CHILD ABUSE IN RESIDENTIAL CARE INSTITUTIONS

IN ROMANIA

by

ADRIAN VASILE RUS

Bachelor of Science, 2004
Dimitrie Cantemir University of Tirgu-Mures
Romania

Master of Science, 2007
Dimitrie Cantemir University of Tirgu-Mures
Romania

Master of Science, 2010
Texas Christian University
Fort Worth, Texas

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Texas Christian University
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LIST OF ABBREVIATION

BEIP - Bucharest Early Intervention Project

SCARCIR - Survey on Child Abuse in Residential Care Institutions in Romania

SSPH - State Secretariat for Persons with Disabilities

CHILD ABUSE IN RESIDENTIAL CARE INSTITUTIONS IN ROMANIA

Introduction

Child abuse has been recognized as a widespread problem in residential care institutions in the West (Ellonen and Pösö, 2011; Gallagher, 1999; Hobbs, Hobbs, and Wynne, 1999; Rindfeisch, and Rabb, 1984; Sen, Kendrick, Milligan, and Hawthorn, 2008). In Romania, the abuse (physical, emotional, or sexual) that institutionalized children experienced was also widespread, however, it has been scarcely studied (Gavrilovici & Groza, 2007; Stativa, Anghelescu, Palicari, Stanescu, & Nanu, 2002). Most often, the studies conducted on children living in Romanian institutions (Bucharest Early Intervention Project, Zeanah et al., 2003) or with histories of adverse life experiences in orphanages and adopted mostly in the United Kingdom (Rutter et al., 2007), Canada (Ames et al., 1992), or the U.S. (Bruce & Gunnar, 2009), focused mainly on deprivation and neglect and their consequences on the children's physical and psychological development.

This study will focus on the overlooked phenomena of abuse experienced by institutionalized Romanian children. Such abuse should be understood within the context of political and societal changes (macrosystem; Bronfenbrenner, 1977), as well as the dynamics of children's immediate environment (microsystem), both of which influenced many aspects of daily life within Romanian institutions. The following section provides a historical overview of the Romanian child protection system, including institutionalization, and the environment in which institutionalized children lived.

History of Child Protection in Romania

The Romanian child welfare system has undergone a series of major changes over the past two decades, impacting quality of care and developmental outcomes for Romanian orphans and foster children. Each distinct reform period within this twenty-year span can be

identified by the laws and governmental reform measures enacted, the shift in child population among various Romanian institutions and foster care homes, types of institutions available to children, level of care, shift in reasons for child abandonment, and changes in ways children are routed through the system (for a review, see Rus, Parris, Cross, Purvis, & Drăghici, 2011).

In the following section we present the major changes that occurred in the child protection system in Romania from the late 1980's until 1999, when the data for the current study were collected. This historical background provides a necessary context for understanding the current state of Romania's child care system and the services it provides. Greenwell (2006) proposed a framework delineating the pre-reform era and three distinct reform periods in the Romanian child care system: pre-reform period (pre-1990), child welfare reform period I (1990-1991), child welfare reform period II (1992-1996) and child welfare reform period III (1997-2000). Furthermore, these periods were followed by the de-institutionalization period (2001-2004) and the alternative to institutionalization care system period (2005-present; NACPA & UNICEF, 2004).

The Pre-Reform Period took place during the Communist regime in Romania (1945-1989) that promoted a national belief that children of struggling families were the responsibility of the state rather than the family. Thus, a large network of institutions was created and families experiencing difficulty were encouraged to place their children in these institutions (NAPCR, 2006; Greenwell, 2003). However, the economic depression of the 1980's and the strict pro-natalist policies of the Ceausescu regime resulted in over 100,000 children living in institutions by 1989, out of the total population of about 23 million Romanian citizens (NAPCR, 2006). Many of these were institutionalized for social and economic reasons, usually in the early weeks of life (Castle et al., 1999) and were social orphans, voluntarily given to the state, rather than true orphans (Johnson et al., 2006).

The unexpected rise in the number of abandoned children prompted the adoption of Law 3/1970 for the protection of minors, which promoted institutionalization rather than taking measures to prevent child abandonment and to encourage parents to assume responsibility for their children (NACPA & UNICEF, 2004).

The Child welfare reform period I (1990-1991) is also known as the period of quick-fix solutions (NACPA, 2004). Child welfare reform in Romania was triggered by the overthrow of the communist dictator Nicolae Ceausescu in December 1989, allowing the international community to become focused on Romania's institutionalized children. In this early period of reform, two approaches were taken. First, international non-governmental organizations provided massive amounts of aid for these children (Dickens & Groza, 2004), but their efforts were ad hoc and uncoordinated (NAPCR, 2006). Second, adoption was emphasized as a means of rescuing children (Dickens & Groza 2004; NAPCR, 2006; Castle et al., 1999). The Child welfare reform period II (1992-1996) is considered the period of contradictory and unfocused reform (NACPA & UNICEF 2004). The next period of substantial reform began in 1997 and is discussed below.

Child Protection in Romania between 1997- 2000

The time period between 1997 and 2000 was considered the period of real reform (NACPA & UNICEF, 2004) of the Romanian child protection system. During this time, child protection institutions were decentralized and special legislation was adopted (Government Ordinance 26/1997, Law 108/1998) to create alternatives to institutionalization and to regulate adoption procedures (Government Ordinance 25/1997, Law 87/1998). The new protection system was created in 1997 and the responsibility for its functioning was removed from the central government and delegated to the county level. Thus, 41 County Directorates for Child Protection (CDCP) were created, including one in each of the six sectors of Bucharest, the capital of Romania. The main objectives of the CDCP's were to prevent

institutionalization of children by providing support to families and closing the large institutions while finding alternative solutions for child protection (NAPCR, 2009).

Stativa et al. (2002) reported that after 1998, the only protection measures allowed by the law were placement, entrustment, and emergency placement. Stativa and colleagues also emphasized that following the implementation of the new legal framework, residential care institutions were no longer supposed to be organized according to the age criterion. However, the vast majority of placement centers continued to have an age-based structure (Stativa et al., 2002). Thus, the residential care institutions were nurseries (leagăne), houses for preschool children (casa de copii preşcolari), and houses for school-aged children (casa de copii şcolari) that had been established by virtue of Law 3/1970. They were institutions whose organizational and operational principles were inappropriate for meeting the children's needs. Furthermore, there were also residential care institutions for children with severe disabilities (for convenience, henceforth referred to as hospice).

Ecology of Institutionalized Children Development

Bronfenbrenner (1977, p. 514) described human development as "the progressive, mutual accommodation, throughout the life span, between a growing human organism and the changing immediate environments in which it lives." Bronfenbrenner conceptualized the environment in terms of nested systems and defined four systems ranging from micro to macro: microsystem, mesosystem, exosystem, and macrosystem. Specifically, Bronfenbrenner's ecological model centers on the individual level and then expands to include family, neighborhoods, communities, and the larger sociopolitical environments that influence the individual development to varying degrees.

Most relevant to the current study is the microsystem, defined as "the complex relationship between the developing person and the environment in the immediate setting containing that person" (Bronfenbrenner, 1977, p. 514). The main features of the Romanian

institutionalized children's microsystem included the type of institution where they lived (e.g., nursery, orphanage, residential centers), the roles of the setting's members (e.g., child, peer, caregiver) and the setting-appropriate activities of the members (e.g., feeding, nurturing, playing). The most important proximal processes within a child's microsystem are feeding or comforting a baby, playing with a young child, child-child activities, group or solitary play, reading, learning new skills, athletic activities, problem solving, caring for others in distress, making plans, performing complex tasks, and acquiring new knowledge and know-how (Bronfenbrenner & Morris, 1998). Based on what is known about institutionalized Romanian children, the features of their microsystem as well as developmental proximal processes were abnormally deficient. As a consequence the children were severely deprived.

