years of age) to examine prevalence and gender differences in forms of aggression and victimization, as well as 96 adolescents ( $M=15.71$  years of age) studied longitudinally over one calendar year to examine the relation between aggression, victimization and depression. Findings indicate that self-reported

relational aggression as well as overt aggression each uniquely predicts depression symptoms, controlling for the alternate form of aggression. Relational victimization also uniquely predicts depression symptoms after controlling for overt victimization. Overt victimization did not significantly predict depression after controlling for the contribution of relational victimization. Implications of findings, limitations and future directions are discussed.

**Table of Contents**

List of Tables.....	viii
Introduction.....	1
Culture and peers from a developmental psychopathology perspective.....	3
Culture and developmental psychopathology.....	4
Peer relationships and developmental psychopathology.....	6
Peer aggression, victimization and adjustment.....	10
Peer aggression and culture.....	11
War exposure, aggression and adjustment.....	12
Sub-Saharan Africa: Peer relationships, aggression, victimization and adjustment.....	17
History of social and political factors.....	18
Economy and demographic trends.....	20
Education.....	22
Cultural beliefs.....	23
The peer group.....	24
Aggression and adjustment.....	25
Victimization and adjustment.....	29
Uganda: Socio-political history and recent conflict.....	30
Socio-political history .....	30
Recent conflict.....	33
Child development research in Uganda.....	34

The current study.....	37
Aims.....	37
Method.....	38
Participants.....	38
Recruitment and consent.....	39
Procedure.....	40
Measures.....	41
Children's Depression Inventory.....	41
Children's Social Behavior Scale- Self Report.....	42
Children's Social Experiences Questionnaire- Self Report.....	42
Administration and management of bias.....	43
Linguistic adaptations.....	44
Administration conditions.....	45
Likert-scale training.....	46
Data Analysis Plan.....	46
Results.....	47
Factor structure of aggression and victimization subscales.....	47
Gender differences in forms of aggression and victimization.....	48
Gender differences in depressed affect.....	48
Correlations between forms of aggression and victimization.....	48
Unique effect of relational aggression on depression.....	49

Unique effect of overt aggression on depression.....	49
Unique effect of relational victimization on depression.....	50
Unique effect of overt victimization on depression.....	51
Discussion.....	51
Limitations and future directions.....	57
Tables.....	65
Bibliography.....	71

**List of Tables**

Table 1. Comprehensive summary of linguistic adaptations for measures.....	65
Table 2. Gender differences in forms of aggression, forms of victimization, and depressed affect.....	66
Table 3. Unique effect of relational aggression on depression.....	67
Table 4. Unique effect of overt aggression on depression.....	68
Table 5. Unique effect of relational victimization on depression .....	69
Table 6. Unique effect of overt victimization on depression.....	70

## Examining the Role of Aggression and Victimization in the Development of Psychopathology in Ugandan Adolescents

Among most current psychological researchers and clinicians, the developmental significance of peer relationships is undisputed. Considered a major developmental task of childhood, establishing and maintaining relationships with other children has been shown to dramatically impact both child and later adult outcomes (Rubin, Bukowski & Parker, 2006). Researchers have successfully identified a number of risk and protective factors stemming from the peer experience that promote or discourage the development of disorder. One of the primary risk factors linked with maladjustment in this category is exposure to or participation in aggressive behavior. Aggression has been linked with a wide range of maladaptive outcomes, including rejection by peers (Coie & Kupersmidt, 1983; Newcomb, Bukowski, & Pattee, 1993), academic problems and low achievement (Hinshaw, 1992; Wentzel, 2003), later aggressive behavior (Broidy et al., 2003), occupational problems (Kokko & Pulkkinen, 2000), and internalizing and externalizing problems (Coie, Dodge, & Kupersmidt, 1990; Cicchetti, Lynch, Shonk, & Manly, 1992; Rubin et al., 2006).

In particular, one well-established maladaptive outcome linked with both aggression and victimization is internalizing problems, particularly depressive symptoms (Cicchetti & Toth, 1998; Crick & Grotpeter, 1995; Crick & Grotpeter, 1996; Crick & Zahn-Waxler, 2003; Dodge, 1993; Panak & Garber, 1992; Prinstein, Boergers & Vernberg, 2001). Yet there remain significant gaps in our knowledge regarding this relationship. From a developmental systems perspective, aggressive behavior, victimization, and their related outcomes stem from a complex interplay between

individual characteristics, such as social competence, and proximal and distal systems of influence, including family characteristics, peer group norms, and cultural setting.

Unfortunately, the majority of the research on aggressive behavior and related outcomes has focused on individual characteristics and the more proximal systems of influence (Crick, Murray-Close, Marks & Mohajeri-Nelson, 2010). Studies examining these relations have typically utilized children from western or industrialized settings, and a growing body of research indicates that aggressive acts may be perceived and received differently by peers in different cultural contexts (Cairns & Cairns, 1994; Chen, Chung & Hsiao, 2009; Chen, Rubin & Li, 1995; Prinstein and Cillessen, 2003). Within Sub-Saharan Africa, data is particularly lacking in relation to prevalence, gender differences, and outcomes of physical and relational aggression and victimization.

Additionally, research supports the notion that socio-historical context and politico-environmental factors play an undeniable role in psychosocial development (Arnett, 1998; Leventhal & Brooks-Gunn, 2000; Lynch & Cicchetti, 1998; McLoyd, 1998). Specifically, there is growing evidence that exposure to war or political conflict significantly influences individual behavior as well as psychosocial adjustment. In particular, work supports a link between exposure to war and the development of internalizing symptoms such as depression (Allwood, Bell-Dolan & Hussain, 2002; Carlson & Rosser-Hogan, 1991; Elbedour, Onwuegbuzie, Ghannam, Whitcome , & Hein, 2007; Thabet, Abed & Vostanis, 2004) and behavioral problems such as aggression (Qouta & Odeh, 2005; Qouta, Punamaki & El Sarraj, 2008). However, to date, no work has been conducted examining the relation between peer aggression and depression in a war-affected sample.

The goal of this paper is to 1) evaluate current knowledge on peer relations, aggression, adjustment and the influence of war exposure from a cross-cultural perspective, 2) contribute to the literature on the prevalence of different forms of aggression and victimization in war-affected regions, and 3) explore the relationship between relational and overt aggression/victimization and depression in a sub-Saharan, war-affected setting. To accomplish these goals, this paper will first address culture, peers and aggression from the developmental psychopathology perspective (Cicchetti, 1984; Cicchetti, 1993; Cicchetti & Bukowski 1995; Sroufe & Rutter, 1984). Next, as literature on aggression and general child development is extremely limited within the Ugandan context, aggression will be reviewed within the both the broad cultural context of Sub-Saharan Africa as well as Uganda specifically. These explorations will summarize relevant history of social and political factors, economic and educational trends, cultural beliefs, as well as Uganda's socio-historical context of war and findings on the relationship between war exposure and aggression. Finally, a cross-sectional sample, as well as a short-term longitudinal sample spanning one calendar year, will be utilized within the sub-Saharan African context of northern Uganda to prospectively examine 1) prevalence and gender differences in relational and physical forms of aggression and victimization, 2) aggression and victimization as risk factors for development of depression symptoms, and 3) gender as a possible moderator of extant relations between aggression/victimization and depression.

### **Culture and Peers from a Developmental Psychopathology Perspective**

The developmental psychopathology perspective (DP) views disorder as developmental deviation, or the idea that all disordered behavior can be viewed as a

distortion or degeneration of normal functioning (Sroufe & Rutter, 1984; Cicchetti & Toth, 2009). It thus becomes necessary to view abnormality in the context of normality in order to fully understand it; to define a behavior or trait as abnormal, there first must be a norm or standard that the behavior is deviant from.

**Culture and developmental psychopathology.** When approaching developmental psychopathology from a cultural perspective, it is important to note that the normative standard is both subjective and context-specific, a function of historical and societal pressures and standards that vary across groups and cultures. Further, consistent with the transactional models of contextualist perspectives described above, psychopathology is also conceptualized as a dynamic interaction between factors both intraorganismic (e.g. biological and genetic factors, cognition, personality) and extraorganismic (e.g. family and peers, social class, culture) in nature (Cicchetti & Cohen, 1995). To use fertility as an example, the “normal,” or average, American woman is 25.4 years of age at the time of first birth and will have 2.06 children (Central Intelligence Agency, 2014) whereas a Ugandan woman is 19.1 years of age and will have 6.9 children (Central Intelligence Agency, 2014; World Health Organization, 2005). These varied cultural norms are likely a function of individual social cognitions regarding the family, societal perspectives on when it is appropriate to begin a family, availability of contraceptives and sexual health education, and the cultural value placed on child-rearing.

Developmental psychopathology also places an emphasis on adaptation versus maladaptation within development. The perspective views normative development as orderly; as our biological or environmental circumstances change, it is assumed that we

will adapt to them. Accommodative strategies in response to change can be helpful (e.g. adaptive, positive) or harmful (e.g. maladaptive, disordered). This determination is based on a host of individual developmental factors or systems that may influence the strategy's functionality (e.g. age, emotion regulation or attentional abilities), in addition to the sociocultural and economic standards of the society in which an individual is living. In the case of Ugandan and American fertility rates, the difference in onset of childbearing and number of births may also reflect an adaptive response to historical and economic pressures. Uganda has a high mortality rate, little to no institutionalized end of life care, few enforced child welfare or labor laws and a high number of subsistence farmers. As such, a large family may ensure enough labor for the farm and thus enough food to eat, in addition to familial support in old age and a high likelihood of some offspring surviving to reproduce. Alternately, the United States is primarily a service-based economy with low mortality rates, strongly enforced child labor and welfare laws and a high cost of living. As each child has a high likelihood of survival to reproductive age, a large family may not be necessary to ensure descendants. Additional children are also not needed as a labor force; alternately, with minimum requirements enforced by law for food, shelter, clothing and education, each additional child comes with substantial financial liability, lessening the fiscal stability of the family. As such, electing to have only a few children when residing in the United States may best protect familial interests. Thus, by focusing on adaptation versus maladaptation when evaluating a developmental outcome, we may more easily see the non-linear, yet orderly, pathways by which developmental outcomes occur. This example is also congruent with an additional tenet of the developmental

psychopathology perspective; to fully comprehend the behavior of a given individual, all systems must be examined in concert, using multiple levels of analysis.

Finally, because the systems influencing development are dynamic and continuously developing themselves, developmental psychopathology dictates that the most informative way to observe a system's effects is to study it longitudinally (Cicchetti & Toth 2009). As the system changes, the researcher is able to observe other changes in an individual, in addition to receiving clues about causality in a chain of influence. This may be especially useful in the study of the influence of culture on maladaptive behavior, as the adaptive value of cultural practices may change over time, even if still transmitted. Further, by viewing individual development as a cumulative process influenced by biological, behavioral, cognitive and social factors over time, it is also clear that positive or negative outcomes as precipitated by any of the listed factors would be influential and probabilistically predictive of the direction of an individual's future development. Precursors and correlates to disorder such as cognitive, social and behavioral components, thus become part of a broader and more cohesive developmental picture.

**Peer relationships and developmental psychopathology.** One variable that has been identified as of high importance in the development of psychopathology is the peer experience. Havighurst (1953) lists peer relationships as a primary developmental task of childhood, and one that aids in the attainment of a number of other major tasks such as the development of social cognition and perspective taking, as well as development of personal independence and values. In addition to providing children with a training ground to develop the wide range of interpersonal skills, behaviors and experiences necessary for normal function within social contexts, positive interaction with peers is

linked with higher social and emotional skills key to normative development (Rubin, 1990; Rubin et al., 2006). Further, peer relationships have been shown to influence individual perception, including a child's sense of both self-esteem and social competence (Bishop & Inderbitzen, 1995; Harter, 1982; Keefe & Bernde, 1996). Alternately, challenges in the genesis and maintenance of peer relationships is linked with a range of negative outcomes affecting social, emotional and cognitive functioning, including internalizing and externalizing problems, health risk behaviors, and academic problems (for a review, see Prinstein, Rancourt, Guerry & Brown, 2009).

However, identifying pathways by which children come to reap the benefits and consequences of their peer exposure is challenging, in part due to the complexity of peer experiences as a variable. Consider Hinde's (1987) description of peer experience as belonging to varying levels of social complexity: individuals, interactions, relationships and groups. On the individual level, personal characteristics such as personality features, emotional regulation, temperament and social cognitive skills all directly influence social exchanges that take place (Hawley, 2003). Within these exchanges, or interactions, social cues and the relation between participants' individual characteristics color each isolated outcome. Over time, these interactions and outcomes build upon and inform each other to become a relationship. These singular relationships exist within a network of other relationships, or groups, which tend to display emergent values, hierarchies and behavioral norms- in essence, a culture. Each individual tends to belong to multiple groups (e.g. classes, teams, friend groups) some of which will additionally exert social influence on each other. Echoing the pathways perspective of developmental psychopathology previously described, the peer interactions and outcomes are

additionally influenced by perceptions of past and subsequent expected exchanges between peers.

Notably, recent progress has been made in identifying the mechanisms through which peer exposure influences subsequent outcomes, in part due to the recent interest in developmental cascades (Masten, Burt & Coatsworth, 2006; Masten & Cicchetti, 2010). Cascade models, also referred to as chain reactions or progressive effects, examine multiple constructs longitudinally to explore the interactions and transactions that occur between multiple systems (Cicchetti & Cannon, 1999; Masten & Cicchetti, 2010; Rutter & Sroufe, 2000). Echoing both a dynamic systems perspective and many of the central tenets of developmental psychopathology, cascade models work to evaluate the bidirectional influences across multiple domains of functioning, from micro- to macro-levels, in order to better understand and test pathways of adaptation and maladaptation (Cox, Mills-Koonce, Propper & Gariepy 2010; Masten & Cicchetti, 2010). Recent research utilizing this analytical framework has shown one mechanism influencing the development of depressed affect appears to be friendship experiences. Recently, Bukowski, Laursen and Hoza (2010) found that friendlessness (e.g. having a friend) moderated the relationship between depressed affect and avoidance and exclusion, whereas friendlessness was linked to “snowballing” rates of depressed affect. Another study by Murray-Close and colleagues (2010) identified a cascade effect relating to the peer problems of children with ADHD; challenges with inhibition of aggression and poor social skills and overly positive self-perceptions predicted peer rejection and increased aggression at later time points. Further, these relationships produced negative feedback

loops, with peer rejection at Time 1 related to impaired social skills at Time 2, which was in turn related to increased peer rejection at Time 3.

An added layer of complexity is introduced when one considers that the form and function of peer relationships themselves vary by culture. Regarding form, the structural characteristics of friendships, such as the size of friend groups and length of relationships, appear to vary in South Korean, US and Indonesian samples (French, Bae, Pidada & Lee, 2006). Members of Israeli kibbutz communities are reported to foster few dyadic close relationships, with group involvement treated as more important (Sharabany & Wiseman, 1993). When considered in relation to relationships as a system, it may be that emphasis on group versus individual outcomes in a cultural system determines the scope of relationships sought out.

Regarding function, the developmental and cultural role that peer relationships fulfill in a child's development also appears to vary. In western cultures, friendship is often viewed as a mechanism for socialization, enhancing personal views of self-worth, self-esteem, sense of identity and confidence (Buhrmester, 1990; Corsaro & Rizzo, 1988; Damon & Hart, 1982; Russel & Russel, 1992; Sullivan, 1953). However, this purpose may not be salient in group-oriented cultures where promotion of the self and independence are not primary developmental tasks (Chen & French, 2008). Many Asian cultures value friendships as agents for socializing the values of harmony and cooperation (Chen et al., 2004). Further, group-oriented cultures are reported to describe instrumental aid, or the ability to provide emotional, intellectual, financial or physical assistance, as important factors in friendship (DeRosier & Kupersmidt, 1991; French, Rianasari, Pidada, Newlman, & Buhrmester, 2001; Tietjen, 1989). Interestingly, out of the different

forms of social support described by Betancourt and Khan (2008) as protective factors associated with lower PTSD symptoms in conflict and post-conflict settings, instrumental aid is cited as providing the highest degree of protection. However, the function of peer relationships as a social support and a protective factor in times of stress appears to be a commonality across many cultural contexts. An examination of perceived connectedness to peers within a group of Chechen displaced adolescents; connectedness to peers was related to lower levels of emotional and behavioral problems (Betancourt, 2005). Moreover, in an examination of Palestinian youth exposed to the Intifada, social integration in the peer group moderated the relationship between conflict experience and subsequent psychosocial problems (Barber, 2001).

**Peer aggression, victimization and adjustment.** Despite its aforementioned complexity, researchers have successfully identified a number of risk and protective factors stemming from the peer experience that promote or discourage the development of disorder. One of the primary risk factors linked with maladjustment in this category is exposure to or participation in aggressive behavior. The defining characteristic of aggression is the aggressor's intent to cause harm to the victim (Baron & Richardson, 1994). Aggression as a construct must be considered in relation to both the form it takes, as a number of discrete subtypes which have been identified including physical, relational, verbal, direct, indirect, overt and covert (Crick & Grotpeter, 1995; Dodge & Coie, 1987; Kempes, Mathes, De Vries, & Van Engeland, 2005; Nelson, Springer, Nelson & Bean, 2008), as well as the intended function of the act itself. A number of theories have been posited regarding the purpose of aggression within the peer group, including social dominance theory, the idea that aggression is primarily a means of

achieving dominance within a hierarchy (Buss & Shackelford, 1997). In keeping with the developmental psychopathology perspective, aggression may thus be an adaptive response to hierarchical positioning within a social network; for example, perceived popularity was related to high levels of aggressive behavior (Little, Brauner, Jones, Nock & Hawley, 2003; Prinstien & Cillessen, 2003). Evidence for a curvilinear relationship between aggression and child adjustment has also been posited, with low levels of aggression associated with increases in social status, self esteem and adjustment (Hektner, August & Realmuto, 2000; Prinstien & Cillessen, 2003; Salmivali, 2001). However, the effectiveness of aggression as an adaptive strategy may be constrained by a number of factors, including when in the developmental period the child elects to use the strategy and the form of aggression the child elects to use. For example, covert relational or socially aggressive strategies involving the manipulation of the social context may be of a sociocognitive complexity that would only provide benefit within a hierarchy when peers' social cognitive skills are sufficiently advanced (e.g. in late childhood and adolescence).

Regardless of the possible benefit within a group hierarchy, being the perpetrator or victim of aggression has been linked with multiple negative outcomes, including rejection by peers (Coie & Kupersmidt, 1983; Newcomb, Bukowski, & Pattee, 1993), academic problems and low achievement (Hinshaw, 1992; Wentzel, 1991), later aggressive behavior (Broidy et al., 2003), occupational problems (Kokko and Pulkkinen, 2000), and both internalizing and externalizing problems (Coie, Dodge, & Kupersmidt, 1990; Rubin et al., 2006). In particular, a meta-analysis by Hawker and Boulton (2000) reviewing twenty years' research on peer victimization and maladjustment found that

victimization is most strongly related to depression. However, as previously noted, aggressive behavior stems interplay between individual characteristics and more distal systems of influence, with majority of current published research focused on the former (Crick, Murray-Close, Marks & Mohajeri-Nelson, 2009).

**Peer aggression and culture.** The primary direction of research linking culture and aggression deals with prevalence rates and gender differences of aggression in non-western settings (Lansford et al., 2012). Studies of this nature have been conducted in Finland, Poland, Israel, Indonesia, Italy, Belize, Kenya, Nepal, Australia, American Samoa and China, to name a few (Munroe et al., 2000; Osterman et al., 1994; Osterman et al., 1998; Russel, Hart, Robinson & Olsen, 2003; Tomada & Schneider, 1997).

Unsurprisingly, cultural values, attitudes and beliefs have been shown to influence the expression of aggressive behavior. While aggression appears to consistently be related to peer rejection across cultures (Rubin, Cheah & Menzer, 2010), the consequences and social costs of aggression appear to vary somewhat. Cultures which value individual goal-seeking and competition tend to report more aggressive behavior (Weisz et al., 1988). Alternately, cultures that tend to give the group priority over the individual appear to inhibit aggressive responses; in particular, collectivistic cultures with high moral standards and Confucian values report lower levels of aggression (Bergeron & Schneider, 2005). Consistent with this, children in East Asian countries such as China, Thailand and Korea appear to engage in fewer aggressive behaviors compared to children in North America (Bergeron & Schneider, 2005; Weisz et al., 1988). However, these differences between individual-oriented versus group-oriented settings may be influenced by form of aggression. In a study examining self-reported rates of aggression in China,

Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, and the United States, Lansford et al. (2012) found cross-cultural differences in the mean levels of self-reported physical and relational aggression. Children in Jordan and United States reported levels of both physical and relational aggression lower than the mean. Of particular note, the Philippines and Thailand did not differ from the global mean of relational aggression across all countries. Further, compared to the United States sample, the Thailand sample had more than double the rate of boys and girls scoring 1 standard deviation above the mean on relational (not physical) aggression.

Similarly, aggressive acts are perceived and received differently by peers in different contexts. Aggressive children in individualistic settings may receive support, accolades or even be popular with peers (e.g. the Queen Bee), whereas researchers have documented pervasive psychological and social difficulties for aggressive children in China, including peer rejection, negative self-perception and internalizing problems (Cairns & Cairns, 1994; Chen, Rubin & Li, 1995; Prinstein & Cillessen, 2003). In fact, one study by Chen and colleagues (2004) found that of the sampled aggressive children in China, North America, Brazil and Italy, only the Chinese children reported increased feelings of loneliness and depression. Chen, Chung and Hsiao (2009) suggest that the lower self-perceptions of aggressive Chinese children may be due to the social-evaluative process in schools whereby self-evaluations of behavior and performance are then reviewed and discussed with teachers.

### **War Exposure, Aggression and Adjustment**

While not a cultural variable per se, large numbers of children in majority world settings are exposed to war, community violence or sectarian and political conflict

throughout childhood (UNICEF, 2005). Between 1990 and 2003, there has been major armed conflict within 27-38% of developing countries, affecting up to 20 million children (Walker et al., 2007). While there have been a number of studies documenting a variety of adverse psychosocial effects of exposure to armed conflict (for a review, see Masten & Narayan 2012), there is remarkably little empirical evidence on whether war increases risk for aggressive behavior. As Qouta and colleagues (2008) note, this is unusual given societal beliefs about violence begetting violence.

Overall, research seems to support the notion that exposure to armed conflict is a risk factor for aggressive behavior (Liddell, Kvalsvig, Qotyana, & Shabalala, 1994). A study by Qouta, Punamaki & El Sarraj (2008) compared rates of aggressive behavior in Palestine during the high conflict period of Al Aqsa Intifada and the peaceful period of Palestinian Authority Rule after the Oslo agreement; the researchers found a consistent association between exposure to military conflict and rates of child aggression. This finding replicates the relation found between Intifada exposure and increases in aggressive behavior found by Qouta & Odeh, (2005). Researchers reported that when children exposed to the Israeli-Palestinian conflict were subjected to curfews, 66% of children began to fight with each other and 38% began to develop aggressive behavior (El Sarraj & Qouta, 2005). An additional study by Qouta, Punamaki, Miller and El Sarraj (2008) found that witnessing severe military violence was associated with parent-reported aggressive behavior, with child-reported proactive and reactive forms of aggression, and child-reported aggression enjoyment. The link between aggression and war experiences was also supported in a Croatian study by Kerestes (2006); war exposure in preschool predicted levels of aggression in adolescence. Aggression has also been found to be one

of the outcomes predicted by an accumulated risk model in which exposure to political violence is examined alongside other factors frequently experienced by children in war settings such as family negativity (Garbarino & Kostelny, 1996; Garbarino, Kostelny, & Dubrow, 1991).

Alternately, some findings contest the relation between war exposure and aggression. Multiple studies have found war to be unrelated to increases in child aggression (Barber, 2008; Blattman & Annan, 2007; Raboteg-Saric, Zuzul & Kerestes 1994). In these instances, some researchers have posited that the nature of the conflict and the child or adolescent's perceptions of their own involvement play a significant role in moderating behavioral outcomes. For example, consider Barber's 2008 examination of adolescents in Palestinian territories. While the author found that exposure to chronic violence and active participation in the conflict did not necessarily predict increases in aggression, violence or mental health problems, Barber notes that in this case of political conflict, one may need to take into account the possibility that perceived meaning of the conflict and experiences associated with it account for the findings. In this vein, Barber points out that even violent political activism can positively influence identity development and personal growth of youth.

As opposed to the few studies focused on aggression, internalizing psychopathology is frequently explored as the sequelae of war exposure. Perhaps the most common internalizing problem examined is posttraumatic stress disorder (PTSD) or posttraumatic stress symptoms (PTSS). It has been well established that war exposure, particularly active involvement in fighting as child soldiers, is strongly related to PTSD development. Recent studies estimate that roughly one third of Ugandan former child

soldiers meet full criteria for PTSD as outlined by the DSM-IV (Bayer, Klasen & Adam, 2007; Goldstein, Wampler & Wise, 1997; Okello, Onen, & Musisi, 2007). Further, studies examining levels of PTSS report that virtually all Ugandan child soldiers report at least moderate levels of PTSS (Amone-P'Olak, Garnefski, & Kraaij, 2007; Derluyn, Broekaert, Schuyten, & Temmerman, 2004).

While not quite as well-explored as PTSD, war exposure has also been explored in relation to depression. Carlson and Rosser-Hogan (1991) examined rates of clinical depression as diagnosed by the DSM-III in Cambodian refugees; in this sample, 80% of participants met full criteria for major depressive disorder. In a study examining adjustment of children present during the Sarajevo siege in Bosnia, children exposed to violent war trauma reported higher rates of depression symptoms than both the group exposed to nonviolent trauma such as deprivation/relocation and the group not exposed to any kind of trauma (Allwood, Bell-Dolan & Hussain, 2002). The relation between extreme war exposure and high rates of depressive symptoms is also seen in Ugandan former child soldier samples (Okello, Onen, & Musisi, 2007). Further, high comorbidity between PTSS and depressive symptoms have been found among both children and adolescents exposed to military violence (Elbedour et al., 2007; Thabet et al., 2004). However, a number of these studies are cross-sectional in nature, with samples collected during the conflict within internal displacement or refugee camps or after stability has returned. Exceptionally few studies examine these phenomena longitudinally.

Some research indicates that gender may moderate this relationship between war exposure and depression. Vizek-Vidović, Kuterovac-Jagodić & Arambašić (2000) found that girls exposed to conflict in Croatia manifested higher levels of depression symptoms

than boys. However, western gender research indicates that there are some normative differences in internalizing and externalizing symptomatology reported by males and females, particularly in adolescence (Crick & Zahn-Waxler, 2003). The lack of pre-conflict data on gender differences in internalizing symptoms in a number of these cultures makes it difficult to determine if the effects seen are truly a gender difference in response to trauma exposure or if they are simply a reflection of existing normative gender differences.

This distinction between trauma-driven outcomes and typically occurring gender differences or stressors is reflective of critiques that trauma-focused explorations tend to overemphasize the impact of direct exposure to conflict on mental health while ignoring the influence of basic cultural and psychosocial factors on local mental health outcomes (Miller, Kulkarni, & Kushner, 2006; Miller & Rasmussen, 2010). Very often, conditions such as lack of clean water or electricity, poverty, malnutrition, loss of social or material support, and community violence are concurrently present at the time of conflict and are also powerful risk factors for adverse outcomes themselves (Walker et al., 2007). Few studies consider concurrent psychosocial factors such as aggression alongside mental health issues in war-affected populations.

### **Sub-Saharan Africa: Peer Relationships, Aggression, Victimization and Adjustment**

Given the notable differences seen in peer relationships, aggression, victimization and adjustment relative to environmental influences and cultural settings, it is necessary to evaluate evidence on the role of peer aggression and victimizaiton and children's adjustment in Sub-Saharan Africa if we hope to understand the full scope of the influence of aggression on child development. In keeping with systems perspectives that dictate

the importance of macro-level factors, (Bronfenbrenner & Morris, 2006; Cicchetti & Toth, 2009; Super & Harkness, 2002; Sroufe & Rutter, 1984) this exploration will review 1) relevant social, economic, educational and historical factors that have been identified as influential in child development, 2) common cultural perspectives relevant to the region, and 3) empirical research on peers, aggression and victimization in sub-Saharan settings. In an attempt to attain a comprehensive body of work on Sub-Saharan child aggression as it relates to peer interaction, an individual PsychINFO search for each of the sub-Saharan countries was conducted, combining the country name with the search terms “aggression” and “peer.” An additional search was conducted using the more general terms “Africa” and “African.” Articles focused exclusively on peer relations and aggression as it relates to health-related outcomes (e.g. peer aggression directed toward individuals with HIV/AIDS) will not be addressed due to the nature of such health problems as powerful risk factors themselves. In addition, some researchers have validly criticized cross-cultural psychological research in its tendency to compare disparate cultures with separate worldviews (e.g. Patterson, 2000) when in actuality culture is a socio-cognitive influence that permeates thought, belief and behavior. As such, this review will not reference African findings in comparison to European or North American findings, but rather will review them in the context of the identified African belief structures and relevant developmental theory.

**History of social and political factors.** Sub-Saharan Africa is a broad swathe encompassing 48 countries reaching from the Cape of Good Hope in South Africa at the bottom of the continent up to the Sahara desert, a barren expanse which serves as an effective topographic boundary that has prevented extensive interaction between the

north and the south of the continent. As with North Africa and West Asia, the region encompasses incredible diversity in physical features and ecological contexts as well as in political, economic and social terms. As Fearon (2003) notes in his ethnolinguistic and cultural analysis, the country has an incredible number of different identifiable ethnic groups; over 350 groups were coded in the whole of Africa, accounting for a quarter of the world's countries but 43% of the world's ethnic groups. However, the region's small number of base-languages and the commonalities between languages indicate that the country is significantly less culturally diverse than ethnically diverse (Fearon, 2003).

The history of the region is also quite complex. Oral histories and archaeological findings allow for the tracking of ethno-linguistic groups across expanses of the lower half of the continent as recently as 100 years ago to over 2000 years ago (Collins & Burns, 2013). For example, the Luo peoples of East Africa are a Nilotic group that, over the course of the last 800 years, have extended from South Sudan into Ethiopia, Uganda, Kenya and Tanzania (Ogot, 1967). While the nature of these migrations is beyond the scope of the paper, it is important to note that the flow of peoples across the continent points to both a degree of cultural coherence within the lower half of the continent as well as patterns of culture that may not follow geopolitical boundaries. Politically, Scarrit and Mozzafar (1999) describe over 300 distinct ethnopolitical groups within the region. Some of these subgroup divisions occurred during a period of colonialism in the 19<sup>th</sup> century when many European countries established political domain in the region, drawing borders that cut across traditional territorial boundaries, an event which escalated social tensions. Further, European colonial powers also established residences, businesses and infrastructure such as roads on groups' traditional territories or ancestral family land,

forcing many members to move or take up alternate trades and unskilled labor. The occupation resulted in an interesting version of acculturation whereby the arriving occupants imposed their culture on the original residents. Historically, increased levels of acculturation to colonial culture in Kenya during British occupation were found to be associated with increased aggression and increased exposure to aggression of others (Ainsworth & Ainsworth, 1962).

This colonial period came to a close in the 1950s and 1960s when European countries withdrew their presence in sub-Saharan Africa (Collins & Burns, 2013). However, upon withdrawal many countries lacked the resources or training to continue managing the infrastructure (e.g. hospitals, roads) that had been put in place with external resources. Further, the regional occupancy and subsequent cultural shift in response to changing contexts meant that many traditional ways of life had been abandoned during the colonial period and were unrecoverable; families were unable to return to the way of life lived 100 years before, but neither were they equipped to operate in the cultural and social shell left behind by colonial occupants. Boyden & Mann (2005) point out that in this region, some disparities between groups of children may have origins that are expressly political in nature. For example, the historical policies of Apartheid led to the direct discrimination of specific ethnic groups, producing disparities in education, employment, access to healthcare, and civil rights.

**Economy and demographic trends.** Economically, Sub-Saharan Africa also contains 33 of the 49 “least developed countries” as identified in 2008 by the United Nations Department of Economic and Social Affairs (UNDESA, 2008). Many countries in sub-Saharan Africa are focused on producing perishable goods or cash crops (e.g.

coffee, tobacco) for export to western countries, but much of the region's wealth lies in its natural resources and substantial human capital. Despite this, sub-Saharan Africa has experienced little economic growth; many researchers attribute this lack of expansion to a post-colonial period of exploitation by developed countries, positing that groups are taking advantage of the current political instability left in the wake of decolonization to siphon natural resources (Arnett, 2008; Maathai, 2011; Nsamenang, 2007, Nsamenang & Lo-Oh, 2012). In fact, current evaluations describe China as the most recent culprit (Alden & Alves, 2010; Kaplinsky & Morris, 2009; Taylor, 2009). Thus, despite being resource rich, the majority of the region experiences deep and severe levels of poverty (Ali & Thorbecke, 2000).

The region also has a number of notable demographic trends. The region's population is growing rapidly due to extremely high fertility rates; the average number of children in countries within the subcontinent often exceed 6 per woman, and populations in many African countries are over half composed of children under the age of 14 (Central Intelligence Agency, 2014). In fact, recent United Nations population projections predict the current population of the United States will be exceeded by Nigeria alone within the next 90 years, even taking into consideration mortality rates and other health-related factors (UNDESA, 2004). Further, the subcontinent has fought a remarkable battle with HIV/AIDS, with the problem reaching an epidemic scope comparable to the "black death" in Middle-Ages Europe (Caldwell, Caldwell & Quiggin, 1989). Moreover, as of 2002 more than one tenth of the adult population ages 15-49 was infected with HIV in 12 sub-Saharan African countries; seven of those countries have an HIV prevalence rate of 20% or greater (UNICEF, 2002). Despite the severity of this

health crisis, lack of medical resources and shortcomings in reproductive health education have hampered intervention efforts.

**Education.** Schooling is an area held in very high regard by both governments and citizens of much of the subcontinent. However, with the advent and demise of colonialism in addition to ongoing western influence there has been a shift away from indigenous education related to many of the day-to-day practices of individuals (e.g. agriculture, child-rearing) and toward institutionalized or formal schooling in math, science and language arts, an education which socializes and educates individuals in a way that leaves graduates prepared for careers in common service industry jobs seen in western countries, but ill-equipped for the agrarian and craft-based jobs which compose most local economies (Mukene, 1988; Nasamenang & Lo-Oh, 2012; Serpell, 2011; Serpell & Hatano, 1997). Early childhood education has faced similar problems. European colonizers promoted the institutionalization of early childhood education beginning in the early 19<sup>th</sup> century (e.g. the Infant Schools of Cape Town, South Africa; Prochner & Kabiru 2008). At that time, it was generally held that in order to “civilize” indigenous peoples (e.g. promote a Eurocentric frame of mind and developmental path) one must expose the group to western science and literature, a tactic which reflected a “blank slate” perspective on child development (Prochner & Kabiru 2008).

Understandably, current policies and initiatives on formal schooling are met with some resistance in the rural areas of the subcontinent. An indigenous perspective on formal schooling is well described by Serpell (2011) in his description of the “narrowing staircase” model perceived by many groups. Serpell points out that many groups view formal schooling as a mechanism for selecting out a small and talented minority of local

students from the community while offering little of value to those who do not pass the national exams. As one student was quoted in Banda's (2008) examination of indigenous knowledge systems in schools after leaving prior to completion of 7<sup>th</sup> grade, "Yes, I did the right thing (to stop school). I do not even complain at all. Where is the profit from schooling? Because even those friends of mine who went up to Grade 9, they do not even know what to do in the village now. As for me my mind is now set on farming. That is all and not schooling." (Banda, 2008, p. 243). Despite some progress in the form of promotion of hybridized schooling that combines traditional skill-based teaching and classical western subjects (Banda, 2008), many areas within the region are still struggling to find their desired balance between formal and indigenous education.

**Cultural beliefs.** Regarding the scope of beliefs and attitudes held, the sub-Saharan region is admittedly diverse. However, despite the region's complex history, a number of scholars have posited that commonalities in African subgroups' adaptations in addition to parallels in cultural ideas, practices and issues indicate a level of cultural unity (Diop, 1960; Nkwi, 1983; Serpell, 1992). Nasamenang and Lo-Oh (2012) describe two major shared cultural attributes. First, sub-Saharan cultures typically hold a theocentric perspective on life. This perspective emphasizes humanity and value of human life in addition to emphasizing the sacred nature of childbearing (Nsamenang, 2011). As the authors note, these worldviews also do not stress sovereignty but rather frame the individual as part of an integrated social community, stretching not only through life but also into the afterlife. Second, the sub-Saharan cultural perspective is holistic in nature. This perspective parallels the emergent properties of development championed in dynamic systems theories (Thelen & Smith, 1996); behaviors and outcomes are not

perceived as means or ends of themselves, but rather part of an intimately interconnected whole of behavior. As such, individual behaviors or actions cannot be understood in the absence of reference to the whole.