Although there were variations among the residential institutions, certain features characterized almost all institutions for Romanian children during the twenty years after the collapse of the communist regime. These features included high ratios of children to caregivers (one caregiver for every 20-40 or even 50 children; NACPA & UNICEF, 2004); lack of caregiver consistency due to many caregivers who worked in rotating shifts and who had minimal contact with children during meals and playtime (Smyke, Zeanah, Fox, & Nelson, 2009; Zeanah et al., 2003), and lack of psychological investment by the caregivers who had minimal communication with the children (Rutter et al., 2007); large numbers of children (400-500) placed within individual residential institutions (NACPA & UNICEF, 2004) who slept with many children in one room (Stativa et al., 2002); no toys or educational activities (Rutter et al., 2007); subsistent levels of food, clothing, and shelter, little or no interactions between infants and their peers, toilet training and meal times severely restricted (Johnson et al., 1992); lack of individualized developmental programming (Children's Health Care Collaborative Study Group, 1992); management structure led by medical personnel (Castle et al., 1999); as well as the lack of specialists (psychologists, physical therapists,

teachers, or social workers) within institutions (Stephenson, Anghelescu, Fumarel, Georgescu, Iorgulescu, McCreery, et al., 1993) due in part to the abolishment of psychology and sociology as academic disciplines in Romania during the 1970's and 1980's (Cojocaru, 2009; David, Moore & Domuta, 2002; Zamfir & Zamfir, 1996).

It is very important to highlight that the immediate setting of the Romanian institutionalized children's microsystem was the institution's building where children were housed. Institutionalized children usually were placed within houses for children or orphanages (case de copii) that were residential care institutions for preschool and school-aged children. After 3 years of age, children from nurseries who had not been absorbed into families, were most commonly placed in orphanages. Placements were based on age alone (without consideration for individual wishes or keeping siblings together). Children were typically released from the system at age 18 (NAPCR, 2010). These institutions used to be organized following the model of the austere boarding schools of 150-200 years ago, where the very crowded spaces only allowed monotonous, boring activities performed together by all the children. There used to be no spaces for socialization and recreation either inside or outside the institution. There were a limited number of bathrooms to be used by a large number of children, usually by all the children who lived on that floor. Moreover, most of the living facilities were in poor condition (as revisions and repairs would only be performed once a year). The buildings that hosted these two types of institutions were inadequate for the purpose they served. They were former castles or orphanages (in an advanced state of degradation, where not much could be done to transform them into appropriate living spaces for children), or in new, three- or four-story apartment buildings with 14-20 bedrooms on every floor (Stativa et al., 2002).

The traditional type of institution (model developed based on Law no. 3/1970) was characterized by two important features. First, these institutions were located in huge

buildings, with extensive accommodation capacities, hosting a large number of children, between 150 and 350. Second, the internal organization of the spaces did not meet children's needs nor respect their rights (the dormitories were very big, with about 8-10 beds, children were grouped to sleep in the same room irrespective of age, and there was almost no furniture or a possibility to organize personal spaces for the children, dormitories were exclusively used for "sleeping"; the dining room(s) were also very big; one kitchen was shared by the whole institution, which was inaccessible to the children for their potential involvement in kitchen activities; the activity rooms held large groups of children, and were used for group educational activities or for spending free time; in the sanitary facilities, privacy was totally disregarded; and there were no adequate spaces where children could meet family members who were visiting. Furthermore, some children were placed within family-type organized institutions, characterized by location in small houses or apartments and a limited number of children (under 50), or in larger buildings organized into autonomous sub-units of no more than 50 children, further divided into modules of no more than 10 children. In addition, internal spaces and day-to-day activities were organized to create living conditions that come close to the family model and allow for individualized caregiving.

A child's mesosystem includes connections or relationships between their microsystems. For Romanian institutionalized children, the mesosystem was very narrow because these children had few microsystems, mainly limited to the institution, school, and neighborhood. In addition, experiences within the orphanage, where relations between child-caregiver or child-peers were saturated with violence, likely influenced the mesosystem by increasing the level of danger within the school and neighborhood as well (Gavrilovici & Groza, 2007).

The exosystem of these children included the national strategies and policies that pertained to them, and the national and local governmental agencies that applied these

policies. A series of national policies and reforms affecting residential institutions were enacted throughout the 1990's. Eventually these reforms led to the permanent closure of institutions and development of alternative services for children.

The macrosystem of these children included governmental, economic, social, and educational policies, as well as national values, customs, beliefs, and knowledge regarding child rearing. In Romania, the macrosystem underwent a huge upheaval during the transition from Communism to a Democracy. After living for decades with almost every aspect of their life controlled by government, Romanians were abruptly thrust into a period of complete societal restructuring. Romanian children institutionalized during the 1990's were living in a macrosystem that was in a state of constant change.

Abuse in Romanian Institutions

The prevalence of abuse within Romanian institutions, and its effect on children's physical and/or psychological development has been studied very little. Gavrilovici and Groza (2007) studied the magnitude of violence on 448 institutionalized youth, ages 8-17, in 2001 in Romania (six institutions located in rural, urban, and semi-urban settings within Iasi County). This is the only study we are aware of, apart from the large-scale study conducted by Stativa and colleagues in 1999 (Stativa et al., 2002), that was the basis for the current investigation. Specifically, Gavrilovici and Groza found that children residing in institutions self-reported being threatened "sometimes or more" in the past year (68.8% of males and 63.9% of females), slapped/hit/punched (73% of males and 68.2% of females), and attacked/stabbed with a knife (12.1% of males and 6% of females). In addition, 31.2% of boys and 27% of girls reported being sexually abused.

Furthermore, the authors showed that the abuse exceeded the physical boundaries of institutions in which the children lived. For instance, these same children reported that they were threatened at school in the past year (41.9% of males and 43.8% of females),

slapped/hit/pushed at school (46.7% of males and 42.9% of females), threatened in the neighbourhoods (46.5% of males and 36.1% of females) and slapped/hit/pushed in the neighborhoods (34.1% of males and 18% of females). The aforementioned study did not investigate the magnitude of the violence in institutions from the perspective of examining mediators or risk factors for abuse, nor did it distinguish who perpetrated the abuse.

Psychological abuse was perpetrated in many forms in Romanian institutions (Stativa et al., 2002), ranging from punishing young children for behaviors that are normal at their age, depriving children of authentic emotional relationships, subjecting them to ridicule and humiliation, ignoring children's performances, setting rules and requirements that children were unable to observe and meet, keeping children in a permanent state of insecurity and uncertainty, perpetuating a lack of confidence in other people, making children wear clothes that were inappropriate for their gender and age, and not providing children with adequate opportunities for making their own choices and decisions.

Physical abuse included beatings, withholding of meals, physical isolation, and submission to various humiliating jobs, all applied as punishments (Stativa et al., 2002).

Another form of widespread abuse in residential care institutions was the exploitation of younger children by older children (including physical, psychological, and sexual abuse). The shortage of staff and insufficient training are attributed as factors allowing child on child abuse to occur. One category of abuse involved older children forcing younger children to steal, beg, and give away their personal belongings for the benefit of the older children. In addition, children were victims of sexual abuse from staff and other adults who came into contact with them through the institution (teachers, physicians, etc.), adults who were not connected in any way to the child/institution, and also older children in the same institution, from other institutions, or from outside the institution (Stativa et al., 2002).