The aforementioned worldview has implications for how researchers ask about and examine peer relations and aggression within the African context. Africans may perceive the western approach of asking about facets of behavior as inadequate or illogical because it breaks experience down into single behaviors that occur with varying frequency at the individual level (e.g. the CBCL). Additional support for this comes from a study by Giles, Legare and Samson (2008). Giles and colleagues examined children's beliefs about aggression as they relate to the construct of psychological essentialism, or the tendency to view observable behaviors as a function of a deep underlying nature, both fundamental and resistant to change (Medin, 1989; Martin & Parker, 1995). They found that as opposed to American children, South African children were more likely to view aggression as inborn and stable over time, a perspective that complements a holistic worldview.

**The peer group.** Peer groups serve important functions in sub-Saharan contexts as not only a context for socialization but also a source of social support outside of the family system in times of stress (Betancourt & Khan, 2008; Gauvain & Parke, 2010). In fact, peer interaction was recently proposed as the mediating link between culture and socioemotional development through its use of cultural belief structures to establish peer social evaluative processes (Chen, 2012). Unfortunately, there is very little systematic research focused on the role of peers in child development within the Sub-Saharan region of the world; most work in this area comes from case studies within a specific setting.

For example, Maasai of Kenya and Tanzania have peer support built into their daily rituals. Teenage boys within this tribe are expected to always travel and eat in pairs (Boyden et al., 2004). This serves not only as a risk management strategy, as the tribe resides in an area susceptible to serious drought and famine, but also as a tool for teaching the value of cooperation and the benefit of providing instrumental physical, emotional or material assistance to peers (Boyden & Mann, 2005). Other researchers have speculated that in particular, play with peers can be a primary socializing agent (Gauvain & Parke, 2010).

**Aggression and adjustment.** While there have been some fairly recent anthropological analyses examining aggression in African contexts (e.g. female aggression in an ethnographic study of Zambian women, Schuster, 1983), the state of research on sub-Saharan examinations of aggression and victimization is similar to that of peer relations in that there is an absence of systematic replicated research. For example, a recent review of peer relationships in cultural context describe aggressive children's increased risk for victimization as a "universal" finding in Australia, North America, Europe, Southern Asia, and East Asia; there was a notable absence of work conducted in Africa (Hanish & Guerra, 2004; Khatri & Kupersmidt, 2003; Schwartz, Farver, Chang & Lee-Shin, 2002; Smith et al., 2002; Slee, 1995, as cited in Rubin et al., 2010). As acknowledged in earlier sections, one of the primary avenues of recent cross-cultural research has been comparing prevalence rates of different types of aggression. While the global body of research on this topic is moderately developed, there have been very few examinations in the sub-Saharan context relative to more developed regions of the world, and there do not appear to be any official statistics or reports on the prevalence of

aggression for the African continent. Still, those studies that have been conducted are striking. In the Lansford et al. study (2012), as compared to 8 other countries from 6 regions of the world, Kenya had the highest rate of reported aggressive behavior for both boys and girls for both relational and physical aggression, in addition to the highest percentage of children who scored one standard deviation or more above the mean on either relational or physical aggression. This may be due to methodological factors such as variability in the interpretation of the rating scale by culture. However, the authors note that this is unlikely, as the measurement of physical and relational aggression was reduced to a dichotomy (e.g. presence of behavior at any time, or absence).

Alternately, researchers have hypothesized that differing rates of aggression as seen in the Lansford et al. (2012) are due to factors pertaining to cultural beliefs and values. As aggression may be perceived differently in different belief structures, the prevalence of different types of aggressive behavior may be due to children's evaluation of the risks and benefits of engaging in the behavior within a specific cultural context (Österman et al., 1994). This would make sense in the context of developmental psychopathology, as the adaptive value of aggression is dependent on the cultural, political, social and behavioral context that a child is residing in and those influences that are presently acting on a child. Historically, researchers describing traditional child rearing practices in this region (e.g. the Embu of Kenya) have noted that a central developmental task and goal of parents is to generate compliance with the strict social rules of the group, and the child's popularity with peers is in fact tied to "knowing their place" and exerting control over their behavior and emotions (Kenyatta, 1938, p. 106, as cited in Weisz et al., 1993). Indeed, socialization in general in sub-Saharan Africa is

posited to focus primarily on compliance with group rules (Munroe & Munroe, 1977). This facet of socialization would be particularly important in settings where conflict or non-conformity often led to violence or consequences which might affect the receipt of typical instrumental aid from the community.

Limited evidence supports the influence of aggression on peer relations in the Sub-Saharan setting. Aggression was related to peer rejection in a normative South African sample and a learning disordered Zambian sample (Bonn & Kruger, 1996; Mulenga, 1999). However, to the author's knowledge, the vast majority of regions within Sub-Saharan Africa have no accessible relevant research on the topic. There have been some studies examining other correlates and risk factors of aggression and victimization, namely physical discipline, being a victim of physical or sexual abuse, AIDS-related stigma, socioeconomic status, familial factors, poverty and emotion regulation (Ani & Grantham-McGregor, 1998; Boyden et al., 2004; Cluver, Bowes, & Gardner, 2010; Kithakye, Morris, Terranova & Meyers, 2010). A study by Lansford et al. (2005) found that increased use of physical discipline by parents in Kenya is associated with increases in reported child aggression. Interestingly, the researchers found that the perceived and actual normality of physical discipline use within the culture moderated the relationship. As physical discipline was highly normative within the studied region, Kenyan mothers' use of physical discipline attenuated the relationship between physical discipline and adjustment problems; behaviors in the high discipline group were markedly lower than seen in the 6 other settings studied. A study examining risk factors for aggression in Nigerian boys found that corporal punishment also had a negative effect on aggressive behavior, in addition to negative associations with crowding

at home and lack of paternal affection (Ani & Grantham-McGregor, 1998). Espinoza et al. (1992) found familial influences to be significant influences on aggressive behavior as well. In a sample of 111 Kenyan school age children, aggressive behavior on the playground was positively correlated with lower socioeconomic status and parents who were less educated. A cross-cultural study examining the role of poverty in 5 countries also found a negative effect of poverty on peer relations in Kenyan students, with peers more likely to belittle and exclude poorer students (Boyden et al., 2004). Emotion regulation has also been shown to influence rates of aggression and prosocial behavior, but within the sub-Saharan region its influence has only been examined in a Kenyan post-conflict setting where it serves as a moderator for adjustment (Kithakye et al., 2010).

There has been some empirical support for the idea that higher rates of aggression are related to patrilineal cultures (Munroe et al., 2000). However, the study did not examine a comparison group within the Sub-Saharan context; any number of social, political, historical or economic factors may be influencing the findings. Further, Munroe and colleagues' coding of aggression in this observational study was limited to 3 categories: assaulting, roughhousing, and symbolic aggression (e.g. threatening, insulting), which do not span the full range of aggressive behavior identified in the literature (e.g. Nelson et al., 2008). In particular, the assessment neglects relational aggression, thought to be more common in girls within other cultural settings (Crick & Grotpeter, 1995).

Finally, a select few examinations of age and gender differences in aggression and victimization also exist in the Sub-Saharan sample. In the Lansford et al. (2012) examination, boys reported being more physically aggressive than girls in Kenya, but

both genders reported high rates of both physical and relational aggression. In work focused on validation of a peer victimization scale by Mynard and Joseph (2000) within a Nigerian setting, researchers found that Nigerian boys reported significantly more physical victimization than girls; no gender differences were found in provocative victimization, confrontational victimization, and social manipulation (Balogun & Olapegba 2007).

**Victimization and adjustment.** Some work has also been completed on victimization's relation to adjustment in Sub-Saharan settings, although there remains a dearth of work relative to western settings (Ohsako, 1999). In Liang, Flisher and Lombard's (2007) South African examination, bullied individuals were also more likely to report engaging in physical aggression as well as other antisocial behavior. However, the Liang et al. (2007) study does not take into account different forms of victimization, as the measure of bullying or victimization is a single dichotomous question (e.g. This year, have you bullied anybody/ been bullied at school?). Other studies show some support for overt victimization as a risk factor for internalizing and externalizing problems. A study by Cluver, Bowes and Gardner (2010) found that in a South African sample, children experiencing overt victimization showed higher levels of anxiety, depression, suicidal ideation and post-traumatic stress symptoms. Additionally, an eight country Sub-Saharan study examining physical and sexual violence in relation to health behaviors found that individuals who had experienced physical violence reported higher insomnia symptoms, feelings of loneliness, suicidal ideation, substance use and multiple sex partners (Brown et al., 2008). However, the Brown et al. (2008) study also measures physical violence via a single question on number of physical fights an individual has

participated in within the year. The study neither delineates whether the individual was behaving in a proactive (e.g. aggressive) or reactive way, nor does it address covert relational forms of victimization or bullying.

### **Uganda: Socio-Political History and Recent Conflict**

The current study is set in the East African country of Uganda. While the greater social, political, economic, demographic and educational circumstances of sub-Saharan Africa described in the previous section are applicable to Uganda, this region has a unique social and political background that should be acknowledged in the context of the current exploration.

**Socio-political history.** The following modern sociopolitical history is drawn primarily from the Library of Congress country profile (Byrnes, 1992) and the Central Intelligence Agency World Factbook (CIA, 2014). A former colony, Uganda was granted independence in 1962 after almost 70 years as a British protectorate. However, the circumstances of Ugandan independence were different than those of other colonized African regions. In the case of most other African countries, political factions had to unify to force self-rule or independence from their reluctant colonizers. In Uganda, alternately, independence was granted without this unified indigenous political pressure; indeed, one Ugandan political faction actually opposed independence unless its separatist ideals were met. In 1962, the son of a Lango tribe chief in northern Uganda named Milton Obote was elected Prime Minister. In the three years following independence, supporters of a highly centralized government vied against proponents of a tribe-based, loose federation in which local chiefs would retain regional control within their respective kingdoms.

In 1967, after political pressure requesting his resignation, the elected Obote took full control of the government and suspended the constitution, essentially orchestrating a coup against his own government. He later declared Uganda to be a republic and granted greater powers to his own executive branch of government. He also abolished the kingdoms of Uganda, unifying the country geographically if not politically. Of particular note in this chapter of Ugandan history is Obote's systematic oppression of the Bugandan peoples, one of the largest tribes in southern Uganda and proponents of retaining the kingdom structure and localized control. In an effort to control the group, the kingdom of Buganda was divided into four districts that were controlled via martial law, a move that generated significant tension between the southern Buganda and northern Lango/Acholi ethnic groups perceived to be loyal to Obote. As his rule continued and the military began to assume a more prominent role in the country's political activities, Obote appointed an illiterate and minimally experienced junior military officer named Idi Amin Dada. Amin quickly climbed the ranks into a position of power, embezzling money and using his authority and military control to further secure his own political position.

In 1971, upon hearing of government plans to arrest Amin and the military officers loyal to him, Amin staged a successful military coup and assumed control of the Ugandan government. Immediately following his ascension to power, Amin initiated the mass execution of the Acholi and Lango government troops perceived to be loyal to Obote. Amin's rule was militaristic and totalitarian in nature, with the government house renamed the "Command Post" and Ugandan districts governed by battalion leaders from regional military barracks. Government coercion, torture and execution became common. For example, when coffee farmers smuggling goods to Kenya became an

economic problem, Amin's policy solution was to instruct military patrols to shoot the smugglers on sight. Amin also initiated ethnic cleansing within Uganda, expelling and seizing the property of almost 50,000 resident Asians; in many instances, the seized property was used to further fund or bribe the military. After Amin attempted to annex a portion of Tanzania, the Tanzanian army counterattacked, joined by the newly formed Uganda National Liberation Army (UNLA) composed of Ugandan exiles. Tanzanian forces and the UNLA overtook the city of Kampala in spring of 1979, and Amin fled to an exile in Saudi Arabia.

After a year-long interim government, two interim leaders exiled and a second military coup, Obote was returned to power in an election widely agreed to be corrupt due to non-secret ballots, intimidation tactics, flawed ballot counting and political maneuvering which blocked Obote's opponents from running in 17 districts. Obote ruled from 1981 to 1985, but the whole of his rule was colored by civil war. Shortly after Obote reassumed power, former political ally Yoweri Museveni declared himself and his supporters to be the National Resistance Army (NRA), tasked with overthrowing the Obote government. The NRA's campaigning in areas hostile to Obote coupled with use of guerrilla warfare proved hard for Obote to combat. The military conflict between Obote's UNLA and Musevini's NRA resulted in greater devastation and loss of life than that which was accumulated over the 8 years of Amin rule. In addition to direct combat between armies, ethnic tensions and the shift in power resulted in Acholi government soldiers, persecuted under Amin's regime, taking revenge on residents in the districts comprising Amin's former support base. In 1985, Obote once again fled the country in the face of a coup. After a year of a poorly received interm government, Museveni

moved on Kampala and took control of the government with the NRA in 1986, assuming the presidency. Despite early promises that presidents would only be able to hold a 4-year term, Musevini later abolished limits on presidential tenure. To date, he has been in power for over 27 years; in over the course of his tenure, he has established extremely restrictive limits on civil rights, political activity and freedom of speech (Amaza, 1998; Human Rights Watch, 2013).

**Recent conflict.** Over the period of Musevini's rule, Uganda has also been the site of one of the most notorious conflicts between a national government and a rebel group. For over twenty years, the people of northern Uganda, including the Acholi and Lango tribes, experienced horrendous violence and poverty due to war between a rebel group, the Lord's Resistance Army (LRA), and the Ugandan government. The LRA was originally formed in opposition to the NRA and UPDF in 1987, shortly after Musevini took control of the government. When Musevini assumed power, the southern based NRA and UPDF victimized the Acholi and Lango in the north as retribution for Acholi soldiers' persecutory actions during Obote's period of rule. At first, the LRA was formed as a civilian resistance movement, perceived to be the protector of the northern Ugandan people from government backed military abuse. However, over time the LRA evolved into a militant rebel group with religious overtones and began looting northern Ugandan homes for supplies, killing civilians and abducting villagers who were forced to participate in the conflict.

The trauma experienced by youth in the LRA conflict has been particularly extreme – over 32,000 were abducted by the LRA, with boys forced to kill friends, family, and others while girls were forced into sexual slavery (UNICEF, 2005). A

number of children in the northern region lived their wholes lives in constant fear of being abducted or killed by the LRA. Typically feared by their families and former community members, abductees who managed to escape the LRA faced rejection and exclusion. At peak of rebel activity in 1996, approximately 2 million northern Ugandans, including 200,000 children either orphaned or separated from parents, were brutally and violently forced by the Ugandan government to leave their homes and sent to camps for internally displaced persons (IDPs). Conditions in these camps were horrendous with inadequate food and non-existent sanitation facilities. By some estimates, up to 95% of the Acholi peoples were eventually internally displaced. In 2005 a cease-fire was declared and a measure of calm returned to northern Uganda. Today's Acholi and Lango youth and young adults have spent their entire lives in the shadow of these twin atrocities. Compounding matters further, these youth are also highly at risk for experiencing and witnessing violence (e.g., physical and psychological abuse) perpetrated by their own families, neighbors, and local authorities. This is perhaps not surprising given that the cultures of northern Uganda have been permeated by violent atrocities for much of their country's history.

**Child development research in Uganda.** Historically, interest in the sub-Saharan region has focused on research intended to explore questions related to universals in development (Ainsworth, 1967, Cole, Gay, Glick, & Sharp, 1971; LeVine, 1974; Otaala, 1973). Child psychology researchers have consistently turned to African societies to examine the generalizability of developmental theory and findings to other cultural contexts (Harkness & Super, 1977). However, while some work has been done with normative populations within Uganda such as Ainsworth's early research focused on

cultural differences in attachment (1967), exploration of contextually relevant social or cognitive development is not common in U.S. and European research set in sub-Saharan Africa. Indeed, the majority of published developmental literature generated through a PsychINFO or Google Scholar search with the term “Uganda” focuses on the effects of medical and humanitarian crises such as malnutrition or HIV/AIDS on physical, cognitive or social development.

In particular, Uganda lacks a body of work in three major areas, all of which are identified as areas of need by Marfo et al.’s (2011) assessment of the state of research in Africa. First, very little work has been completed on identification of and generation of typical developmental milestones in the Ugandan setting. These major markers of physical development, cognitive development and social development are frequently used across varying age groups in western research as a way of identifying those at risk for social, psychological or medical problems. With basic milestones, population based measures of health are also able to provide a fuller and more rounded perspective on the well-being of youth in Uganda, in addition to insight on a child’s developmental pathway. Achievement of developmental milestones and performance on age-salient developmental tasks provides a concrete and quantifiable indicator of the probabilistic pathway an individual is on (Geiger & Crick, 2001). Failure to achieve a milestone or accomplish a notable developmental task does not unequivocally signify pathology, but may provide an indicator that the child is on a deviant pathway which probabilistically increases his or her risk for negative outcomes (Geiger & Crick 2001). While there have been a few notable studies on basic social and cognitive developmental milestones (e.g. Killbride, Robbins & Killbride, 1970; Otaala 1973), these explorations tend to ignore

local systems of influence, norms, values, and worldviews, providing minimal culturally sensitive adaptation to research methodology and exhibiting little sensitivity to possible behavioral heterogeneity in milestone accomplishment.

Second, Uganda continues to struggle with basic documentation and dissemination of citizens' life circumstances and accessible ecological assets. This basic understanding of everyday life and available resources is essential if we are to understand the socioeconomic, historic, and resource-based influences coloring the Ugandan culture and worldview, in addition to identifying potential risk and protective factors. A lack of research on the topic is partly to blame for this dearth of knowledge, but fault also lies with the particularly dynamic nature of postcolonial Ugandan culture in a digital age. As the population grows rapidly, subsistence farming or hunter-gatherer villages turn into towns and exposure to technology is increased, Ugandans' modal life circumstances are changing and will continue to change rapidly.

Finally, there is a paucity of work focused on prevalence and norms for typical behaviors or traits important to the local context, as well as how these behaviors are related to relevant psychosocial outcomes. In particular, there is troublingly little work on the nature and influence of aggression in northern Uganda, and no work examining aggression as an antecedent of depression within this war-affected region. While the limited peer relations and aggression literature of sub-Saharan Africa was summarized in the previous section, knowledge on aggression's influence on adjustment in northern Uganda specifically has major implications for (a) the cultural generalizability of established developmental antecedents of psychopathology, (b) our understanding of the developmental impact of some of the most severe trauma exposure in the world, and (c)

identification of specific markers of risk that may be used to design culturally sensitive preventive interventions for war-affected African populations.

### **The Current Study**

The current study will address these critical gaps in the field through two explorations. First, a cross-sectional adolescent sample within the sub-Saharan African context of northern Uganda will be utilized to explore prevalence and gender differences in relational and physical forms of aggression and victimization within this war-affected population. Second, a short-term longitudinal design spanning one calendar year will be used to prospectively examine aggression and victimization as risk factors for development of depression symptoms in adolescence. Additionally, gender will be examined as a possible moderator of extant relations between aggression/victimization and depression.

### **Aims**

As there are so few studies examining the proposed questions in sub-Saharan Africa and no such studies in Uganda, these analyses will be exploratory in nature.

*Aim 1:* Determine present gender differences in relational and physical forms of aggression and victimization in the northern Ugandan context.

*Aim 2:* Determine whether relational and physical forms of aggression serve as risk factors for development of depressive symptoms in Ugandan war-affected adolescents.

*Aim 3:* Determine whether relational and physical forms of victimization serve as risk factors for development of depressive symptoms in Ugandan war-affected adolescents.

*Aim 4:* Determine whether gender moderates extant relations between aggression/victimization and depression in this setting.

## **Method**

### **Participants**

For cross-sectional examinations (Aim 1), participants include 258 12- to 23-year-old adolescents ( $M=16.26$ ,  $SD=1.75$ ). Among the participants, 53.9% were boys. Tribal affiliations include Langi/Lango (59.7%), Acholi/Luo (6.6%), Bantu (3.1%), and other/unknown (30.6%). For longitudinal analyses (Aims 2-4), participants include 96 12- to 19-year-old adolescents ( $M=15.71$ ,  $SD=1.48$ ). This sample represents 52.2% of the original 184 students who participated in the study at Time 1, all of whom are included in cross-sectional analyses (while 105 students were retained for Time 2, nine did not complete relevant questionnaires and were thus excluded from analyses). While high, this rate of attrition is not atypical in longitudinal studies of child development in developing countries (Alderman, 2000; Hoddinott, Maluccio, Behrman, Flores, & Martorell 2008). Among the longitudinal participants, 50.5% were boys. Tribal affiliations include Langi/Lango (59.4%), Bantu (5.2%), Acholi/Luo (4.2%) and other/unknown (31.2%). Due to practical considerations such as student absence or other scholastic testing at the participating school, we were not able to collect complete self-report information for some individuals in both the cross-sectional and the longitudinal datasets. While we were able to run make-up sessions with some of these individuals, time constraints circumscribed this effort. With no reason to suspect bias in the sample with incomplete information, all available subjects with complete information were used for each analysis. As the total number of children varied with each analysis, please refer to the residual degrees of freedom to identify number of subjects used in each examination.

All students attended a private school in the town of Lira, Uganda. As many Ugandan children do not begin to learn English until formal schooling, participants were selected on the basis of year in school. Students from Secondary 1 to Secondary 3 participated in order to ensure sufficient grasp of English to complete the questionnaire. It is pertinent to note that in most Ugandan schools, students do not advance grades at the year's end as is typical in US schools; rather, students advance based on merit as measured by test scores throughout the year. Thus, it is possible that a participant began the study in Secondary 1 and concluded the study in Secondary 3 despite keeping to the timeframe of 1 calendar year.

### **Recruitment and consent**

In Uganda the standard consent process is much different than in the United States. School officials, including teachers but most notably principals and headmasters, are typically authorized to provide consent for their students in a variety of capacities, including consent for medical procedures and participation in activities such as research. There are a number of reasons for this. First, for a number of children in northern Uganda, identifying the relevant legal guardian is not straightforward. Many children orphaned during the war or as a result of parental HIV/AIDS end up informally fostered by relatives and non-relatives in their home community (Ntozi, 1997). In such cases, it may be logical to identify the individual paying school fees as the primary guardian. However, a number of these individuals have their fees (including food and clothing) paid by western aid organizations focused on financial support for education of orphaned children. Further, in the case of individuals for whom a guardian may be identified, contacting the families and guardians becomes a challenge. Many children board at

schools located within the large town nearest their home village; distances from school to home and cost of travel may dictate that students only visit their parents a few times each year. Without direct travel, there are few ways to get in contact with parents residing in separate villages. Cell phones are becoming increasingly prevalent, but the cost of calls and poor reception in rural settings make this option unfeasible. As a function of this, teachers and administrators are customarily given a very high degree of authority in Ugandan culture and parents will generally defer to their opinion or expertise, especially on academic matters. Therefore, the Director of Lira Integrated gave consent for all participants. This consent was received as part of the statement of research approval from Lira Integrated. This protocol was approved by University of Minnesota's IRB and the Ugandan National Council of Science and Technology, the body which governs international research in Uganda.

### **Procedure**

Data was collected in-country over the summers of 2011-2013 by the author and a group of trained research assistants in collaboration with teachers on the research committee at our Ugandan partner school. Despite data collection spanning 3 years, only 2 data points were collected, referred to as Time 1 (T1) and Time 2 (T2). These timepoints were 1 calendar year apart from each other. For both Time 1 and Time 2 data collection, children were asked to attend one to two 90 minute sessions scheduled at regular intervals over the course of 3 weeks at their school. Number of sessions was dependent on the length of time it took the student to complete the assessment battery. These sessions were scheduled so as not to conflict with scholastic testing and extracurricular activities. Children provided informed assent at the beginning of the

session and were told that they were not required to participate, nor would non-participation impact them in any way, academic or otherwise. Upon completion, students' participation was compensated via local refreshment in a quantity deemed appropriate by teachers and approved by the Director of the school. As an additional form of compensation for the school and as thanks for hosting the research team, the researchers hosted a school-wide traditional feast for teachers and the full student body at the completion of each visit.

## Measures

**Children's Depression Inventory (CDI).** The CDI examines the presence and severity of depressive symptoms found in children (Kovacs, 1984). This measure consists of 27 items, all of which assess depression. Each item consists of three related statements, and children respond by selecting the one statement that best fits how they feel (e.g., I am sad once in a while vs. I am sad many times vs. I am sad all the time). Items are scored from 0 to 2, with higher scores indicating more evidence of depression. This measure has been used extensively in the sub-Saharan African context (Cluver, Gardner & Operario, 2007; Cluver, Gardner & Operario, 2009; Wild, Flisher, Laas, & Robertson, 2006) and has been used in other empirical work in Uganda (Kaggwa & Hindin, 2010). One slight change was made in replacing the word "I" with "you" for each question, an adaptation recommended by our Ugandan research committee. No content changes were made. Evaluations of the CDI's psychometric properties have established construct validity (e.g. Saylor, Finch, Spirito & Bennett, 1984). In the current investigation, internal consistency for the measure was  $\alpha = .74$ .

**Children's Social Behavior Scale - Self Report (CSBS-SR).** This is an assessment of the frequency with which children direct aggression towards their peers (Crick & Grotpeier, 1995). This measure consists of 15 items in which individuals are asked to report how often they engage in various aggressive and prosocial behaviors. The current study utilizes the relational aggression and overt aggression subscales. Each item consists of a single statement about a behavior, and children respond by selecting how often they feel that they engage in the behavior (e.g., Some kids tell lies about a classmate so that the other kids won't like the classmate anymore. How often do you do this?). Items are scored on a 1-5 likert scale from never to always, with higher scores indicating more evidence of aggression. The relational aggression subscale (RA) consists of 5 questions addressing behaviors that focus on harming relationships. In the current investigation, internal consistency for the relational aggression subscale was  $\alpha = .72$ . The overt aggression subscale (OA) consists of 3 items that focus on physical harm or verbal aggression. Internal consistency for the overt aggression subscale was  $\alpha = .84$  in this analysis.

**Children's Social Experiences Scale - Self Report (CSEQ-SR).** The CSEQ-SR consists of 15 items assessing relational and physical victimization and prosocial behavior (Crick & Grotpeier, 1996). The relational and overt victimization scales (RA & OA) are each composed of 5 items. An item consists of a single statement about a behavior, and children respond by selecting how often they perceive themselves to be a recipient of the behavior (e.g., How often do other kids leave you out on purpose when it is time to play or do an activity?). Items are scored on a 1-5 Likert scale from never to always. Higher scores indicate more evidence of victimization. In the current

investigation, internal consistency for the relational victimization subscale was  $\alpha = .71$ .

Internal consistency for the overt victimization subscale was  $\alpha = .77$ .

### **Administration and Management of Bias**

There are a number of unique methodological considerations that must be taken into account when conducting work in majority world settings. Broadly, these may be broken down into the categories of bias and equivalence. Bias refers to “nuisance factors” that generate discrepancies between reported and actual differences in the underlying trait or ability measured, or differences measured using an instrument that lacks a similar meaning within and across cultures (Poortinga, 1989, Van De Vijver & Tanzer, 2004). Alternately, equivalence typically refers to whether measures and measurement procedures are comparable across cultures (Johnson 1998). Equivalence is often framed as the opposite of bias. As Van De Vijver and Leung (2011) note, equivalence requires the absence of bias, whereas bias almost always results in a form of inequivalence. To ensure equivalence, research team members sought to address three forms of bias in our methodology: construct bias, method bias and item bias.

Construct bias refers to the inequivalence resulting from constructs that lack shared meaning, a premise that precludes cross-cultural comparison. While this exploration does not seek to directly compare the responses of Ugandan individuals to individuals in other settings, it does examine constructs of relational and physical aggression and victimization as measured by instruments developed in the United States. Method bias refers to sources of bias due to factors related to the methodology of a study. Sources of this kind of bias can include physical or social differences in administration conditions, ambiguity of instructions, interviewer effects, linguistic problems, and

differential familiarity with response procedures. Finally, item bias refers to discrepancies originating from poor translation or ambiguous items. To avoid construct, method and item bias, the research team used a combination of the design-based and statistically-based bias management and equivalence testing approaches described in Van De Vijver and Leung's 2011 chapter in *Cross-Cultural Research in Psychology*. These approaches will be described in the sections below.

**Linguistic adaptations.** Uganda's 2 official languages are Swahili and English. British English is widely considered to be the correct form of the language in Uganda, although most Ugandans who speak English have had little contact with native British English speakers. As such, the language has thus developed a strong local flavor by adopting some words from traditional Swahili dialects and reimagining use and meaning for standard British English words. This has produced a form of English referred to as Ugandan English. While Ugandan English shares the vast majority of words and linguistic structures with American English, there remain some significant differences in regard to specific idioms and meanings relevant to this work which could potentially lead to construct and item bias. As such, study questionnaires were treated as written in a foreign language, despite the significant linguistic overlap.

Researchers followed protocols for translation of measures outlined in Lansford et al. (2012) in addition to manualized cross-cultural adaptation procedures described in Antunes (2012). To ensure linguistic and conceptual equivalence of the measure used, forward and back translation procedures were applied. Specifically, researchers recruited two Ugandan teachers fluent in Ugandan English and formal British and American English who were members of the partner school's research committee. These recruits

separately translated the instruments into Ugandan English and were asked to note a) questions or idioms that did not translate well or were culturally insensitive or irrelevant, b) identify words that elicited several meanings within the Ugandan context, c) suggest improvements for identified issues, and 4) indicate reasons for alterations of noted discrepancies. Researchers met with translators individually and as a group to review the identified discrepancies, and a third Ugandan teacher mediated the assimilation of versions into a single forward-translated measure. All members of the research team back-translated the measure separately, including a “naïve” translator, a member who is unfamiliar with the relevant research area and was blind to the original version of the measures. The back-translated versions were aggregated and reviewed in a meeting of translators and multi-disciplinary research team members to ensure consensus on the proposed wording and alterations. The final version was proofed and reviewed by additional Ugandan teachers not involved in the original translation efforts. Overall, the measures used in this analysis required minimal alteration. A comprehensive summary of adaptations is presented in Table 1.

**Administration conditions.** To avoid administration method bias, the partner school’s research committee worked with the UMN team in making decisions about the physical set-up and administration of questionnaires so that test-taking conditions were consistent with Ugandan cultural norms. Collateral information was gathered from teachers on typical test administration and test-taking settings, which was used to inform administration. Questionnaires were administered in a standard classroom within the secondary school with a desk configuration recommended by teachers and ambient noise consistent with school norms. Social environmental conditions such as physical space

between respondents, respondent group size and group (versus individual) administration were consistent with Ugandan norms. Ugandan teachers and UMN research assistants jointly led questionnaire sessions, with a member of the school's research committee also present. Ugandan teachers were given training in questionnaire administration protocols and fielding student questions.

**Likert-scale training.** In collateral data collection regarding administration, Ugandan teachers reported that students have not had extensive exposure to the Likert-scale response structure. To mitigate this potential source of administration bias and discourage differential response styles, all participants were led by the Ugandan and UMN session leaders in a Likert-scale training, during which they completed 5 culturally relevant sample questions (e.g., I eat posho). After research assistants and Ugandan teachers confirmed group understanding of Likert-scale response structure, students began questionnaires. Research assistants and Ugandan teachers read the first two to three questions with participant groups to ensure comprehension; after this, students were allowed to work individually at their own pace. Students were instructed to ask for assistance from one of the circulating research assistants or teachers if the wording of a question was confusing or incomprehensible; participants appeared to consistently request help when needed.

### **Data Analysis Plan**

1. Independent samples t-tests will test gender differences in relational aggression, physical aggression, relational victimization, and physical victimization.
2. Correlations between relational and physical aggression will be reported.

3. Multiple hierarchical linear regressions will be used to test the unique contributions of:
  - a. relational aggression independent of physical aggression on later depression symptoms
  - b. physical aggression independent of relational aggression on later depression symptoms
  - c. relational victimization independent of physical victimization on later depression symptoms
  - d. physical victimization independent of relational victimization on later depression symptoms
4. Additional steps will be added to the regressions to examine possible moderation of these relations by gender.

## Results

### **Factor Structure of Aggression and Victimization Subscales**

As this examination utilizes scales of the CSBS-SR and CSEQ-SR that have not been previously used in Uganda, it was necessary to test whether items loaded as expected onto the relational and physical aggression and victimization factors. Confirmatory factor analysis was used to test the pattern of factor loadings for all subscales. The model fit the data well,  $\chi^2(129) = 137.35$ ,  $p = .291$ , Comparative Fit Index (CFI) = 0.99, root mean square error of approximation (RMSEA) = 0.02 (90% CI: 0.00, 0.04). All items loaded significantly onto their respective factors. On this basis, it was concluded that the measures met criteria for establishing configural invariance (Vandenburg & Lance, 2000).

### **Gender Differences in Forms of Aggression and Victimization**

Independent samples t-tests were used to examine possible gender differences in prevalence of relational and overt aggression and relational and overt victimization. No significant gender differences were found for relational aggression,  $t(253) = -0.44$ ,  $p=.66$ , overt aggression,  $t(253) = 1.30$ ,  $p=.20$ , relational victimization,  $t(250) = -0.73$ ,  $p=.47$ , or overt victimization,  $t(250) = 0.52$ ,  $p=.60$ . Means and standard deviations by gender are reported in Table 2.

### **Gender Differences in Depressed Affect**

Independent samples t-tests were also used to examine gender differences in depressed affect scores. No significant gender differences were found,  $t(224) = 1.75$ ,  $p=.08$ . Means and standard deviations for depressed affect by gender are also reported in Table 2.

### **Correlations Between Forms of Aggression and Victimization**

To assess the degree of relatedness between different forms of aggression and victimization, correlations were run for physical and relational aggression as well as physical and relational victimization. The correlation coefficient for overt and relational aggression was  $r = .58$ ,  $p=.000$ , whereas the correlation for overt and relational victimization was  $r = .71$ ,  $p=.000$ . This is consistent with previous research reporting significant intercorrelations between relational and overt aggression (e.g.,  $r = .54$ , Crick & Grotjeter, 1995;  $r = .63$ , Crick, 1996). Little et al. (2003) reported that correlation coefficients typically fall within the  $r = .5-.7$  range, and a meta-analysis by Card et al. (2008) found that the average corrected correlation was .76. These coefficients indicate a

relationship between the relational and overt forms of aggression and victimization that is to be expected with two separate but related constructs (Crick & Grotpeter, 1995).

### **Unique Effect of Relational Aggression on Depression**

A hierarchical regression analysis tested whether T1 reports of relational aggression uniquely predicted participants' reported T2 depression above and beyond the contribution of T1 overt aggression. All predictor variables were centered prior to inclusion in analyses. Using T2 depression as the dependent variable, overt aggression was added on an initial step. At step 2, the main effects of relational aggression and gender were added. In order to test whether gender moderates the association between relational aggression and depression, a relational aggression x gender interaction term was entered at step 3. Analyses revealed a significant main effect of relational aggression on T2 depression, controlling for overt aggression. The main effect of gender was not significant. Furthermore, findings indicated that gender did not moderate the association between RA and depression. Results indicated that this final model was significant  $F(4,67) = 4.60$ ,  $p = .002$ , and accounted for approximately 22% of the variance in depression scores ( $R^2 = .216$ ). Findings are presented in Table 3.

### **Unique Effect of Overt Aggression on Depression**

A hierarchical linear regression tested whether T1 reports of overt aggression uniquely predicted participants' reported T2 depression above and beyond the contribution of T1 relational aggression. All predictor variables were centered prior to inclusion in analyses. Using T2 depression as the dependent variable, relational aggression was added on an initial step. At step 2, the main effects of overt aggression and gender were added. In order to test whether gender moderates the association

between overt aggression and depression, an overt aggression x gender interaction term was entered at step 3. Analyses revealed a significant main effect of overt aggression on T2 depression, controlling for relational aggression. The main effect of gender was not significant. Gender also did not moderate the association between RA and depression. Results indicated that this final model was significant  $F(4,67) = 4.17$ ,  $p = .005$ , and accounted for approximately 20% of the variance in depression scores ( $R^2 = .199$ ). Findings are presented in Table 4.

### **Unique Effect of Relational Victimization on Depression**

Hierarchical linear regressions were conducted to examine whether T1 reports of relational victimization uniquely predicted participants' reported T2 depression above and beyond the contribution of T1 overt victimization. All predictor variables were centered prior to inclusion in analyses. Using T2 depression as the dependent variable, overt victimization was added on an initial step. At step 2, the main effects of relational victimization and gender were added. In order to test whether gender moderates the association between relational victimization and depression, a relational victimization x gender interaction term was entered at step 3. Analyses revealed a significant main effect of relational victimization on T2 depression, controlling for overt victimization. The main effect of gender was not significant, and gender did not moderate the association between RV and depression. Results indicated that this final model was significant  $F(4,68) = 2.99$ ,  $p = .025$ , and accounted for approximately 10% of the variance in depression scores ( $R^2 = .100$ ). Findings are presented in Table 5.