Purpose and Research Questions of the Current Study

The major goals of the current study are two-fold. First, it is important to determine the extent to which Romanian institutionalized school-aged children experienced abuse (emotional and physical) by staff (educational and caregiving personnel) and whether this was a general phenomenon in the whole country. Second, this study seeks to identify the predictors of the abuses children experienced in institutions, including the effect of individual and environmental factors that enabled abuse within orphanages. Overall, this study provides a snapshot of Romanian children residing in placement centers (orphanages) in 1999 from the particular viewpoint of including the emotional and physical abuse expressed in punishments children received from the staff, which have not yet been addressed by other published research.

The present study is based on data collected for the Survey on Child Abuse in Residential Care Institutions in Romania, a study conducted in 1999 by Stativa et al. (2002), considered the first survey conducted on child neglect and abuse in residential care institutions in Romania. The main purpose of Stativa et al. survey was to obtain/establish a database on the forms and dimensions of neglect and abuse in residential care institutions, which should assist decision-making strategies and policies for prevention and intervention in order to reduce or eliminate neglect and abuse.

Previous surveys conducted on representative national samples concerning the causes of institutionalization (see Children's Health Care Collaborative Study Group, 1991; Stephenson, Anghelescu, Stativa, & Pasti, 1997) pointed to the existence of certain forms of abuse or neglect, with serious negative consequences on children's development and social integration. Those surveys have identified cases of children's neglect that include lack of stimulation, health problems, poor emotional development, lack of rehabilitation of disabilities, and disregard of children's rights to have a family, a personal life, and privacy.

The present study differs from Gavrilovici and Groza's (2007) study in four important ways. First, while the Gavrilovici and Groza assessed a relatively large sample of 448 institutionalized children, it was not a representative sample regarding gender and age of the children within the Romanian county where data were collected. In contrast, the current study includes a national representative sample of 1,391 institutionalized children recruited using a stratified random sampling procedure. Moreover, all the populations included in the sample, by region and type of institution, have been structured and distributed taking into account the age groups and gender structure in each group. Second, Gavrilovici and Groza did not identify whether these children were exposed to violence from their caregivers, educators, teachers, or other individuals. In contrast, the current study assessed the abuse experienced by institutionalized children at the hands of staff. Third, while Gavrilovici and Groza's study identified the types of violence experienced by institutionalized children (threats, slapping/hitting/punching, beatings, knife attacks, gun violence, and sexual abuse), whether they personally experienced the violence or personally witnessed it, and the settings where it occurred (placement center, family home for those children able to visit their parents, school, and neighborhood) that study did not identify the factors that facilitated the abuse. In contrast, the current study describes children's characteristics (e.g., age, gender, duration of institutionalization), children's relationships with parents, peers, or caregivers, as well as the institutions' characteristics (e.g., type of organization, size of the placement center) that may have facilitated abuse. Fourth, multilevel models were considered for this study because of the hierarchical data structure, with children nested within institutions.

Therefore, consistent with previous research (Gavrilovici & Groza, 2007), it is hypothesized (1) that the abuse of Romanian institutionalized children was a generalized phenomenon across all institutions and regions in the country. This prediction is based on the assumption that the staff, like most people in the general Romanian population, enforced

discipline through rough/punitive methods rooted in traditional/cultural beliefs and practices. For instance, two relatively recent studies (Browne, Cârtână, Momeu, Păunescu, Petre & Tokay, 2002; Iliescu, Preda, Stativa, Vitcu, & Ovedenie, 2007) highlight the widespread use of verbal and physical punishments among Romanian parents in general.

Additionally, (2) it is hypothesized that children's probability for being punished by the staff was influenced by both individual and institutional characteristics. Specifically, the probability of being abused by staff would be significantly influenced by children's characteristics such as: amount of time spent in institutions; gender, the frequency of parent's visits; and children's trust in institution's staff. Furthermore, the institution's characteristics may have influenced abuse, such as: institution's size; the ratio of children to caregivers; and the model of organization of institution. Although there is a paucity of literature regarding abuse in residential care institutions, there is some evidence that suggests a link between the magnitude of abuse by staff and the institution's characteristics (Colton, 2002). However, we know very little about the degree of abuse in Romanian institutions and, specifically, how children's characteristics influenced the odds of being punished. For instance, there is evidence that children with histories of institutionalization had developmental problems (Colvert et al., 2008; Fisher, Ames, Chisholm, & Savoie, 1997; Gunnar and Van Dulmen, 2007; Juffer & van IJzendoorn, 2005; Zeanah et al., 2009) making them more susceptible for maladaptative behaviors. As a consequence, institution's staff may have used punishments for correcting these behaviors (Stativa et al., 2002). In addition, there is evidence that boys with or without histories of institutionalization had more problems than girls (Crick & Zahn-Waxler, 2003; Holtan, Ronning, Handegard, & Sourander, 2005) making them more difficult to manage and, therefore, staff may have used punishments as a tool in disciplining these children (Stativa et al., 2002). Also, parents' visits could be a painful experience for both children and parents (Haight, Kagle, & Black, 2003) causing children to display adverse

behavioral reactions or outbursts resulting from this emotional stress, and resulting in increased levels of punishments for these behaviors. The presence of a trusted adult person in the institution may have provided children with some form of protection, helped them to regulate, and/or provided helpful advice. Overall, the abovementioned studies support the hypothesis that both children and institutions' characteristics played an important role in enabling the punishments.

Method

Written consent to use the archival data (information contained within children's files) and to survey the children for research purposes was obtained by the principal investigator (Stativa et al., 2002) from the appropriate Romanian authorities. Children's and institution's privacy were protected by replacing their names with identification numbers on all research documents and analyses.

Participants of Original Study

The current research is based on the cross-sectional Survey on Child Abuse in Residential Care Institutions in Romania (SCARCIR; Stativa et al., 2002). It was conducted on a national representative sample of 3,164 (1,701 boys and 1,463 girls) children in residential care institutions, with ages between 0.1 – 20 years (M = 9.45; SD = 5.39), representing 7.8% of the entire population of institutionalized Romanian children in 1999. The data for the sampling was supplied by the Directorate for Child Protection – EU/Phare – Bridging Programme for 1999. According to those data, in 1999 there were 37,000 children in 267 placement centers and 3,455 children in 35 hospices out of a total population of 5.6 million children between 0-18 years old. The data for the hospices (residential care institutions for children with severe disabilities) were provided by the State Secretariat for Persons with Disabilities (SSPH).

The total sample included 72 placement centers and 8 hospices (see Table 1) recruited by stratified random sampling, and the total number of children selected (3,164) represented 96.1% of the projected sample (3,291). According to Stativa et al. (2002), the difference was due to the fact that in some of the institutions included in the sample, the age structure underwent some changes. Consequently, the number of children in the 8-15 age group was not high enough to allow us to obtain the estimated sample size. This large sample was determined by the relatively high dispersion of the institutionalized children within the eight development regions of Romania (i.e., North-East; South-East; South, South-West; West, North-West; Center, and Bucharest-Ilfov Region), the types of institutions (nursery; house for preschool children; house for school-aged children, and hospice), gender, and the age of the children.