### **Unique Effect of Overt Victimization on Depression**

Hierarchical linear regressions were conducted to examine whether T1 reports of overt victimization uniquely predicted participants' reported T2 depression above and beyond the contribution of T1 relational victimization. All predictor variables were centered prior to inclusion in analyses. Using T2 depression as the dependent variable, relational victimization was added on an initial step. At step 2, the main effects of overt victimization and gender were added. In order to test whether gender moderates the association between overt victimization and depression, an overt victimization x gender interaction term was entered at step 3. The main effect of overt victimization was not significant after controlling for relational victimization. The main effect of gender was not significant as well. Gender did not moderate the association between OV and depression. Results indicated that this final model was significant  $F(4,68) = 2.86$ ,  $p = .030$ , and accounted for approximately 14% of the variance in depression scores ( $R^2 = .144$ ). Findings are presented in Table 6.

### **Discussion**

The current study supplements current knowledge on the pathogenesis of psychopathology in war-affected children through assessment of the role of aggression and victimization in the development of depression symptoms in a northern Ugandan adolescent sample. Analyses revealed that, after controlling for the alternate forms of aggression, self-reported relational and overt aggression were uniquely and positively associated with depression symptoms one year later, providing evidence that engagement in both overt and relational forms of aggression confer distinct and considerable risk for the development of depression in adolescence within the northern Ugandan context.

Indeed, in these analyses the final models incorporating both forms of aggression accounted for 20-22% of the variance in individual depression scores. This provides some insight into the cultural generalizability of aggression as an established developmental antecedent of psychopathology. Findings are consistent with research in the US that identifies relational and overt forms of aggression as distinct forms of peer behavior that serve as risk factors for the development of internalizing symptoms in adolescence (Prinstein et al., 2001).

Forms of victimization were also examined as a risk factor for later depression symptoms. Self-reported relational victimization also predicted later depression symptoms after controlling for overt victimization. This finding is also consistent with existing research supporting relational victimization as a unique risk factor in the development of psychopathology (Crick & Bigbee, 1998; Crick & Grotjeter, 1996; Prinstein et al., 2001) as well as a specific risk factor for depression in adolescence (Morales & Cullerton-Sen, 2000). As with findings on aggression, relational victimization also appears to have a powerful adverse impact, with the complete model accounting for 10% of the variance in depression scores.

Of note, findings showed that while self-reported overt victimization did predict later depressive symptoms when entered on the first step of the regression targeting relational victimization, overt victimization did not significantly predict later depression symptoms above and beyond the predictive contribution of relational victimization. This finding is contrary to previous literature linking overt victimization and internalizing problems (Boivin, Hymel, & Bukowski, 1995; Crick & Grotjeter, 1996; Hodges, Boivin, Vitaro, & Bukowski, 1999; Prinstein et al., 2001) as well as studies examining the impact

of overt victimization on internalizing problems in sub-Saharan settings (Culver, Bowes & Gardener, 2010).

One possible explanation for this incongruity lies in the nature of peer support as a protective factor in the sub-Saharan setting. In Cluver and colleagues' study (2010) set in Cape Town, South Africa, support from close friends was found to buffer the adverse internalizing effects of overt victimization. Relative to this finding, overt victimization should impact the individual if peer support is either absent or should the child perceive peer support to be absent. Further, some of the aforementioned studies' conflicting findings were generated without measuring or controlling for relational forms of victimization (Cluver, Bowes & Gardner, 2010). Thus, it may be that Ugandan adolescents are interpreting their experience as victims of relational aggression as a lack of peer support, a theory consistent with the established notion that relationally victimized children may interpret negative peer interactions as critical appraisals of the self, in turn generating internalizing problems or emotional distress (Crick & Bigbee, 1998; Prinstein et al., 2001).

Alternately, cultural differences regarding the perceived normativity of overt aggression and victimization in the Ugandan context may account for this difference. Physical aggression is much more common in the Uganda than in many parts of the US and Western Europe where most studies of aggression and victimization originate. One review of factors influencing Ugandan mental health, authored by Ugandan Ministry of Health and hospital employees, found that acts of violence frequently reported in Uganda include familial corporal punishment, the burning of children's body parts, tying up with ropes and, less commonly, the mutilation of body parts (Ndyanabangi, Basangwa,

Lutakome, & Mubiru, 2004). Physical punishment is also extremely common in East African school settings. One study examining reward, punishment and adjustment of orphans in Tanzanian schools reported that 54% of all subjects, orphan and non-orphan, reported having been physically punished in school once or more within the past week (Makame, Ani & Grantham-McGregor, 2002). Indeed, a rhyme frequently repeated with zest by children in Ugandan nursery schools visited by the research team includes the line “If you make a mistake/ You will be beaten!/ Beaten beaten beaten/ By our teacher!” It may be that individuals who are physically victimized perceive the experience to be a relatively typical part of Ugandan childhood. This normative perception may serve as a protective factor, insulating adolescents from the deleterious effects seen in western literature.

This exploration also examined whether associations between forms of aggression and victimization were similar to those found in previous literature. Consistent with Lansford and colleagues’ findings in nine other countries (2012), higher rates of relational aggression were significantly associated with higher rates overt aggression in the Ugandan context. The moderate correlation coefficient of .58 found for relational and overt aggression is similar in magnitude to those found in a number of other studies examining relations between different but related forms of aggression (Archer, Killpatrick, & Bramwell, 1995; Kawabata, Crick, & Hamaguchi, 2010; Lansford et al., 2012). This exploration also found a similar relation between rates of relational and physical victimization, with a correlation coefficient of .71. This coefficient is somewhat higher than those reported by Crick, Casas and Ku (1999) and Cullerton-Sen and Crick (2005), but is within close range of the average correlation reported in a meta analysis of

gender differences and intercorrelations between direct and indirect aggression in childhood and adolescence (Card, Stucky, Sawalani, & Little, 2008).

No gender differences were found in rates of depressed affect. This is at odds with most western research on major depressive disorder (MDD), which reports significantly higher rates of MDD in females (Anderson, Williams & Silva, 1987; Cohen et al., 1993; Essau, Conradt, & Petermann, 2000; Essau, Lewinsohn, Seeley, & Sasagawa, 2010; Fleming, Offord, & Boyle, 1989; Kashani et al., 1987; Lewinsohn et al., 1993), a sex difference which appears to emerge in adolescence (Cohen et al., 1993; Essau et al., 2000; Hankin et al., 1998). However, a lack of gender differences in depression rates has been replicated in other studies examining East African individuals exposed to mass trauma (Bolton, Neugebauer, & Ndogoni, 2002) as well as studies conducted in rural Uganda (Bolton, Wilk, & Ndogoni, 2004). Previous posited explanations for this discrepancy have been sample-centered, such as sampling a greater proportion of men than women infected with HIV, a group with higher known rates of depression (Bolton et al., 2004). Alternate explanations for this disparity may lie in cultural differences in gender socialization, the war's influence on the development of internalizing symptoms, or differences in self-report of depressive symptoms within this cultural context.

Notably, no gender differences were found in either form of self-reported aggression and victimization, a finding counter to a substantial body of research on gender differences in aggression (Crick & Grotpeter 1995; Crick & Grotpeter 1996; French et al., 2002; Österman et al., 1998; Russel et al., 2003). However, a lack of gender differences across different forms of aggression is not unprecedented in the

literature. While replicating gender differences in physical aggression in all 9 countries, consistent gender differences in relational aggression were not found by the Lansford et al. study (2012). Tomada & Schnieder (1997) reported higher rates of both relational and physical aggression in boys. Further, the meta-analysis of gender differences in indirect and direct aggression by Card et al. (2008) concluded that the small gender differences found by studies were trivial and does not support gender differences in relational aggression.

One possible explanation of the lack of gender differences seen across forms of aggression and victimization in this sample lies in the explicitly high value of relationships in of Ugandan culture. Uganda may be classified as having characteristics consistent with collectivist culture, or a culture in which central emphasis is placed on the group; these cultures are thought to view themselves primarily as part of a whole, placing common goals and values above that of the individual, in addition to promoting cooperation and maintenance of harmonious relationships (Triandis, 1995). Indeed, Ugandan scholar Paul Bukuluki frames Uganda as taking an African collectivist worldview in which individual self concept and personhood are intimately entwined with the concept of community, even going so far as to treat them as one and the same (Bukuluki, 2013; Ikuenobe, 2006).

As Crick and Grotjepeter propose in their seminal work (1995), gender differences in relational and overt aggression may be present in western settings because the forms are differentially effective as a means of inflicting harm or exerting control in each gendered peer context. However, the relative importance of relationships within Uganda's cultural structure would then make damaging an individual's peer relationships

exceptionally pernicious for both boys and girls; both male and female individuals may view this relational damage as equal to or more detrimental than the effects of physical or verbal aggression and thus more emotionally distressing. Furthermore, damage to a relationship would have not just relational but also physical implications within a setting in which an individual is reliant on relationships and community support for basic needs such as food or shelter as well as access to other limited resources such as cell phones, airtime or the internet. As noted previously, the ability to provide this kind of instrumental aid (e.g. emotional, intellectual, financial or physical assistance) has been found to be an important factor in friendships within group-oriented cultures (French, Pidada & Victor, 2005; Tietjen, 1989).

**Limitations and future directions.** While these findings provide significant insight into the impact of peer aggression and victimization on the development of internalizing problems in war-affected settings, a number of limitations should be noted. First, this study does not explicitly measure degree of war exposure in youth. While a number of studies of war-affected individuals do not directly measure war-exposure and instead infer exposure based on geographic residence, (e.g. Bass et al., 2012; Tol et al., 2014), degree of direct exposure to conflict can have a significant impact on the development of mental health problems (Fox & Tang, 2000; Jaranson et al., 2004; Tang & Fox, 2001). Future studies on the relation between aggression and mental health symptoms in war-affected populations would benefit from an objective quantitative measure of the magnitude of individual exposure to conflict related events. Further, when considering war as a risk factor in the development of psychopathology, it is important for researchers to avoid reducing exposure to a “presence versus absence”

dichotomy, as this ignores the myriad differences in individual war experiences. When included in analyses, information on the type of exposure (e.g. abduction, direct engagement in fighting, caught in crossfire, presence during fighting in home village, having a parent or family member injured or killed) via a structured questionnaire such as the War Trauma Questionnaire (Macksoud, 1992) can provide a more nuanced understanding of the impact of different types of war experiences on mental health (e.g. Smith, Perrin, Yule, Hacam, & Stuvland, 2002).

Even within studies sensitive to type of war exposure, a number of other relevant parameters are frequently ignored such as the developmental timing of exposure, or the developmental period in which the exposure to conflict first occurred. Of additional import are the chronicity of exposure and the recency of latest exposure. In other research focused on the developmental and psychopathological influence of traumatic events such as child maltreatment, analyses of developmental timing, chronicity and recency have been shown to elucidate subtle differences in the impact of maltreatment on individual neurobiological, psychological, emotional and behavioral outcomes (Cicchetti, Rogosch, Gunnar & Toth, 2010; Hecht, Cicchetti, Rogosch & Crick, in press; Manly, Cicchetti, & Barnett, 1994; Manly, Kim, Rogosch & Cicchetti, 2001). Examination of developmental period, chronicity and recency within war exposure studies may provide similar clarification.

Additional work is also needed to bridge the gap between trauma-focused and psychosocial approaches to understanding the impact of conflict on child mental health. As noted by Miller et al. (2006) as well as Miller & Rasmussen (2010), research focused on mental health in war-affected populations frequently focuses on trauma experiences,

ignoring the daily stressors and life circumstances of individuals as well as known psychosocial risk factors. One suggestion provided by researchers in this arena relative to targeted clinical intervention focuses on addressing salient and easily targeted daily stressors which impact mental health prior to administering specialized clinical services (Miller & Rasmussen, 2010). By using these targets to reduce daily stressors and improve quality of social and material circumstances for children in conflict and post-conflict settings, researchers may identify youth whose distress and dysfunction do not abate; these individuals are likely to require the specialized clinical assistance most trauma interventions focus on (Bolton & Betancourt, 2004). Relative to the findings of this study, peer aggression and victimization may be promising targets for this kind of psychosocial intervention.

The findings of this study indicate that forms of aggression and victimization may serve as moderating factors in the development of depression in the wake of war exposure in East Africa. However, without an age-matched comparison group with limited exposure to the conflict that is of similar socioeconomic status and from a culturally equivalent region of the country, our ability to draw definitive conclusions about the relation between war exposure, depression and aggression remains limited. Making this comparison may prove challenging within a number of war-affected countries as a result of the pervasiveness of conflict within that setting and regional variance in culture. However, in Uganda identifying an appropriate comparison group is quite feasible. In the LRA conflict, the Nile River has served as an impassable barricade for northern LRA rebels, preventing them from invading the southern half of the country and thus significantly limiting direct exposure to fighting and abduction in the southern

half of the country. Future research in this domain should examine the relation between aggression, victimization and depression within southern Ugandan adolescents so that a culturally relevant comparison may be made. Other improvements to future studies include a larger sample size to detect nuances in behavioral outcome measures as well as strategic measures for management of attrition, noted by many researchers as a chronic problem when conducting research in majority world settings due to rapid change in life circumstances, access issues, limitations in technology, limited resources and lines of communication (Mathee et al., 2010).

This work has replicated studies in other countries finding aggression and victimization to be developmental antecedents to psychopathological outcomes, supporting their classification as developmental risk factors within a Ugandan setting. However, as noted previously, there is significant cultural heterogeneity within Ugandan tribal groups and East Africa more generally. Future research would also benefit from an exploration of cultural beliefs about aggression, victimization and depressed affect within and across ethno-linguistic tribal groups. With each tribe's varied history, traditions, and unique socialization practices, it is likely that cultural beliefs about aggression, victimization and displays of sadness vary. Further, the adaptive importance of different forms of aggression may fluctuate relative to tribal gender norms and socialization. These nuances are likely to impact the relation between aggression, victimization and depression and should be explored further.

This study relies on self-report for measures of aggression, victimization and depressed affect. Previous work has supported the utility of self-report as a technique for studying disparate forms of aggression as it relates to psychosocial outcomes in

adolescents (Crick & Grotpeter, 1995; Crick & Grotpeter, 1996; Khatri, Kupersmidt, & Patterson, 2000; Orpinas & Frankowski, 2001). However, self-report has also been criticized in studies of aggression as children may be reluctant to disclose their actual rate of engagement in aggressive behavior. Children may also report their behavior or experiences inaccurately due to a lack of insight, particularly in relation to covert forms of aggression. Further, when examining aggression in a new culture, cultural norms and perceptions of aggression may influence rates of reporting; if Country A is more accepting of aggression and perceives it as more normative than Country B, then children in Country A are more likely to feel comfortable reporting that they engage in aggressive behaviors. Replication of these findings using multi-informant methodology, including observation, teacher report, parent or caregiver report and peer nominations would be hugely beneficial for our understanding of the constructs, albeit logically challenging in this context.

While this study has added to the current literature on the topic, there is not yet enough work to reflect extensively on how psychosocial factors like aggression contribute to Sub-Saharan Africa's unique pathways of development. Only with additional longitudinal study of how developmentally salient systems interact over multiple levels of analysis will the field gain insight into precipitants of aggression and elucidate equifinality and multifinality in associated outcomes. Given the extremely turbulent history of both the region and Uganda specifically, it may be especially important to consider aggression longitudinally from the perspective of adaptation versus maladaptation. Uganda's numerous sudden and dramatic social shifts may translate to a situation where the adaptive value of aggression has changed rapidly and yet is still being

culturally transmitted through socialization processes at home and within the community. For example, consider the difference in a child's day within a hunter-gatherer society, a formal school setting, or a battlefield; all of these scenarios may have occurred in a single village in northern Uganda within 2 generations.

One particularly ripe prospect for developmental pathway exploration may be examination of how peer aggression and mental health relate to self-regulation over time in war-affected contexts. In a study examining aggression and prosocial behavior in relation to political conflict in Kenya, Kithakye et al. (2010) found that higher self-regulation skills in preschoolers were predictive of less aggression and better prosocial functioning, even after controlling for pre-conflict behavior. If self-regulation is serving as a protective factor by limiting the development of aggression after exposure to conflict, our findings support the possibility of a relationship in which self-regulation at Time 1 may predict aggression at Time 2 and in turn influence the development of depression at Time 3. A developmental cascade model may help clarify this relationship as well as provide an avenue to incorporate other possible precipitants of depression. Incorporation of a social competence variable may appropriate given the Bukowski et al. (2010) study relating friendlessness and snowballing rates of depressed affect as well as Murray-Close and colleagues (2010) findings regarding the negative feedback loop of impaired social skills and increased peer rejection, a known risk factor for depression (Boivin, Poulin, & Vitaro, 1994; Prinstein & Atkins, 2004).

As the field moves toward a more global and inclusive view of child development across cultures, researchers will need to undertake both structure-oriented and level-oriented studies in order for constructs such as aggression and victimization to be

appropriately understood across multiple contexts. Structure oriented explorations such as the present study seek to identify whether one construct relates to another construct in the same way as documented in other settings (e.g. aggression, victimization and depression) or seek to compare the conceptualization and structure of constructs within a different culture. Level-oriented studies, alternately, compare whether different settings exhibit the similar levels of a construct (e.g. levels of aggression in two countries). We are in particular need of additional structure-oriented studies; a content analysis of articles by Brouwers, Van Hemert, Breugelmans, and Van de Vijver, (2004) found that the number of level-oriented studies is nearly double that of structure-oriented studies, despite the relative methodological simplicity of structure-oriented studies compared to level-oriented ones (van de Vijver & Matsumoto, 2011).

Additionally, Arnett (2008) points out that the field of child development and psychology more generally has a historic tendency to emphasize fundamental science, imposing order and distilling behavior by stripping away cultural context. While we may have improved somewhat, particularly with current dynamic and contextualist approaches, researchers should also consider what it would take to conduct future cultural research with the relevant worldviews and locally relevant phenomena in mind. In applying western science procedures to a traditional culture without considering worldview we risk losing valuable perspective and insight on the underlying constructs influencing the normative perspectives, beliefs and behaviors of individuals. One exceptional methodology for future consideration towards this aim is the mixed methods approach to examining mental health constructs championed by Betancourt and colleagues (2009). By first undertaking a structured and systematic qualitative study of

the constructs in question, researchers gain a depth of knowledge to draw upon when developing relevant quantitative instruments at a later time. In this way, researchers increase the validity of the new and locally derived instruments while also increasing the likelihood that researchers will identify the salient psychosocial features and behavioral problems of importance to that community.