The Stativa et al. study (2002, see Table 1) included two counties in the North-East Region (20.4% of the sample population), four counties in the South-East Region (12.9% of the sample population), three counties in the South-West Region (9.2% of the sample population), three counties in the South Region (12.3% of the sample population), four counties in the West Region (8.7% of the sample population), five counties in the North-West Region (13.2% of the sample population), five counties in the Center Region (13.9% of the sample population), and the entire Bucharest-Ilfov Region (9.4% of the sample population). Consequently, information was obtained about children from 27 counties (out of 41 counties and municipalities of Bucharest that comprise the official administrative divisions of Romania) and 54 towns (including Bucharest with three of its sectors) in the final national sample of Stativa et al. study.

Table 1

Summary of number of children in each type of institution and region; Demographic characteristics of institutionalized children (n = 3,164)

Region	Type of Institution				Number of Children
	Medical Centre	Nursery	PC Preschoolers	PC School-age	
Bucharest-Ilfov	51	62	59	124	296 (9.4%)
Center	21	91	0	329	441 (13.9%)
North-East	30	138	64	414	646 (20.4%)
North-West	26	104	15	273	418 (13.2%)
South	60	93	34	202	389 (12.3%)
South-East	48	130	64	166	408 (12.9%)
South-West	39	57	51	143	290 (9.2%)
West	33	63	20	160	276 (8.7%)
Gender					
Female	163	394	167	977	1463 (46.2%)
Male	145	344	140	843	1701 (53.8%)
Age	11.86 (3.65%)	2.29 (1.93%)	7.76 (3.69%)	12.37 (3.66%)	9.52 (5.37%)

Note. Values for type of institution and gender are counts with percentage in parentheses. Values for age in years are means with standard deviation (SD) in parentheses.

Procedure

The sample used for the Stativa et al. cross-sectional study was designed and stratified, with independent samples for the 8 regions of the country. The distribution of the samples by region was calculated by weighting the number of institutionalized children in a particular region against the total size of the sample. These numbers were structured according to the types of institutions operating in each region. All the populations included in the sample, by

region and type of institution, have been structured and distributed taking into account the age groups and the gender structure in each group. Consequently, each regional group, or type of institution, was weighted by age group and gender within each age group. Institutions in each region were selected depending on the size of the sample, structured by age groups and gender. Size was the reason for including one or several institutions of the same type in the sample. All these considerations allowed the construction of an adequate total sample, as well as an appropriate structuring.

The data were collected by 14 investigators with extensive experience in data collection in residential care institutions and in interviewing children. For the purpose of Stativa's study, the investigators were trained during 4 days. Because the investigators had to put together a sample from each institution selected for the survey, according to the age groups and genders required, they performed a random selection of the children's files (institutionalized children all have a social file) until they obtained the required sample. Specifically, children's files were located within locked cabinets in alphabetical order and the investigators had to choose at random from these files until they had obtained the appropriate structure of the sample for that particular institution. For each institution, two investigators extracted data from the children's documents and then interviewed the children based on the list of chosen children. It is important to highlight, that within the structure of the data collection, there were some occurrences when a child had information taken from his/her file (first part of the survey), but information was not obtained for the second part of the survey. This was explained by the fact that the initial selection of the child's file did not take into account the presence or absence of that child within the institution (some children were not present in the institution for different reasons) so as not to disturb the randomness of the selection process.

Therefore, this explains the missing data regarding the second part of the survey.

Participants in the Current Study

Three inclusion criteria were used to include children from the original study in the current secondary analysis. First, participants had to be 7 years old or above. Second, participants had to be living in residential care institutions for school-aged children. Furthermore, the third criteria implied that the children had to have both the first part of the survey (files) and the second part of the survey (interview). Therefore, those with missing data were excluded, resulting in a final sample (see Table 2) of 1,391 (743 boys and 648 girls) children with ages between 7 – 20 years (M = 12.86; SD = 2.8), representing 44% of Stativa et al. initial sample, and 3.8% of the population of Romanian institutionalized children in 1999. It is important to mention that this final sample (see Table 2) included two counties and seven institutions in the North-East Region (21.8% of the sample population), four counties and six institutions in the South-East Region (9.6% of the sample population), two counties and four institutions in the South-West Region (7.3% of the sample population), three counties and eight institutions in the South Region (12.1% of the sample population), two counties and two institutions in the West Region (8.7% of the sample population), four counties and five institutions in the North-West Region (17.5% of the sample population), five counties and six institutions in the Center Region (15.2% of the sample population), and the entire Bucharest-Ilfov Region with 5 institutions (8.1% of the sample population). Thus, the final sample included 43 placement centers located in 51 Romanian localities. Furthermore, these localities were nested in 23 counties (including Bucharest with three of its sectors) that were nested also within 8 regions.

Table 2

Summary of the number of institutions and number of children in each Romanian region; Demographic characteristics of institutionalized children (n = 1,391)

Region	Number of institutions	Number of children	Age	Gender	
				Female	Male
Bucharest-Ilfov	5	113 (8.1%)	12.83 (2.99)	53 (46.9%)	60 (53.1%)
Center	6	212 (15.2%)	12.68 (2.74)	104 (49.1%)	108 (50.9%)
North-East	7	303 (21.8%)	13.24 (2.48)	165 (54.5%)	138 (45.5%)
North-West	5	244 (17.5%)	12.78 (2.99)	114 (46.7%)	130 (53.3%)
South	8	169 (12.1%)	12.64 (2.80)	69 (40.8%)	100 (59.2%)
South-East	6	133 (9.6%)	12.62 (2.76)	63 (47.4%)	70 (52.6%)
South-West	4	101 (7.3%)	12.44 (2.29)	40 (39.6%)	61 (60.4%)
West	2	116 (8.3%)	13.31 (3.39)	40 (34.5%)	76 (65.5%)

Note. Values for number of institutions, children, and gender are counts with percentage in parentheses. Values for age in years are means with standard deviation (SD) in parentheses.

Measures

The data used in the current study were collected by Stativa et al. (2002) using an original survey, also drafted by Stativa. With no standard questionnaire for institutionalized children, the author created his own questionnaire that was structured to capture information about the life experiences of Romanian children within institutions. Stativa tested a draft of the questionnaire in three counties before deciding on the final version. The pilot study included a sample of 120 children in 5 institutions that were not included in the latter survey sample. Although, the Stativa et al. study was initiated in June 1999, two years into the reform program undertaken in the national residential care system, data were collected between October-November, 1999.

The survey included two sections[1]. The first part referred to elements concerning the respect of the rights of institutionalized children (the children's identity, legal status, relationship with their families, health status, educational status, personalized plans, and the quality of care in institutions). In order to fill in this section of the questionnaire, information was obtained from a variety of documents, such as: the children's social files, medical records, other records available in the institutions or made available by either the management or the educational, social, and medical personnel. The second section of the survey was only applied to children over 7 years of age in placement centers, referring to acts of neglect and abuse in institutions. Regarding abuse, the measurement encompassed three areas of interest: physical, emotional, and sexual abuse.

Dependent Variable

***Emotional and Physical Abuse by Staff*.** In residential care institutions, children reported emotional and physical abuse from a variety of people, including directors, administrative personal, and night attendants. Of 511 children who reported being punished by staff, most reported that punishments were imposed by educational/care staff (34.7%) and night attendants (3.8%; for convenience, henceforth referred to as staff). This phenomenon was captured by a question (Question 102: "Have you happened to be severely punished, inclusively beaten, by the staff?").

[1] In addition to the quantitative data collected by means of the questionnaire, there also were collected qualitative data from a number of 18 case studies, 9 focus group discussions with institutional staff (in which there were 66 educational staff and caregivers), 5 interviews conducted with managers of the Specialized Public Services, and 7 focus discussions with children in residential care (involving 48 children). The information obtained from these focused groups was not analyzed in the current study.

Independent Variables

Individual-level variables (Level I).

These variables included characteristics of the children and their relationships with caregivers.

***Total time spent in child protection care*.** The total time children spent within institutions (the current institution and others they were placed) ranged from .1 to 18 years (*M* = 6.52; *SD* = 4.39).

***Frequency of parents' visits*.** Out of 1,391 children, 257 (18.5%) reported that they were never visited by their parents, and 956 (68.7%) declared otherwise. In addition, 178 children (12.8%) were excluded from this analysis because they were true orphans, and, consequently, not visited by anyone, or they refused to declare this information or had missing data.

***Children's trust in a staff person*.** This variable was measured by question 77 in the original survey ("Is there an adult in this institution that you trust and with whom you can talk about anything without embarrassment or fear?"). On this question, 50.8% of children declared that there is an adult person they trust, 24.7% had many persons they trust, 21.9% did not have person they trust. In addition, 2.2% of children did not respond to this question, and 0.4% had missing data.

Institution-level variables (Level II)

These variables included institutional characteristics such as placement center organization and operational model, placement center size, number of children per dormitory, placement center location (urban vs. rural) and regional location within Romania.

***Placement Centre Organization and Operational Model*.** Out of 1,391 institutionalized children, 822 (59.1%) were placed within institutions that had a traditional type of organization, and 569 (40.9%) were placed within institutions that had a family-type

or mixed-type model of organization. Mixed-type organizations were institutions in which the two previous models (traditional and family-type) coexisted in varying proportions.

***Placement Centre Size*.** Children were housed within institutions that varied by size from small orphanages (up to 50 children) to very large institutions (with more than 350 children). For the purpose of the current study these institutions were grouped as (a) small institutions that grouped children placed in institutions with up to 100 children (n = 252 children), (b) medium institutions with 101 to 200 children (n = 608 children), and (c) large institutions with 201 to 350 or more children (n = 531 children).

***Placement Centre Region Location*.** Consequently, within the current research two counties were included in the North-East Region (21.8% of the sample population), four counties in the South-East Region (9.6% of the sample population), two counties in the South-West Region (7.3% of the sample population), three counties in the South Region (12.1% of the sample population), two counties in the West Region (8.3% of the sample population), four counties in the North- West Region (17.5% of the sample population), five counties in the Center Region (15.2% of the sample population), and the Bucharest-Ilfov Region (8.1% of the sample population). Consequently, information was obtained about children from 23 counties (including Bucharest) and 39 towns (including Bucharest with three of its sectors).

Data Analysis Plan

The analyses proceeded in two stages.

The first stage, Prevalence of Abuse, involved the dependent variable (probability of being punished by staff), and this stage of the analysis plan emphasized a descriptive look at the self-reported measure of abuse (see Hypothesis 1).

The second stage, Predictors of Abuse, involved the independent variables (IV), and how well these IV's predict the dependent variable. The IV's include characteristics of the institutions (i.e., type of organization and size), children (i.e., amount of time spent in

institutions and gender), and the children's relationships (i.e., parent's visits, and children's trust in a staff person).

Because the data was hierarchical in nature with institutionalized children (n = 1,391) nested within 43 institutions, and the measurement of punishments handed by the staff had a binary distribution (no versus yes), multilevel (hierarchical) logistic regression models (Gelman & Hill, 2007) were used to examine the effects of individual and institution level variables on the abuse risk and to account for the clustering of the children within institutions.

Using multilevel logistic regression (MLR) models to explore the predictive association between the IV's and the DV (see Hypotheses 2) provides several benefits compared with other statistical techniques. First, MLR accounts for individual- and institution-level variation in estimating institution-level regression coefficients. Second, MLR allows us to estimate the model even in the context of missing data. Third, MLR can compute the estimates even for institutions with a small sample size of children (Gelman & Hill, 2007). MLR permits the modeling of effects as either random or fixed. A random effect or coefficient implies that the regression coefficients in the study are being modeled and may vary. In other words, a random intercept (e.g., the probability of being punished by the staff) may be understood as varying across institutions. A slope can also vary across contexts. In the context of the current study, a random slope (e.g., time spent in institutions) shows that the relationship between the random slope and dependent variable is different across institutions. In contrast, a fixed effect does not vary by the group. For example, the effect of children's gender on abuse will not vary across institutions. In multilevel models, the random coefficients are assumed to be normally distributed around the overall model. In addition, multicollinearity can be a challenge when there are modeled interactions across levels and centering the predictor is considered a good solution for such a problem (Field, 2009).

To explain the variation in children's reports of punishments handed by the staff, and to test the hypothesis that children's reports would vary according to the characteristics of the children and institutions, three models were developed. The responses (i.e., punished by staff: yes versus no) at the first level were nested within institutions at the second level. Model 1 included only the dependent variable, without any explanatory variables related to the children's characteristics (e.g., gender) or institutions (e.g., institution size), using an intercept only multilevel logistic model (unconditional model). Next, Model 2 included only children's variables, and Model 3 included the interactions between children's and institution's variables.

The fit of each nested model was compared with the previous model using the likelihood ratio test (-2 log-likelihood), wherein each successive model was compared with previous models: the second model was compared with the empty (base) model without explanatory variables, and the third model was compared with the second model. Using a chi-squared distribution, the differences between models were compared to determine significant changes between models.

Multilevel analysis was performed using the lme4 package (Bates, Maechler, & Bolker, 2011) which is an addition for the R program (R Development Core Team, 2012). R is a software program for data manipulation, statistical computing, and graphical display.

Results

Prevalence of Abuse in Romanian Institutions

It was found that out of 1,391 children in this study, 825 children (61.8%) declared that they were not punished by the staff of the institution where they were housed, and 511 (38.2%) declared that they were abused, X^2 (1) = 73.79, $p <$ .001. Specifically, 407 (49.3%) males and 418 (50.6%) females declared that they were not punished by the staff, and 311 (60.9) males and 200 (39.1) females declared otherwise. In addition, 55 children (4%) had

missing data or did not respond to the question and were excluded from the analysis. In addition, it was found (see Table 3) that out of all children included in the analysis, those housed in the North-East region were punished most (10.4%) by the institutional staff, followed by children placed in the North-West region (9.3%), X^2 (7) = 159.07, $p <$ .001.

Table 3

Frequency of punishments across Romanian geographical regions

	Children punished		
Region	No	Yes	Total
North-East	157 (11.8%)	140 (10.4%)	297 (22.2%)
South-East	90 (6.7%)	35 (2.6%)	125 (9.4%)
South	137 (10.3%)	27 (2.0%)	164 (12.3%)
South-West	79 (5.9%)	22 (1.6%)	101 (7.6%)
West	102 (7.6%)	6 (0.4%)	108 (8.1%)
North-West	113 (8.4%)	124 (9.3%)	237 (17.7%)
Center	89 (6.7%)	117 (8.7%)	206 (15.4%)
Bucharest-Ilfov	58 (4.3%)	40 (3.0%)	98 (7.3%)

Note. Values are counts with percentage in parentheses.

Predictors of Abuse

Unconditional Model

The first analysis examined the variance in the outcome measure (probability of being abused by staff) across children without regard to any other predictor and is referred to as the intercept only model (Gelman & Hill, 2007).