In conclusion, the findings of the current study provide support for aggression and victimization as risk factors in the Sub-Saharan, war-affected context as well as provide preliminary support for some forms of aggression and victimization as appropriate psychosocial targets in interventions to improve mental health in war-affected populations. Following replication of the results in a larger sample, future research will need to clarify (a) the culturally relevant forms and functions of aggression within this context, (b) the impact of chronicity and developmental timing of war exposure, as well as (c) the relation between aggression and depression in a culturally relevant comparison group not exposed to war or military conflict. Utilization of open-ended and semi-structured interview methods as a mechanism for development of such quantitative measures appears promising, and Uganda's unique geopolitical and sociological history makes it a unique candidate for future studies of this nature. Completion future studies in this vein may aid in elucidating the true relation between peer aggression, victimization and mental health outcomes in war-affected settings, thus facilitating the design of interventions to promote resilience and recovery from the effects of severe trauma.

Table 1.  
*Comprehensive summary of linguistic adaptations for measures.*

Measure	Question	Original phrase/word	Adaptation	Reason
CSBS-SR	Q3	cheer up	make other children happy when you are upset or sad	American colloquialism
CSEQ-SR	All Qs	kid/kids	child/children	<i>kid</i> refers to goats
	Q4	mean	hurtful	Less familiar with <i>mean</i>
	Q5	cheer you up	make you feel happy	American colloquialism
	Q6	mad	angry	<i>mad</i> refers to crazy
CDI	All Qs	I	you	cultural differences in question phrasing

Table 2.

*Gender differences in forms of aggression, forms of victimization, and depressed affect.*

	Male	Female	<i>t</i> (p)
	M (SD)	M (SD)	
Relational Aggression	2.29 (0.87)	2.33 (0.92)	-0.44 (.66)
Overt Aggression	2.17 (0.83)	2.65 (0.82)	1.30 (.20)
Relational Victimization	2.57 (0.83)	2.65 (0.82)	-0.73 (.47)
Overt Victimization	2.42 (0.92)	2.36 (0.93)	0.52 (.60)
Depressed Affect	36.30 (5.68)	35.02 (5.20)	1.75 (.08)

Note: \**p*<.05, \*\**p*<.01, \*\*\**p* < .001. Scores for forms of aggression and victimization are mean scores rated on a 1 to 5 Likert scale. Depressed affect means reflect sum scores from 30 questions each scored 0 to 2.

Table 3.  
*Unique effect of relational aggression on depression.*

Step	Factor	<i>b</i>	SE <i>b</i>	$\beta$	$r^2\Delta$
1	Overt Aggression	1.52	0.71	.28*	.14***
2	Relational Aggression	2.25	1.11	.37*	.05
	Gender	-1.72	1.13	-.17	
3	Relational Aggression x Gender	-1.88	1.35	-.24	.02

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Table 4.  
*Unique effect of overt aggression on depression.*

Step	Factor	<i>b</i>	SE <i>b</i>	$\beta$	$r^2\Delta$
1	Relational Aggression	1.26	0.81	0.21	.11**
2	Overt Aggression	1.88	0.93	0.35*	.16*
	Gender	-1.76	1.15	-0.17	
3	Overt Aggression x Gender	-0.88	1.21	-0.12	.15

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Table 5.  
*Unique effect of relational victimization on depression.*

Step	Factor	<i>b</i>	SE <i>b</i>	$\beta$	$r^2\Delta$
1	Overt Victimization	0.20	0.93	0.31	.05*
2	Relational Victimization	2.84	1.17	0.42*	.09*
	Gender	-1.44	1.18	-0.13	
3	Relational Victimization x Gender	-1.23	1.55	-0.13	.01

Note: \*p<.05, \*\*p<.01, \*\*\*p < .001.

Table 6.  
*Unique effect of overt victimization on depression.*

Step	Factor	<i>b</i>	SE <i>b</i>	$\beta$	$r^2\Delta$
1	Relational Victimization	2.37	0.99	0.35*	.13**
2	Overt Victimization	0.37	1.13	0.06	.02
	Gender	-1.39	1.19	-0.13	
3	Overt Victimization x Gender	-0.63	1.46	-0.07	.00

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## Bibliography

- Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Oxford, England: Johns Hopkins Press.
- Ainsworth, M. D., & Ainsworth, L. H. (1962). Acculturation in East Africa. II. Frustration and Aggression. *The Journal of Social Psychology*, 57(2), 401-407. doi: 10.1080/00224545.1962.9710936
- Alden, C., & Alves, A. C. (2009). *China and Africa's Natural Resources: The Challenges and Implications for Development and Governance*. Retrieved from South African Institute of International Affairs website: <http://dspace.cigilibrary.org/jspui/bitstream/123456789/29569/1/SAIIA%20Occasional%20Paper%2041.pdf?1>
- Alderman, H. (2000). *Attrition in longitudinal household survey data: some tests for three developing-country samples* (Vol. 2447). Washington, DC: World Bank Publications.
- Ali, A. A. G., & Thorbecke, E. (2000). The state and path of poverty in Sub-Saharan Africa: some preliminary results. *Journal of African Economies*, 9(1), 9-40. doi: 10.1093/jafeco/9.Supplement\_1.9
- Allwood, M. A., Bell-Dolan, D., & Hussain, S. A. (2002). Children's trauma and adjustment reactions to violent and nonviolent war experiences. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41, 450-457. doi: 10.1097/00004583-200204000-00018
- Amaza, O.O. (1998). *Museveni's Long March: from Guerrilla to Statesman*. Kampala, Uganda: Fountain Publishers Ltd.
- Amone-P'Olak, K., Garnefski, N., & Kraaij, V. (2007). Adolescents caught between fires: Cognitive emotion regulation in response to war experiences in northern Uganda. *Journal of Adolescence*, 30(4), 655-669. doi:10.1016/j.adolescence.2006.05.004
- Anderson, J. C., Williams, S., McGee, R., & Silva, P. A. (1987). DSM-III disorders in preadolescent children: Prevalence in a large sample from the general population. *Archives of general psychiatry*, 44(1), 69-76. doi:10.1001/archpsyc.1987.01800130081010.
- Ani, C. C., & Grantham-McGregor, S. (1998). Family and personal characteristics of aggressive Nigerian boys: differences from and similarities with Western findings. *Journal of Adolescent Health*, 23(5), 311-317. doi: 10.1016/S1054-139X(98)00031-7
- Antunes, B., Daveson, B., Ramsenthaler, C., Benalia, H., & Ferreira, P. L. (2012). *The Palliative care Outcome Scale (POS) Manual for cross-cultural adaptation and psychometric validation*. Retrieved from: <http://pos-pal.org/maix/linguistic-validations.php>
- Archer, J., Kilpatrick, G. and Bramwell, R. (1995). Comparison of two aggression inventories. *Aggressive Behavior*, 21, 371-380. doi: 10.1002/1098-2337(1995)21:5<371::AID-AB2480210506>3.0.CO;2-P
- Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development*, 41(5-6), 295-315. doi:10.1159/000022591

- Arnett, J. J. (2008). The neglected 95%: why American psychology needs to become less American. *American Psychologist*, 63(7), 602. doi: 10.1037/0003-066X.63.7.602
- Balogun, S. K., & Olapegba, P. O. (2007). Cultural validation of the multidimensional peer victimization scale in Nigerian children. *Journal of Cross-Cultural Psychology*, 38(5), 573-580. doi: 10.1177/0022022107305239
- Banda, D. (2008). *Education for All (EFA) and African Indigenous Knowledge Systems (AIKS): the case of the Chewa People of Zambia* (Doctoral dissertation). Retrieved from <http://etheses.nottingham.ac.uk/525/>
- Barber, B. K. (2001). Political violence, social integration, and youth functioning: Palestinian youth from the Intifada. *Journal of Community Psychology*, 29(3), 259-280. doi: 10.1002/jcop.1017
- Barber, B. K. (2008). Contrasting portraits of war: Youths' varied experiences with political violence in Bosnia and Palestine. *International Journal of Behavioral Development*, 32(4), 298-309. doi: 0.1177/0165025408090972
- Baron, R. A., & Richardson D.R. (1994). *Human aggression* (2<sup>nd</sup> ed.) New York: Plenum.
- Bass, J., Poudyal, B., Tol, W., Murray, L., Nadison, M., & Bolton, P. (2012). A controlled trial of problem-solving counseling for war-affected adults in Aceh, Indonesia. *Social Psychiatry and Psychiatric Epidemiology*, 47(2), 279-291. doi: 10.1007/s00127-011-0339-y
- Bayer, C. P., Klasen, F., & Adam, H. (2007). Association of trauma and PTSD symptoms with openness to reconciliation and feelings of revenge among former Ugandan and Congolese child soldiers. *Journal of the American Medical Association*, 298(5), 555-559. doi: 10.1001/jama.298.5.555.
- Bergeron, N., & Schneider, B. H. (2005). Explaining cross-national differences in peer-directed aggression: A quantitative synthesis. *Aggressive Behavior*, 31(2), 116-137. doi: 10.1002/ab.20049
- Betancourt, T. S. (2005). Stressors, supports and the social ecology of displacement: Psychosocial dimensions of an emergency education program for Chechen adolescents displaced in Ingushetia, Russia. *Culture, Medicine and Psychiatry*, 29(3), 309-340. doi: 10.1007/s11013-005-9170-9
- Betancourt, T. S., Bass, J., Borisova, I., Neugebauer, R., Speelman, L., Onyango, G., & Bolton, P. (2009). Assessing local instrument reliability and validity: a field-based example from northern Uganda. *Social Psychiatry and Psychiatric Epidemiology*, 44(8), 685-692. doi: 10.1007/s00127-008-0475-1
- Betancourt, T. S., & Khan, K. T. (2008). The mental health of children affected by armed conflict: Protective processes and pathways to resilience. *International Review of Psychiatry*, 20(3), 317-328. doi: 10.1080/09540260802090363
- Bishop, J. A., & Inderbitzen, H. M. (1995). Peer acceptance and friendship: An investigation of their relation to self-esteem. *The Journal of Early Adolescence*, 15(4), 476-489. doi: 10.1177/0272431695015004005
- Blattman, C., & Annan, J. (2008). Child combatants in northern Uganda: Reintegration myths and realities. In R. Muggah, (Ed.) *Security and post-conflict reconstruction: dealing with fighters in the aftermath of war* (pp. 103-125). New York, NY: Routledge.

- Boivin, M., Hymel, S., & Bukowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development and Psychopathology*, 7(04), 765-785. doi: 10.1017/S0954579400006830
- Boivin, M., Poulin, F., & Vitaro, F. (1994). Depressed mood and peer rejection in childhood. *Development and Psychopathology*, 6(03), 483-498. doi: 10.1017/S0954579400006064
- Bonn, M., & Kruger, P. (1996). Popularity and rejection in children's peer groups: A South African perspective. *Early Child Development and Care*, 125(1), 1-14.
- Bolton, P., & Betancourt, T. S. (2004). Mental health in postwar Afghanistan. *Journal of the American Medical Association*, 292(5), 626-628. doi:10.1001/jama.292.5.626.
- Bolton, P., Neugebauer, R., & Ndogoni, L. (2002). Prevalence of depression in rural Rwanda based on symptom and functional criteria. *The Journal of Nervous and Mental Disease*, 190(9), 631-637.
- Bolton, P., Wilk, C. M., & Ndogoni, L. (2004). Assessment of depression prevalence in rural Uganda using symptom and function criteria. *Social Psychiatry and Psychiatric Epidemiology*, 39(6), 442-447. doi: 10.1007/s00127-004-0763-3
- Boyden, J., Eyber, C., Feeny, T., & Scott, C. (2004). Children and poverty. Part II. *Voices of children: Experiences and perceptions from Belarus, Bolivia, Sierra Leone, India and Kenya* (Children and Poverty Series). Richmond, VA: Christian Children's Fund.
- Boyden, J., & Mann, G. (2005). Children's risk, resilience and coping in extreme situations. In M. Ungar (Ed.), *Handbook for working with children and youth: Pathways to resilience across cultures and contexts*, 3-26.
- Broidy, L. M., Nagin, D. S., Tremblay, R. E., Bates, J. E., Brane, B., Dodge, K. A., ... & Vitaro, F. (2003). Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: a six-site, cross-national study. *Developmental Psychology*, 39(2), 222- 245. 245. doi: 10.1037/0012-1649.39.2.222
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology, Vol. 1: Theoretical models of human development* (6th ed., pp. 793 – 828). New York: Wiley. doi: 10.1002/9780470147658.chpsy0114
- Brouwers, S. A., Van Hemert, D. A., Breugelmans, S. M., & Van de Vijver, F. J. (2004). A historical analysis of empirical studies published in the Journal of Cross-Cultural Psychology 1970-2004. *Journal of Cross-Cultural Psychology*, 35(3), 251-262.
- Brown, D. W., Riley, L., Butchart, A., Meddings, D. R., Kann, L., & Harvey, A. P. (2009). Exposure to physical and sexual violence and adverse health behaviours in African children: results from the Global School-based Student Health Survey. *Bulletin of the World Health Organization*, 87(6), 447-455.
- Buhrmester, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. *Child Development*, 61(4), 1101-1111. doi: 10.1111/j.1467-8624.1990.tb02844.x
- Bukowski, W. M., Laursen, B., & Hoza, B. (2010). The snowball effect: Friendship moderates escalations in depressed affect among avoidant and excluded children.

- Development and Psychopathology*, 22(4), 749-757. doi: 10.1017/S095457941000043X
- Bukuluki, P. (2013). "When I steal, it is for the benefit of me and you": Is collectivism engendering corruption in Uganda? *International Letters of Social and Humanistic Sciences*, 5, 27-44.
- Buss, D. M., & Shackelford, T. K. (1997). Human aggression in evolutionary psychological perspective. *Clinical Psychology Review*, 17(6), 605-619. doi:10.1016/S0272-7358(97)00037-8
- Byrnes, R. M. (1992). *Uganda: A country study*. Washington: GPO for the Library of Congress. Retrieved from Library of Congress Website: <http://lcweb2.loc.gov/frd/cs/ugtoc.html>
- Cairns, R. B., & Cairns, B. D. (1994). *Lifelines and risks: Pathways of youth in our time*. New York: Cambridge University Press.
- Caldwell, J. C., Caldwell, P., & Quiggin, P. (1989). The social context of AIDS in sub-Saharan Africa. *Population and Development Review* 15(2), 185-234. doi: 10.2307/1973703
- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, 79(5), 1185-1229. doi: 10.1111/j.1467-8624.2008.01184.x
- Carlson, E. B., & Rosser-Hogan, R. (1991). Trauma experiences, posttraumatic stress, dissociation, and depression in Cambodian refugees. *The American Journal of Psychiatry*, 148(11), 1548-1551.
- Central Intelligence Agency. (2014). Uganda. In *The world factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html>
- Cicchetti, D. (1984). The emergence of developmental psychopathology. *Child Development* 55(1), 1-7.
- Cicchetti, D. (1993). Developmental psychopathology: Reactions, reflections, projections. *Developmental Review*, 13(4), 471-502.
- Cicchetti, D., & Bukowski, W. M. (1995). Developmental processes in peer relations and psychopathology. *Development and Psychopathology*, 7(4), 587-589. doi: 10.1017/S0954579400006726
- Cicchetti, D., & Cannon, T. D. (1999). Neurodevelopmental processes in the ontogenesis and epigenesis of psychopathology. *Development and Psychopathology*, 11(3), 375-393.
- Cicchetti, D., & Cohen, D. J. (1995). Perspectives on developmental psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology* (Vol. 1, pp. 3–16). New York: Wiley.
- Cicchetti, D., Lynch, M., Shonk, S., & Manly, J. T. (1992). An organizational perspective on peer relations in maltreated children. In R. D. Parke and G. W. Ladd (Eds.), *Family-peer relationships: Modes of linkage* (pp. 345-384). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Cicchetti, D., Rogosch, F. A., Gunnar, M. R., & Toth, S. L. (2010). The Differential Impacts of Early Physical and Sexual Abuse and Internalizing Problems on Daytime Cortisol Rhythm in School-Aged Children. *Child Development*, 81(1), 252-269. doi: 10.1111/j.1467-8624.2009.01393.x

- Cicchetti, D., & Toth, S. L. (1998). The development of depression in children and adolescents. *American Psychologist*, 53(2), 221-241. doi: 10.1037/0003-066X.53.2.221
- Cicchetti, D., & Toth, S. L. (2009). The past achievements and future promises of developmental psychopathology: The coming of age of a discipline. *Journal of Child Psychology and Psychiatry*, 50(1-2), 16-25. doi: 10.1111/j.1469-7610.2008.01979.x
- Chen, X. (2012). Culture, peer interaction, and socioemotional development. *Child Development Perspectives*, 6(1), 27-34. doi: 10.1111/j.1750-8606.2011.00187.x
- Chen, X., Chung, J., & Hsiao, C. (2009). Peer interactions and relationships from a cross-cultural perspective. In K. H. Rubin, W. M. Bukowski & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups*, (pp. 432-451). New-York, NY: Guilford Press.
- Chen, X., & French, D. C. (2008). Children's social competence in cultural context. *Annual Review of Psychology*, 59, 591-616. doi: 10.1146/annurev.psych.59.103006.093606
- Chen, X., He, Y., Oliveira, A. M. D., Coco, A. L., Zappulla, C., Kaspar, V., ... & DeSouza, A. (2004). Loneliness and social adaptation in Brazilian, Canadian, Chinese and Italian children: a multi-national comparative study. *Journal of Child Psychology and Psychiatry*, 45(8), 1373-1384. doi: 10.1111/j.1469-7610.2004.00329.x
- Chen, X., Rubin, K. H., & Li, B. S. (1995). Depressed mood in Chinese children: relations with school performance and family environment. *Journal of Consulting and Clinical Psychology*, 63(6), 938- 947. doi: 10.1037/0022-006X.63.6.938
- Cluver, L., Bowes, L., & Gardner, F. (2010). Risk and protective factors for bullying victimization among AIDS-affected and vulnerable children in South Africa. *Child Abuse & Neglect*, 34(10), 793-803. doi: 10.1016/j.chab.2010.04.002
- Cluver, L., Gardner, F., & Operario, D. (2007). Psychological distress amongst AIDS-orphaned children in urban South Africa. *Journal of Child Psychology and Psychiatry*, 48(8), 755-763. doi: 10.1111/j.1469-7610.2007.01757.x
- Cluver, L., Gardner, F., & Operario, D. (2009). Poverty and psychological health among AIDS-orphaned children in Cape Town, South Africa. *AIDS care*, 21(6), 732-741. doi: 10.1080/09540120802511885
- Cohen, P., Cohen, J., Kasen, S., Velez, C. N., Hartmark, C., Johnson, J., ... & Streuning, E. L. (1993). An Epidemiological Study of Disorders in Late Childhood and Adolescence—I. Age-and Gender-Specific Prevalence. *Journal of Child Psychology and Psychiatry*, 34(6), 851-867. doi: 10.1111/j.1469-7610.1993.tb01094.x
- Coie, J. D., Dodge, K., & Kupersmidt, J. B. (1990). Peer group behavior and social status. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 17-59). Cambridge, England: Cambridge University Press.
- Coie, J. D., & Kupersmidt, J. B. (1983). A behavioral analysis of emerging social status in boys' groups. *Child Development*, 54(6), 1400-1416. doi: 10.2307/1129803

- Cole, M., Gay, J., & Glick, J. A., & Sharp, D. W. (1971). *The cultural context of learning and thinking: An exploration in experimental anthropology*. New York: Basic Books.
- Collins, R. O., & Burns, J. M. (2013). *A history of sub-Saharan Africa* (2<sup>nd</sup> ed). Cambridge, England: Cambridge University Press.
- Corsaro, W. A., & Rizzo, T. A. (1988). Discussion and friendship: Socialization processes in the peer culture of Italian nursery school children. *American Sociological Review*, 53(6), 879-894.
- Cox, M. J., Mills-Koonce, R., Propper, C., & Gariépy, J. L. (2010). Systems theory and cascades in developmental psychopathology. *Development and Psychopathology*, 22(3), 497-506. doi: 10.1017/S0954579410000234
- Crick, N. R., & Bigbee, M. A. (1998). Relational and overt forms of peer victimization: a multiinformant approach. *Journal of Consulting and Clinical Psychology*, 66(2), 337- 347. doi: 10.1037/0022-006X.66.2.337
- Crick, N. R., Casas, J. F., & Ku, H. C. (1999). Relational and physical forms of peer victimization in preschool. *Developmental Psychology*, 35(2), 376. doi: 10.1037/0012-1649.35.2.376
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66(3), 710-722. DOI: 10.1111/j.1467-8624.1995.tb00900.x
- Crick, N. R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology*, 8(02), 367- 380. doi: http://dx.doi.org/10.1017/S0954579400007148
- Crick, N. R., Murray-Close, D., Marks, P. E. L., & Mohajeri-Nelson, N. (2009). Aggression and peer relationships in school-age children: Relational and physical aggression in group and dyadic contexts. In K. H. Rubin, W. M. Bukowski & B. Laursen (Eds.), *Handbook of peer interactions, relationships and groups*. (pp. 287-302). New-York, NY: Guilford Press.
- Crick, N. R., & Zahn-Waxler, C. (2003). The development of psychopathology in females and males: Current progress and future challenges. *Development and Psychopathology*, 15(3), 719-742. doi: http://dx.doi.org/10.1017/S095457940300035X
- Cullerton-Sen, C., & Crick, N. R. (2005). Understanding the effects of physical and relational victimization: the utility of multiple perspectives in predicting social-emotional adjustment. *School Psychology Review*, 34(2), 147-160.
- Damon, W., & Hart, D. (1982). The development of self-understanding from infancy through adolescence. *Child Development* 53(4), 841-864.
- Derluyn, I., Broekaert, E., Schuytten, G., & Temmerman, E. D. (2004). Post-traumatic stress in former Ugandan child soldiers. *The Lancet*, 363(9412), 861-863. doi: 10.1016/S0140-6736(04)15734-6
- DeRosier, M. E., & Kupersmidt, J. B. (1991). Costa Rican children's perceptions of their social networks. *Developmental Psychology*, 27(4), 656-662. doi: 10.1037/0012-1649.27.4.656
- Diop, C. A. (1960). *L'Afrique noire pré-coloniale*. Présence africaine.

- Dodge, K. A. (1993). Social-cognitive mechanisms in the development of conduct disorder and depression. *Annual Review of Psychology*, 44(1), 559-584. doi:10.1146/annurev.ps.44.020193.003015
- Dodge, K. A., & Coie, J. D. (1987). Social-information-processing factors in reactive and proactive aggression in children's peer groups. *Journal of Personality and Social Psychology*, 53(6), 1146-1158. doi: 10.1037/0022-3514.53.6.1146
- Elbedour, S., Onwuegbuzie, A. J., Ghannam, J., Whitcome, J. A., & Hein, F. A. (2007). Post-traumatic stress disorder, depression, and anxiety among Gaza Strip adolescents in the wake of the second Uprising (Intifada). *Child Abuse & Neglect*, 31(7), 719-729. doi: 10.1016/j.chab.2005.09.006
- El Sarraj, E., & Qouta, S. (2005). In J. J. López-Ibor, G. Christodoulou, M. Maj, N. Sartorius, & A. Okasha (Eds.) *Disasters and mental health* (pp.229-237). Chichester, UK: Wiley & Sons. doi: 10.1002/047002125X.ch16
- Espinosa, M. P., Sigman, M. D., Neumann, C. G., Bwibo, N. O., & McDonald, M. A. (1992). Playground behaviors of school-age children in relation to nutrition, schooling, and family characteristics. *Developmental Psychology*, 28(6), 1188-1195. doi: 10.1037/0012-1649.28.6.1188
- Essau, C. A., Conradt, J., & Petermann, F. (2000). Frequency, comorbidity, and psychosocial impairment of depressive disorders in adolescents. *Journal of Adolescent Research*, 15(4), 470-481. doi: 10.1177/0743558400154003
- Essau, C. A., Lewinsohn, P. M., Seeley, J. R., & Sasagawa, S. (2010). Gender differences in the developmental course of depression. *Journal of affective disorders*, 127(1), 185-190. doi: 10.1016/j.jad.2010.05.016
- Fearon, J. D. (2003). Ethnic and cultural diversity by country. *Journal of Economic Growth*, 8(2), 195-222. doi: 10.1023/A:1024419522867
- Fleming, J. E., Offord, D. R., & Boyle, M. H. (1989). Prevalence of childhood and adolescent depression in the community. Ontario Child Health Study. *The British Journal of Psychiatry*, 155(5), 647-654. doi: 10.1192/bjp.155.5.647
- Fox, S. H., & Tang, S. S. (2000). The Sierra Leonean refugee experience: Traumatic events and psychiatric sequelae. *The Journal of Nervous and Mental Disease*, 188(8), 490-495.
- French, D. C., Bae, A., Pidada, S., & Lee, O. (2006). Friendships of Indonesian, South Korean, and US college students. *Personal Relationships*, 13(1), 69-81. doi: 10.1111/j.1475-6811.2006.00105.x
- French, D. C., Jansen, E. A., & Pidada, S. (2002). United States and Indonesian children's and adolescents' reports of relational aggression by disliked peers. *Child Development*, 73(4), 1143-1150.
- French, D. C., Pidada, S., & Victor, A. (2005). Friendships of Indonesian and United States youth. *International Journal of Behavioral Development*, 29(4), 304-313. doi: 10.1177/01650250544000080
- French, D. C., Rianasari, M., Pidada, S., Nelwan, P., & Buhrmester, D. (2001). Social support of Indonesian and US children and adolescents by family members and friends. *Merrill-Palmer Quarterly* 47(3), 377-394. doi:10.1353/mpq.2001.0015
- Garbarino, J., & Kostelny, K. (1996). The effects of political violence on Palestinian children's behavior problems: A risk accumulation model. *Child Development*, 67(1), 33-45. doi: 10.1111/j.1467-8624.1996.tb01717.x

- Garbarino, J., Kostelny, K., & Dubrow, N. (1991). What children can tell us about living in danger. *American Psychologist*, 46(4), 376-383. doi: 10.1037/0003-066X.46.4.376
- Gauvain M., & Parke, R. D. (2010). Socialization. In M. H. Bornstein (Ed.), *Handbook of cultural developmental science* (pp. 223-237). New York, N: Psychology Press.
- Geiger, T., & Crick, N. R. (2001). A developmental psychopathology perspective on vulnerability to personality disorders. In R. Ingram & J. M. Price (Eds.), *Vulnerability to psychopathology: Risk across the life span*. New York: Guilford Press.
- Giles, J. W., Legare, C., & Samson, J. E. (2008). Psychological essentialism and cultural variation: children's beliefs about aggression in the United States and South Africa. *Infant and Child Development*, 17(2), 137-150. doi: 10.1002/icd.537
- Goldstein, R. D., Wampler, N. S., & Wise, P. H. (1997). War experiences and distress symptoms of Bosnian children. *Pediatrics*, 100(5), 873-878. doi: 10.1542/peds.100.5.873
- Hanish, L. D., & Guerra, N. (2004). Aggressive victims, passive victims, and bullies: Developmental continuity or developmental change? *Merrill-Palmer Quarterly*, 50(1), 17-38.
- Hankin, B. L., Abramson, L. Y., Moffitt, T. E., Silva, P. A., McGee, R., & Angell, K. E. (1998). Development of depression from preadolescence to young adulthood: emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology*, 107(1), 128-140. doi: 10.1037/0021-843X.107.1.128
- Harkness, S., & Super, C. M. (1977). Why African children are so hard to test. *Annals of the New York Academy of Sciences*, 285(1), 326-331. doi: 10.1111/j.1749-6632.1977.tb29360.x
- Harter, S. (1982). The perceived competence scale for children. *Child Development* 53(1), 87-97. doi: 10.1353/mpq.2004.0003
- Hawker, D. S., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: a meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41(4), 441-455.
- Hawley, P. H. (2003). Strategies of control, aggression, and morality in preschoolers: An evolutionary perspective. *Journal of Experimental Child Psychology*, 85(3), 213-235. doi: 10.1016/S0022-0965(03)00073-0
- Havighurst, R. J. (1953). *Human development and education*. Oxford, England: Longmans, Green.
- Hektner, J. M., August, G. J., & Realmuto, G. M. (2000). Patterns and temporal changes in peer affiliation among aggressive and nonaggressive children participating in a summer school program. *Journal of Clinical Child Psychology*, 29(4), 603-614.
- Hecht, Cicchetti, Rogosch & Crick, (in press). Borderline personality features in childhood: The role of subtype, developmental timing and chronicity of child maltreatment. *Development and Psychopathology*, 26, 1-11.
- Hinde, R. A. (1987). *Individuals, relationships and culture: Links between ethology and the social sciences*. Cambridge, England: Cambridge University Press.
- Hinshaw, S. P. (1992). Academic underachievement, attention deficits, and aggression: comorbidity and implications for intervention. *Journal of Consulting and Clinical Psychology*, 60(6), 893-903. doi: 10.1037/0022-006X.60.6.893

- Hoddinott, J., Maluccio, J. A., Behrman, J. R., Flores, R., & Martorell, R. (2008). Effect of a nutrition intervention during early childhood on economic productivity in Guatemalan adults. *The Lancet*, 371(9610), 411-416. doi: 10.1016/S0140-6736(08)60205-6
- Hodges, E. V., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: protection against an escalating cycle of peer victimization. *Developmental Psychology*, 35(1), 94. doi: 10.1037/0012-1649.35.1.94
- Human Rights Watch (2013). *World Report 2013: Uganda*. Retrieved from Human Rights Watch website: <http://www.hrw.org/world-report/2013/country-chapters/uganda>
- Ikuenobe, P. (2006). *Philosophical perspectives on communalism and morality in African traditions*. Lanham, MD: Lexington Books.
- Jaranson, J. M., Butcher, J., Halcon, L., Johnson, D. R., Robertson, C., Savik, K., ... & Spring, M. (2004). Somali and Oromo refugees: correlates of torture and trauma history. *American Journal of Public Health*, 94(4), 591-598.
- Johnson, T. P. (1998). Approaches to equivalence in cross-cultural and cross-national survey research. *ZUMA-Nachrichten spezial*, 3, 1-40.
- Kaggwa, E. B., & Hindin, M. J. (2010). The psychological effect of orphanhood in a matured HIV epidemic: An analysis of young people in Mukono, Uganda. *Social Science & Medicine*, 70(7), 1002-1010. doi: 10.1016/j.socscimed.2009.12.002
- Kaplinsky, R., & Morris, M. (2009). Chinese FDI in Sub-Saharan Africa: engaging with large dragons. *European Journal of Development Research*, 21(4), 551-569. doi:10.1057/ejdr.2009.24
- Kashani, J. H., Carlson, G. A., Beck, N. C., Hoeper, E. W., Corcoran, C. M., McAllister, J. A., ... & Reid, J. C. (1987). Depression, depressive symptoms, and depressed mood among a community sample of adolescents. *American Journal of Psychiatry*, 144(7), 931-934.
- Kawabata, Y., Crick, N. R., & Hamaguchi, Y. (2010). Forms of aggression, social-psychological adjustment, and peer victimization in a Japanese sample: The moderating role of positive and negative friendship quality. *Journal of Abnormal Child Psychology*, 38(4), 471-484.
- Keefe, K., & Berndt, T. J. (1996). Relations of friendship quality to self-esteem in early adolescence. *The Journal of Early Adolescence*, 16(1), 110-129. doi: 10.1177/0272431696016001007
- Kempes, M., Matthys, W., De Vries, H., & Van Engeland, H. (2005). Reactive and proactive aggression in children A review of theory, findings and the relevance for child and adolescent psychiatry. *European Child & Adolescent Psychiatry*, 14(1), 11-19. doi: 10.1007/s00787-005-0432-4
- Kenyatta, J. (1938). *Facing Mount Kenya: The Tribal Life of the Gikuyu*. London, UK: Secker & Warburg.
- Keresteš, G. (2006). Children's aggressive and prosocial behavior in relation to war exposure: Testing the role of perceived parenting and child's gender. *International Journal of Behavioral Development*, 30(3), 227-239. doi: 10.1177/0165025406066756

- Khatri, P., & Kupersmidt, J. (2003). Aggression, peer victimisation, and social relationships among Indian youth. *International Journal of Behavioral Development*, 27(1), 87-96. doi: 10.1080/01650250244000056
- Khatri, P., Kupersmidt, J. B., & Patterson, C. (2000). Aggression and peer victimization as predictors of self-reported behavioral and emotional adjustment. *Aggressive Behavior*, 26(5), 345-358. doi: 10.1002/1098-2337(2000)26:5<345::AID-AB1>3.0.CO;2-L
- Kilbride, J. E., Robbins, M. C., & Kilbride, P. L. (1970). The comparative motor development of Baganda, American White, and American Black infants. *American Anthropologist*, 72(6), 1422-1428. doi: 10.1525/aa.1970.72.6.02a00160
- Kithakye, M., Morris, A. S., Terranova, A. M., & Myers, S. S. (2010). The Kenyan political conflict and children's adjustment. *Child Development*, 81(4), 1114-1128. doi: 10.1111/j.1467-8624.2010.01457.x
- Kokko, K., & Pulkkinen, L. (2000). Aggression in childhood and long-term unemployment in adulthood: a cycle of maladaptation and some protective factors. *Developmental Psychology*, 36(4), 463-472. doi: 10.1037/0012-1649.36.4.463
- Kovacs, M. (1984). The Children's Depression Inventory (CDI). *Psychopharmacology Bulletin*, 21(4), 995-998.
- Lansford, J. E., Skinner, A. T., Sorbring, E., Giunta, L. D., Deater-Deckard, K., Dodge, K. A., ... & Chang, L. (2012). Boys' and girls' relational and physical aggression in nine countries. *Aggressive Behavior*, 38(4), 298-308. doi: 10.1002/ab.21433
- Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: the effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126(2), 309-337. doi: 10.1037/0033-2909.126.2.309
- LeVine, R. (1974). Parental goals: A cross-cultural view. *The Teachers College Record*, 76(2), 226-239.
- Lewinsohn, P. M., Hops, H., Roberts, R. E., Seeley, J. R., & Andrews, J. A. (1993). Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disorders in high school students. *Journal of Abnormal Psychology*, 102(1), 133-144. doi: 10.1037/0021-843X.102.1.133
- Liang, H., Flisher, A. J., & Lombard, C. J. (2007). Bullying, violence, and risk behavior in South African school students. *Child Abuse & Neglect*, 31(2), 161-171.
- Liddell, C., Kvalsvig, J., Qotyana, P., & Shabalala, A. (1994). Community violence and young South African children's involvement in aggression. *International Journal of Behavioral Development*, 17(4), 613-628.
- Little, T. D., Brauner, J., Jones, S. M., Nock, M. K., & Hawley, P. H. (2003). Rethinking aggression: A typological examination of the functions of aggression. *Merrill-Palmer Quarterly*, 49(3), 343-369.
- Lynch, M., & Cicchetti, D. (1998). An ecological-transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence, and children's symptomatology. *Development and Psychopathology*, 10(2), 235-257.
- Maathai, W. (2011). Challenge for Africa. *Sustainability Science*, 6(1), 1-2. doi: 10.1007/s11625-010-0120-2

- Macksoud, M. S. (1992). Assessing war trauma in children: A case study of Lebanese children. *Journal of Refugee Studies*, 5, 1-15. doi: 10.1093/jrs/5.1.1
- Makame, V., Ani, C., & Grantham-McGregor, S. (2002). Psychological well-being of orphans in Dar El Salaam, Tanzania. *Acta Paediatrica*, 91(4), 459-465. doi:10.1111/j.1651-2227.2002.tb01671.x
- Manly, J. T., Cicchetti, D., & Barnett, D. (1994). The impact of subtype, frequency, chronicity, and severity of child maltreatment on social competence and behavior problems. *Development and Psychopathology*, 6(1), 121-143. doi: 10.1017/S0954579400005915
- Manly, J. T., Kim, J. E., Rogosch, F. A., & Cicchetti, D. (2001). Dimensions of child maltreatment and children's adjustment: Contributions of developmental timing and subtype. *Development and Psychopathology*, 13(4), 759-782.
- Marfo, K., Pence, A., LeVine, R. A., & LeVine, S. (2011). Strengthening Africa's contributions to child development research: introduction. *Child Development Perspectives*, 5(2), 104-111. doi: 10.1111/j.1750-8606.2011.00164.x
- Martin, C. L., & Parker, S. (1995). Folk theories about sex and race differences. *Personality and Social Psychology Bulletin*, 21(1), 45-57. doi: 10.1177/0146167295211006
- Masten, A. S., Burt, K. B., & Coatsworth, J. D. (2006). Competence and psychopathology in development. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology, Vol 3: Risk, disorder, and adaptation* (2nd ed., pp. 696-738). Hoboken, NJ: Wiley.
- Masten, A. S., & Cicchetti, D. (2010). Developmental cascades. *Development and Psychopathology*, 22(3), 491-495. doi: 10.1017/S0954579410000222
- Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war, and terrorism: Pathways of risk and resilience. *Annual Review of Psychology*, 63, 227-257. doi: 10.1146/annurev-psych-120710-100356
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185-204. doi: 10.1037/0003-066X.53.2.185
- Medin, D. L. (1989). Concepts and conceptual structure. *American psychologist*, 44(12), 1469-1481. doi: 10.1037/0003-066X.44.12.1469
- Miller, K. E., Kulkarni, M., & Kushner, H. (2006). Beyond Trauma-Focused psychiatric epidemiology: Bridging research and practice with War-Affected populations. *American Journal of Orthopsychiatry*, 76(4), 409-422. doi: 10.1037/0002-9432.76.4.409
- Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings: bridging the divide between trauma-focused and psychosocial frameworks. *Social Science & Medicine*, 70(1), 7-16. doi: 10.1016/j.socscimed.2009.09.029
- Morales, J.R., & Cullerton-Sen C. (2000, April). Relational and physical aggression & psychological adjustment in adolescent peer and romantic relationships. *Presented at the Biennial Meeting of the Society of Research on Adolescence, Chicago, IL.*