Testing an unconditional model provides an estimate of the variance components and the extent of variation in the outcome variable at each level. In addition, hypothesis tests used

with this model determine whether variation exists at each level that could be explained by including additional predictors. If the variance at a given level is zero, then there is no variation to explain and no further predictors should be added to that level. If the variance at a given level is non-zero, then some of the variation might be explained by adding predictors to the model (Singer & Willett, 2003). The variability of the dependent variable was significantly different from zero ($p < .001$). Therefore, the addition of variables at both the person and institution level was appropriate.

Conditional Models

Model 2. A multilevel logistic regression model was constructed for the individual response *y* given the placement within institution, *j*. This is commonly referred as the level 1 model. In our model, we labeled the survey response y_i as 0 when children declared that they were not punished by the staff and as 1 when declared otherwise (with those children that refused to respond or with missing data excluded), with $\Pr(y_i = 1) = \text{logit}^{-1}(X\beta_i)$. The only variables included in this respondent-level model design matrix X are all 0's and 1's with indicators for the children's characteristics such as the amount of time spent within child protection care (ranging from .1 to 18 years), gender (female or male), parents' visits (yes or no), and children's trust in a staff person (no; yes, one; and yes, many). Reference groups for level 1 variables were female, parents' visits (no), and children's trust in a staff person (no). All of the above mentioned coefficients of this model were set as fixed effects (see Table 5).

Model 3. This model included the main effects of children's and institution's characteristics (also known as the level 2 model), followed by cross-level interactions between each set of variables (see Table 6). Specifically, cross-level interactions were modeled between gender and institution's size; time in institutions and institution's size; time in institutions and institution's type of organization; visits and institution's size; visits and institution's type of organization; trust in caregiver and institution's size, trust in caregiver and institution's type of organization.

It is important to note that in both model 2 and 3 none of the variables were centered. The equation's representations of these logistic models are presented in Table 4.

Table 4

Mathematical notation of the models

Model	Mathematical Notation
Model 1 (Unconditioned model)	$\Pr(y_i = 1) = \text{logit}^{-1}(\beta_0 + u_i)$, for i = 1,…, n
Model 2 (Child Level Variables)	$\Pr(y_i = 1) = \text{logit}^{-1}(\beta^0 + \beta^{Time} * Time_i + \beta^{Gender} * Gender_i + \beta^{Visits} * Visits_i + \beta^{Trust} * Trust_i)$, for i = 1,…, n $\beta_j^{Institution} \sim N(\beta^{Institution}_{Institution(j)}, \hat{\sigma}^2_{Institution})$, for j = 1,…,43.
Model 3 (Child & Institution Level Variables)	$\Pr(y_i = 1) = \text{logit}^{-1}(\beta^0 + \beta^{Time} * Time_i + \beta^{Gender} * Gender_i + \beta^{Visits} * Visits_i + \beta^{Trust} * Trust_i + \beta^{Size} * Size_{i(j)} + \beta^{Organization} * Organization_{i(j)} + \beta^{Gender*Size} * Gender_i * Size_i + \beta^{Time*Size} * Time_i * Size_i + \beta^{Time*Organization} * Time_i * Organization_i + \beta^{Visits*Size} * Visits_i * Size_i + \beta^{Visits*Organization} * Visits_i * Organization_i + \beta^{Trust*Size} * Trust_i * Size_i + \beta^{Trust*Organization} * Trust_i * Organization_i)$, for i = 1,…, n $\beta_j^{Institution} \sim N(\beta^{Institution}_{Institution(j)} + \beta^{Size} * Size_j + \beta^{Organization} * Organization_j, \hat{\sigma}^2_{Institution})$, for j = 1,…,43.

Regarding the equations for model 2 and 3 (see Table 4), the random effect of institution at level 2 ($\hat{\sigma}^2_{Institution}$) is assumed to be normally distributed, with the expected value 0 and the variance ($\hat{\sigma}^2_{Institution}$). The standard assumption is that y_i has a Bernoulli distribution. Furthermore, β^0 represents the average log-odds of punishments handed by

institutional staff, and the β^{Time}, β^{Gender}, β^{Visits}, and β^{Trust}, represent children's level 1 main effects. Moreover, β^{Size} and $\beta^{Organization}$ represent the main effects of institutions' level 2 main effect. Finally, $\beta^{Gender*Size}$, $\beta^{Time*Size}$, $\beta^{Time*Organization}$, $\beta^{Visits*Size}$, $\beta^{Visits*Organization}$, $\beta^{Trust*Size}$ $\beta^{Trust*Organization}$ represent the cross-level interactions of the model 3.

Table 5, 6, and 7 shows the results of the three fitted models: Model 2 containing only children's variables, and Model 3 containing the interaction between children's and institution's variables. The numbers in the columns show the odds ratios (OR), confidence intervals (CI) of the effect obtained by bootstrap method, and the significance (*p* values) of the tests for each model. Bootstrap methods (Efron & Gong, 1983) are resampling techniques that allow studying the distribution of sample statistics and involve drawing repeated samples with replacement from the actual data distribution. This makes it possible to obtain a pseudo-random sample that allows for the approximation of the entire sample distribution (Wasserman & Bockenholt, 1989).

When the fit of Model 1 and Model 2 were compared (the second model was compared with the unconditioned model) using the likelihood ratio test (-2 log-likelihood), a significant difference was found between these two models (see the note of the Table 7) suggesting a significant ($p < .001$) change between these two models when children's characteristics were entered in the model (Model 2). In addition, the differences between Model 2 and Model 3 showed also a significant change between these two models ($p = .005$), suggesting that the last model fit better to the data (see the note of the Table 7).

Main Effects

Considering Model 3 as our final and optimal model, results support the hypothesis that the probability of children being punished or abused by staff varies according to the characteristics of the children and institutions. Specifically, regarding children's characteristics (Level 1), the gender variable had a significant effect (odds ratio) making it a

significant predictor of the self-reported abuse children experienced at the hands of the staff, controlling for the other variables in the model. Specifically, compared with girls, boys were 2.6 times significantly more likely to be punished by the staff, controlling for the other variables. In other words, boys were 28.3% more likely than girls to be punished by staff. In addition, a marginal significant effect was found for the time spent by children in institutions variable (see Tables 5). Regarding the children who declared they were punished by the staff, for every year increase in the time they spent in institutions, there was a corresponding 1.06 increase in probability of being punished compared with those that declared that were not punished, controlling for the other variables in the model. In other words, dividing the time coefficient by 4 (Gelman & Hill, 2007), for each one-year increment increase of time spent in institutions, there was a corresponding 1.8 % increase in the probability that these children would be punished by the staff, controlling for the other variables. Regarding institutions' characteristics (Level 2), the type of institution organization had a significant effect on the dependent variable, controlling for the other variables in the model. A marginal significant effect was found for the institution size variable (see Tables 5). Consequently, compared with children placed in small institutions, those children housed in medium and large institutions were more likely to be punished by the staff (3.97 and 3.95 times more likely, respectively), controlling for the other variables in the model. In other words, these children were 43% more likely to be punished by the staff compared with those children placed in small institutions.

Interaction Effects

Most importantly, when interactions across levels were modeled (see Table 6) it was found that the interaction between gender and institution size, as well as trusted caregiver and institution organization, showed a significant effect on the dependent variable, controlling for the other variables. In addition, a marginal significant effect was shown by the interaction between parents' visits and institution size and organization. Consequently (see Table 6 and

Figure 1), compared with girls, boys placed in large size institutions were 0.35 times less likely to be abused by institutional staff. Furthermore (see Table 6 and Figure 2), compared with those children who declared they have no adult person in the institution they trusted, those who declared they do have many persons they trusted there were significantly (2.71 times) more likely to be punished by institutional staff when placed in family-type or mixed-type models of institutional organization (other institutions). Although marginally significant, our results show (see Table 6 and Figure 3) that those children who were visited were 0.4 times less likely to be punished when placed in medium institutions than in small institutions, controlling for the other variable in the model. However (see Table 6 and Figure 4), when visited children were placed in family-type or mixed-type models of institutional organization (other) they were 2.8 times more likely to be punished by the staff than children who were not visited, controlling for the other variables.

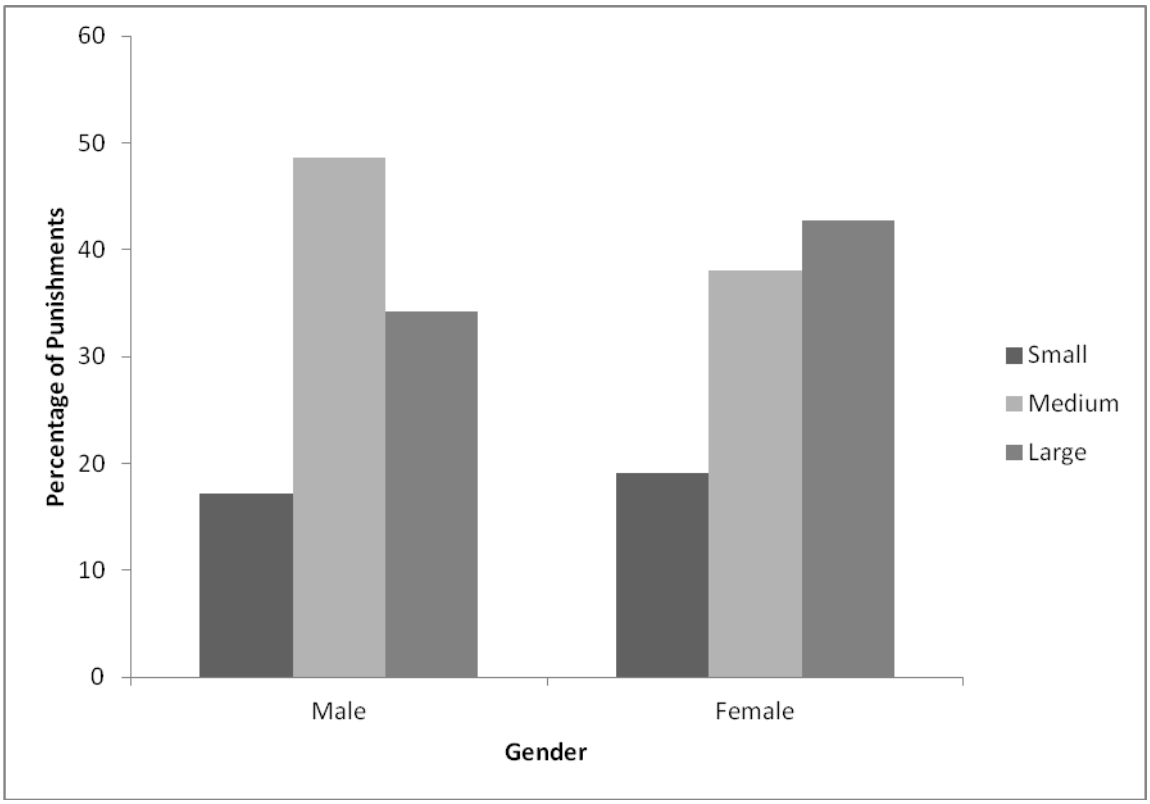

Figure 1. Percentage of children punished by the institutional staff.

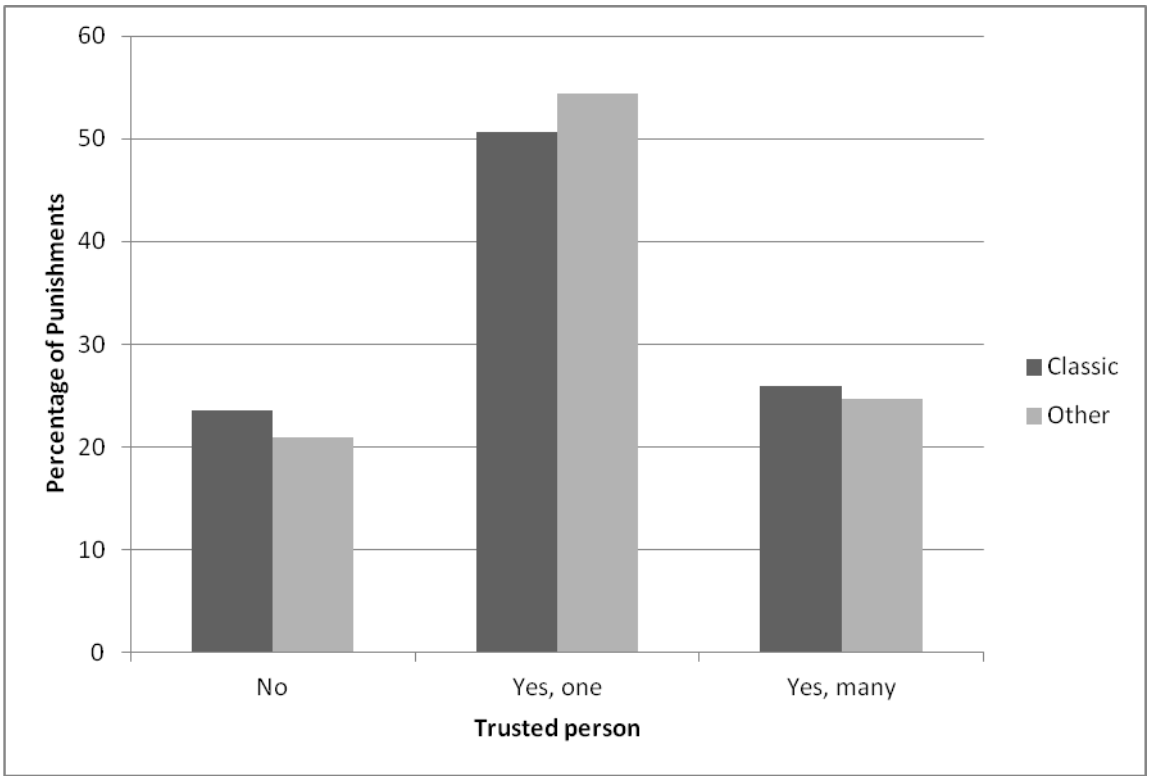

Figure 2. Percentage of children punished by the institutional staff.