- Munroe, R. L., Hulefeld, R., Rodgers, J. M., Tomeo, D. L., & Yamazaki, S. K. (2000). Aggression among children in four cultures. *Cross-Cultural Research*, 34(1), 3-25. doi: 10.1177/106939710003400101
- Munroe, R. L., & Munroe, R. H. (1977). Cooperation and competition among East African and American children. *The Journal of Social Psychology*, 101(1), 145-146. doi: 10.1080/00224545.1977.9923995
- Murray-Close, D., Hoza, B., Hinshaw, S. P., Arnold, L. E., Swanson, J., Jensen, P. S., ... & Wells, K. (2010). Developmental processes in peer problems of children with attention-deficit/hyperactivity disorder in The Multimodal Treatment Study of Children With ADHD: Developmental cascades and vicious cycles. *Development and Psychopathology*, 22(4), 785-802. doi: 10.1017/S0954579410000465
- Mukene, P. (1988). *L'ouverture entre l'école et le milieu en Afrique noire: Pour une gestion pertinente des connaissances*. Fribourg, Switzerland: Studia ethnographica Friburgensia.
- Mulenga, M. C. (1999). *Sociometric status and social behaviour of boys with learning disabilities in a special school in Zambia* (Doctoral dissertation). Retrieved from University of Ottawa: <http://www.ruor.uottawa.ca/en/handle/10393/4299>
- Mynard, H., & Joseph, S. (2000). Development of the multidimensional peer-victimization scale. *Aggressive Behavior*, 26(2), 169-178. doi: 10.1002/(SICI)1098-2337(2000)26:2<169::AID-AB3>3.0.CO;2-A
- Ndyanabangi, S., Basangwa, D., Lutakome, J., & Mubiru, C. (2004). Uganda mental health country profile. *International Review of Psychiatry*, 16(1-2), 54-62.
- Nelson, D. A., Springer, M. M., Nelson, L. J., & Bean, N. H. (2008). Normative beliefs regarding aggression in emerging adulthood. *Social Development*, 17(3), 638-660. doi: 10.1111/j.1467-9507.2007.00442.x
- Newcomb, A. F., Bukowski, W. M., & Pattee, L. (1993). Children's peer relations: a meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychological Bulletin*, 113(1), 99. doi: 10.1037/0033-2909.113.1.99
- Nkwi, P. N. (1983). Traditional diplomacy, trade and warfare in the 19th century Western Grassfields. *Science and Technology Review*, 1, 101-116.
- Nsamenang, A. B. (2007). A critical peek at early childhood care and education in Africa. *Child Health and Education*, 1(1), 14-26.
- Nsamenang, A. B. (2011). The Culturalization of Developmental Trajectories: A perspective on African childhoods and adolescences. In L. A. Jensen (Ed.) *Bridging cultural and developmental approaches to psychology: New syntheses in theory, research, and policy* (pp. 235-254). New York, NY: Oxford University Press.
- Nsamenang, A. B., & Lo-oh, J. L. (2010). Afrique noire. In M. H. Bornstein (Ed.), *Handbook of cultural developmental science* (pp. 223-237). New York, N: Psychology Press.
- Ntozi, J. P. M. (1997). Effect of AIDS on children: The problem of orphans in Uganda. *Health Transition Review*, 7, 23-40. Retrieved from: <http://hdl.handle.net/1885/41156>
- Ogot, B. A. (1967). *History of the Southern Luo: Migration and settlement, 1500-1900* (Vol. 1). Nairobi, Kenya: East African Publishing House.

- Okello, J., Onen, T. S., & Misisi, S. (2007). Psychiatric disorders among war-abducted and non-abducted adolescents in Gulu district, Uganda: a comparative study. *African Journal of Psychiatry, 10*(4), 225-231. doi: 10.4314/ajpsy.v10i4.30260
- Orpinas, P., & Frankowski, R. (2001). The Aggression Scale: A self-report measure of aggressive behavior for young adolescents. *The Journal of Early Adolescence, 21*(1), 50-67. doi: 10.1177/0272431601021001003
- Ohsako, T. (1999). The developing world. In P. K. Smith, Y. Morita, J. Junger-Tas, D. Olweus, R. Catalano, & P. Slee (Eds.) *The nature of school bullying: A cross national perspective* (pp.359-376). London, UK: Routledge.
- Österman, K., Björkqvist, K., Lagerspetz, K. M. J., Kaukiainen, A., Huesmann, L. R., & Fraczek, A. (1994). Peer and self-estimated aggression and victimization in 8-year-old children from five ethnic groups. *Aggressive Behavior, 20*, 411–428. doi:10.1002/1098-2337(1994)20:6<411::AID-AB2480200602>3.0.CO;2-4
- Österman, K., Björkqvist, K., Lagerspetz, K. M., Kaukiainen, A., Landau, S. F., Fraczek, A., & Caprara, G. V. (1998). Cross-cultural evidence of female indirect aggression. *Aggressive Behavior, 24*(1), 1-8. doi: 10.1002/(SICI)1098-2337(1998)24:1<1::AID-AB1>3.0.CO;2-R
- Otaala, B. (1973). *The Development of Operational Thinking in Primary School Children: An Examination of Some Aspects of Piaget's Theory Among the Iteso Children of Uganda*. New York, NY: Teacher's College Press.
- Panak, W. F., & Garber, J. (1992). Role of aggression, rejection, and attributions in the prediction of depression in children. *Development and psychopathology, 4*(1), 145-165. doi: 10.1111/j.1467-8624.1992.tb01696.x
- Patterson, O. (2000). Taking culture seriously: A framework and an Afro-American illustration. In L. E. Harrison & S. P. Huntington (Eds.), *Culture matters: How values shape human progress* (pp. 202-218). New York, NY: Perseus Books.
- Poortinga, Y. H. (1989). Equivalence of cross-cultural data: an overview of basic issues. *International Journal of Psychology, 24*(6), 737-756. doi: 10.1080/00207598908247842
- Prinstein, M. J., & Aikins, J. W. (2004). Cognitive moderators of the longitudinal association between peer rejection and adolescent depressive symptoms. *Journal of Abnormal Child Psychology, 32*(2), 147-158. doi: 10.1023/B:JACP.0000019767.55592.63
- Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology, 30*(4), 479-491. doi:10.1207/S15374424JCCP3004\_05
- Prinstein, M. J., & Cillessen, A. H. (2003). Forms and functions of adolescent peer aggression associated with high levels of peer status. *Merrill-Palmer Quarterly, 49*(3), 310-342. doi: 10.1353/mpq.2003.0015.
- Prinstein, M. J., Rancourt, D., Guerry, J. D., & Browne, C. B. (2009). Peer reputations and psychological adjustment. In Rubin, K.H., Bukowski, M., & Laursen, B. (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 548-567). New York : Guilford Press.
- Prochner, L., & Kabiru, M. (2008). ECD in Africa: A historical perspective. In M. Garcia, A. Pence & J. L. Evans (Eds.) *Africa's future, Africa's challenge: Early*

- childhood care and development in Sub-Saharan Africa* (pp.117-133). The World Bank.
- Qouta, S., Punamäki, R. L., Miller, T., & El-Sarraj, E. (2008). Does war beget child aggression? Military violence, gender, age and aggressive behavior in two Palestinian samples. *Aggressive Behavior*, 34(3), 231-244. doi: 10.1002/ab.20236
- Qouta, S., & Odeh, J. (2005). The impact of conflict on children: the Palestinian experience. *The Journal of Ambulatory Care Management*, 28(1), 75-79.
- Qouta, S., Punamäki, R. L., & El Sarraj, E. (2008). Child development and family mental health in war and military violence: The Palestinian experience. *International Journal of Behavioral Development*, 32(4), 310-321. doi: 10.1177/0165025408090973
- Raboteg-šaric, Z., Žužul, M., & Keresteš, G. (1994). War and children's aggressive and prosocial behaviour. *European Journal of Personality*, 8(3), 201-212. doi: 10.1002/per.2410080305
- Rubin, K. H. (1998). Social and emotional development from a cultural perspective. *Developmental Psychology*, 34(4), 611-615. doi: 10.1037/0012-1649.34.4.611
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships and groups. In N. Eisenberg (Ed.), *The handbook of child psychology* (6th ed., pp. 571-645). New York: Wiley. doi: 10.1002/9780470147658.chpsy0310
- Rubin, K. H., Cheah, C., & Menzer, M. M. (2010). Peers. In M. H. Bornstein (Ed.), *Handbook of cultural developmental science* (pp. 223-237). New York, N: Psychology Press.
- Russell, A., Hart, C., Robinson, C., & Olsen, S. (2003). Children's sociable and aggressive behaviour with peers: A comparison of the US and Australia, and contributions of temperament and parenting styles. *International Journal of Behavioral Development*, 27(1), 74-86. doi:10.1080/01650250244000038
- Russell, A., & Russell, G. (1992). The socialisation of Australian boys and girls in middle childhood for independence and achievement. In J. L. Roopnarine & D. B. Carter (Eds.), *Annual advances in applied developmental psychology: Parent-child socialisation in diverse cultures* (Vol. 5, pp. 53-74). Norwood, NJ: Ablex.
- Rutter, M., & Sroufe, L. (2000). Developmental psychopathology: Concepts and challenges. *Development and Psychopathology*, 12(3), 265-296.
- Salmivalli, C. (2001). Feeling good about oneself, being bad to others? Remarks on self-esteem, hostility, and aggressive behavior. *Aggression and Violent Behavior*, 6(4), 375-393. doi: S1359-1789(00)00012-4
- Saylor, C. F., Finch, A. J., Spirito, A., & Bennett, B. (1984). The children's depression inventory: a systematic evaluation of psychometric properties. *Journal of Consulting and Clinical Psychology*, 52(6), 955. doi: 10.1037/0022-006X.52.6.955
- Scarritt, J. R., & Mozaffar, S. (1999). The specification of ethnic cleavages and ethnopolitical groups for the analysis of democratic competition in contemporary Africa. *Nationalism and Ethnic Politics*, 5(1), 82-117.
- Schuster, I. (1983). Women's aggression: An African case study. *Aggressive Behavior*, 9(4), 319-331. doi: 10.1002/1098-2337(1983)9:4<319::AID-AB2480090407>3.0.CO;2-E

- Schwartz, D., Farver, J. M., Chang, L., & Lee-Shin, Y. (2002). Victimization in South Korean children's peer groups. *Journal of Abnormal Child Psychology, 30*(2), 113-125. doi: 10.1023/A:1014749131245
- Serpell, R. (1992). African dimensions of child care and nurturance. In M. E. Lamb, K. J. Sternberg, C. P. Hwang, & A. G. Broberg (Eds.) *Child care in context: Cross-cultural perspectives* (pp. 463-476). Hillsdale, NJ: Laurence Erlbaum Associates.
- Serpell, R. (2011). Social responsibility as a dimension of intelligence, and as an educational goal: Insights from programmatic research in an African society. *Child Development Perspectives, 5*(2), 126-133. doi: 10.1111/j.1750-8606.2011.00167.x
- Serpell, R., & Hatano, G. (1997). Education, schooling, and literacy. In J. W. Berry, P. R. Dasen, & T. S. Saraswathi (Eds.), *Handbook of cross-cultural psychology* (2<sup>nd</sup> ed., Vol. 2, pp. 345-382). Boston: Allyn & Bacon.
- Sharabany, R., & Wiseman, H. (1993). Close relationships in adolescence: The case of the kibbutz. *Journal of Youth and Adolescence, 22*(6), 671-695. doi: 10.1007/BF01537137
- Slee, P. T. (1995). Peer victimization and its relationship to depression among Australian primary school students. *Personality and Individual Differences, 18*(1), 57-62. doi: 10.1016/0191-8869(94)00114-8
- Smith, P. K., Cowie, H., Olafsson, R. F., & Liefooghe, A. P. (2002). Definitions of bullying: A comparison of terms used, and age and gender differences, in a fourteen-country international comparison. *Child Development, 73*(4), 1119-1133. doi: 10.1111/1467-8624.00461
- Smith, P., Perrin, S., Yule, W., Hacam, B., & Stuvland, R. (2002). War exposure among children from Bosnia-Hercegovina: psychological adjustment in a community sample. *Journal of Traumatic Stress, 15*(2), 147-156. doi: 10.1023/A:1014812209051
- Sroufe, L. A., & Rutter, M. (1984). The domain of developmental psychopathology. *Child Development 55*(1), 17-29.
- Sullivan, H.S. (1953). *The interpersonal theory of psychiatry*. New York, NY: Norton.
- Super, C. M., & Harkness, S. (2002). Culture structures the environment for development. *Human Development, 45*(4), 270-274. doi: 10.1159/000064988
- Tang, S. S., & Fox, S. H. (2001). Traumatic experiences and the mental health of Senegalese refugees. *The Journal of Nervous and Mental Disease, 189*(8), 507-512.
- Taylor, I. (2009). *China's new role in Africa*. Boulder, CO: Lynne Rienner Publishers.
- Thabet, A. A. M., Abed, Y., & Vostanis, P. (2004). Comorbidity of PTSD and depression among refugee children during war conflict. *Journal of Child Psychology and Psychiatry, 45*(3), 533-542. doi: 10.1111/j.1469-7610.2004.00243.x
- Thelen, E., & Smith, L. B. (1996). *A dynamic systems approach to the development of cognition and action*. Boston, MA: MIT press.
- Tietjen, A. M. (1989). The ecology of children's social support networks. In D. Belle (Ed.), *Children's social networks and social support* (pp. 37-69). New York: Wiley.

- Tol, W. A., Komproe, I. H., Jordans, M. J., Ndayisaba, A., Ntamutumba, P., Sipsma, H., ... & de Jong, J. T. (2014). School-based mental health intervention for children in war-affected Burundi: a cluster randomized trial. *BMC medicine*, 12(56), 1-12.
- Tomada, G., & Schneider, B. H. (1997). Relational aggression, gender, and peer acceptance: Invariance across culture, stability over time, and concordance among informants. *Developmental Psychology*, 33(4), 601-609. doi: 10.1037/0012-1649.33.4.601
- Triandis, H. C. (1995). *Individualism & collectivism: New directions in social psychology*. Boulder, CO: Westview Press.
- UNDESA (2008). World economic situation and prospects 2008. Retrieved from United Nations website:  
[http://www.un.org/en/development/desa/policy/wesp/wesp\\_archive/2008wesp.pdf](http://www.un.org/en/development/desa/policy/wesp/wesp_archive/2008wesp.pdf)
- UNICEF (2005). State of the world's children: Childhood under threat. Retrieved from United Nations Children's Fund website:  
[http://www.unicef.org/publications/files/SOWC\\_2005\\_\(English\).pdf](http://www.unicef.org/publications/files/SOWC_2005_(English).pdf)
- UNICEF, Joint United Nations Programme on HIV/AIDS, & World Health Organization. (2002). Young people and HIV/AIDS: Opportunity in crisis. New York, NY: World Health Organization, Stationery Office.
- Van de Vijver, F. J. R., & Leung, K. (2011). Equivalence and bias: A review of concepts, models and data analytic procedures. In D. Matsumoto & F. J. R. Van de Vijver (Eds.) *Cross cultural research methods in psychology* (pp.17-45). New York, NY: Cambridge University Press.
- Van de Vijver, F. J. R., & Matsumoto, D. (2011). Introduction to the methodological issues associated with cross-cultural research. In D. Matsumoto & F. J. R. Van de Vijver (Eds.) *Cross cultural research methods in psychology* (pp.1-14). New York, NY: Cambridge University Press.
- Van de Vijver, F. J. R., & Tanzer, N. K. (2004). Bias and equivalence in cross-cultural assessment: An overview. *Revue Européenne de Psychologie Appliquée/European Review of Applied Psychology*, 54(2), 119-135.doi: 10.1016/j.erap.2003.12.004
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3(1), 4-70. doi: 10.1177/109442810031002
- Vizek-Vidović, V., Kuterovac-Jagodić, G., & Arambašić, L. (2000). Posttraumatic symptomatology in children exposed to war. *Scandinavian Journal of Psychology*, 41(4), 297-306. doi: 10.1111/1467-9450.00202
- Walker, S. P., Wachs, T. D., Meeks Gardner, J., Lozoff, B., Wasserman, G. A., Pollitt, E., & Carter, J. A. (2007). Child development: risk factors for adverse outcomes in developing countries. *The Lancet*, 369(9556), 145-157. doi: 10.1016/S0140-6736(07)60076-2
- Weisz, J. R., Suwanlert, S., Chaiyasit, W., Weiss, B., Walter, B. R., & Anderson, W. W. (1988). Thai and American perspectives on over-and undercontrolled child behavior problems: exploring the threshold model among parents, teachers, and psychologists. *Journal of Consulting and Clinical Psychology*, 56(4), 601-609.

- Weisz, J. R., Suwanlert, S., Chaiyasit, W., Weiss, B., Achenbach, T., & Eastman, K. L. (1993). Behavioral and emotional problems among Thai and American adolescents: Parent report for ages 12-16. *Journal of Abnormal Psychology, 102*(3), 395-403. doi: 10.1037/0021-843X.102.3.395
- Wentzel, K. R. (1991). Relations between social competence and academic achievement in early adolescence. *Child Development, 62*(5), 1066-1078. doi: 10.1111/j.1467-8624.1991.tb01589.x
- Wentzel, K. R. (2003). School adjustment. In W. M. Reynolds and G. E. Miller (Eds.), *Handbook of psychology: Educational psychology*. (Vol. 7, pp. 235–258). Hoboken, NJ: Wiley. doi: 10.1002/0471264385.wei0711
- Wild, L., Flisher, A., Laas, S., & Robertson, B. (2006, July). The psychosocial adjustment of adolescents orphaned in the context of HIV/AIDS. *Poster presented at the International Society for the Study of Behavioural Development biennial meeting, Melbourne, Australia.*
- World Health Organization (2005). Health system profile for Uganda. Retrieved from [http://www.afro.who.int/pt/downloads/doc\\_download/2835-uganda.html](http://www.afro.who.int/pt/downloads/doc_download/2835-uganda.html)