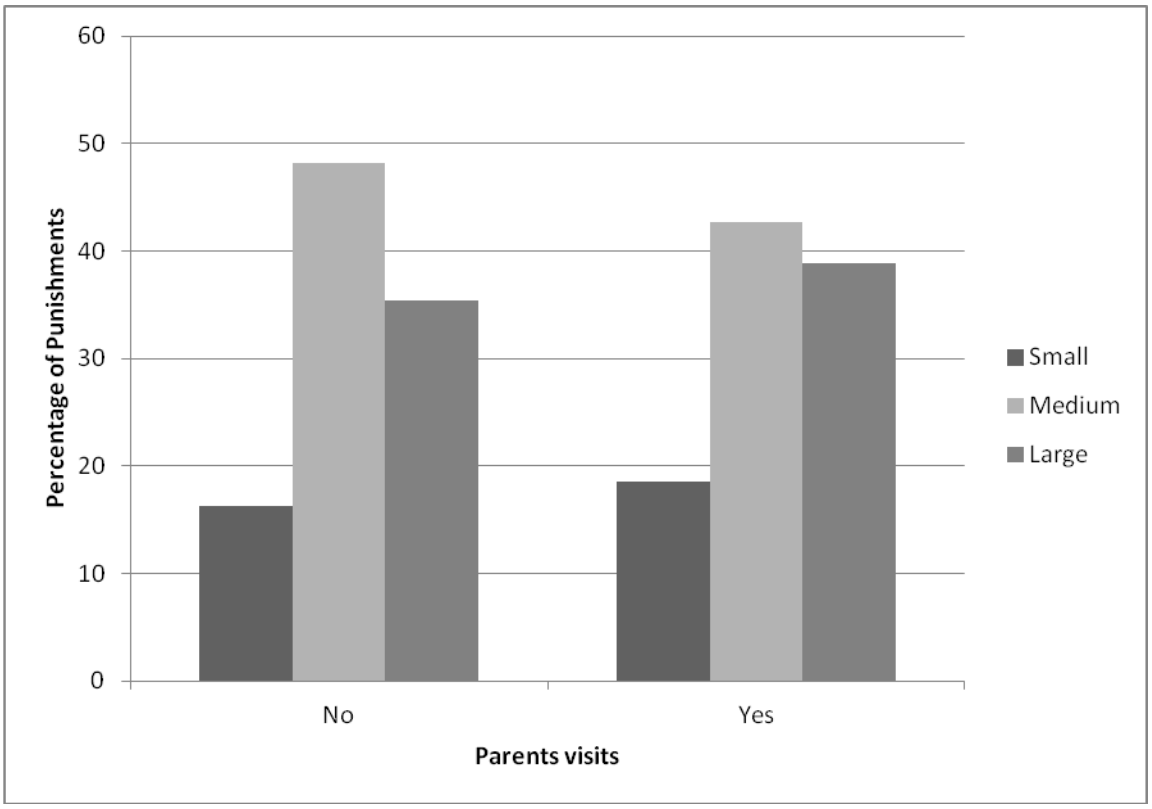

Figure 3. Percentage of children punished by the institutional staff.

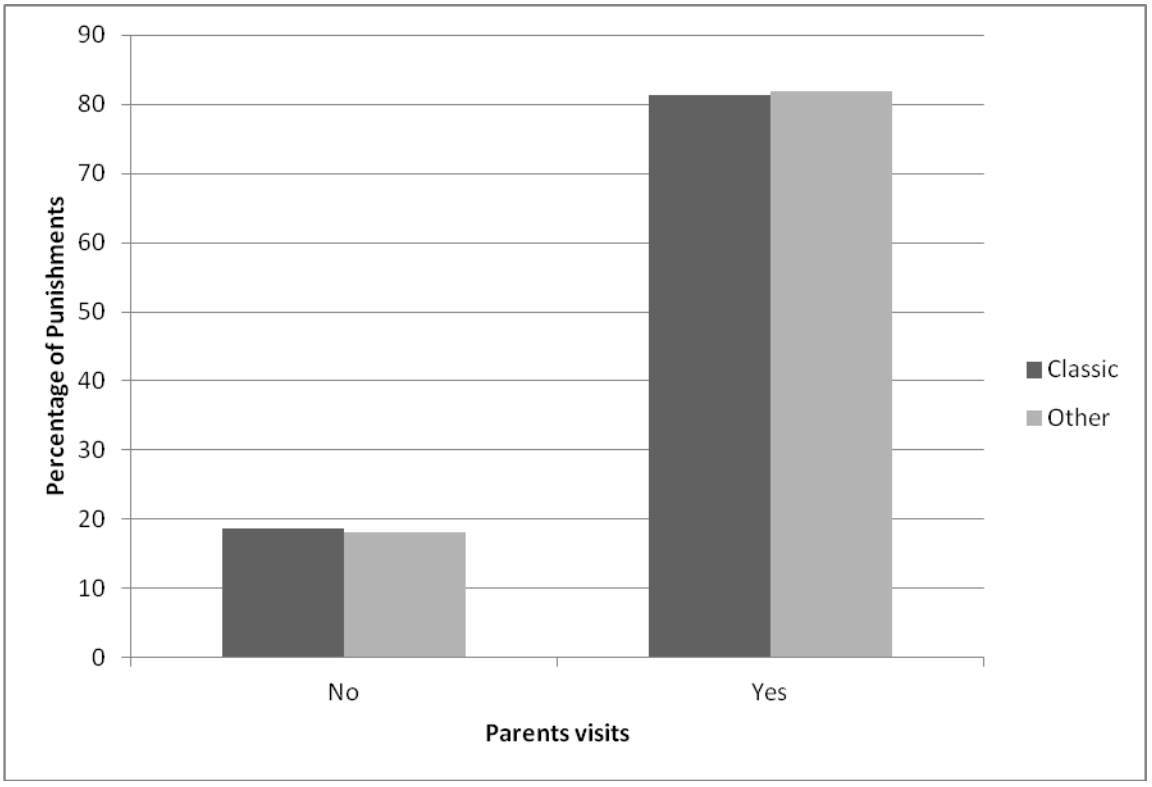

Figure 4. Percentage of children punished by the institutional staff.

Table 5

Multilevel logistic models for influence of children's and institution's characteristics on abuse

	Model 2[a,b] (Child Level Variables)			Model 3[a,b] (Child & Institution Level Variables - Interaction)		
Variable	OR	95% CI	*p*	OR	95% CI	*p*
Fixed effects: Level 1						
Time in institutions	1.06	(1.02, 1.10)	< .001***	1.06	(0.98, 1.17)	.092†
Gender (males)	1.52	(1.15, 2.01)	< .001***	2.59	(1.34, 7.36)	.002**
Visits (yes)	1.25	(0.82, 1.76)	.169	1.77	(0.62, 8.76)	.214
Trust caregiver (one)	0.72	(0.53, 1.02)	.040*	0.57	(0.17, 1.88)	.166
Trust caregiver (many)	0.92	(0.59, 1.25)	.644	0.61	(0.15, 1.72)	.285
Fixed effects: Level 2						
Inst. size (medium)				3.97	(0.87, 33.81)	.066†
Inst. size (large)				3.95	(0.87, 29.38)	.081†
Inst. org. (other)				0.09	(0.01, 0.35)	< .001***

Note. [a]CI were obtained by bootstrap method. † $p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

[b]Reference groups are females, parents' visits (no), children's trust in a staff person (no such person), small institutions, and institutions organized in classical way.

Table 6

Multilevel logistic model for influence of children's and institution's characteristics on abuse

Variable	Model 3 (Child & Institution Level Variables -Interaction) [a,b]		
	OR	95% CI[a]	*p*
Interaction Level 1 vs. Level 2			
Gender (male) *x* Institution size (medium)	0.73	(0.25, 1.69)	.479
Gender (male) *x* Institution size (large)	0.35	(0.09, 0.85)	.011*
Gender (male) *x* Institution org. (other)	1.25	(0.68, 2.49)	.467
Time in institutions *x* Institution size (medium)	0.97	(0.84, 1.05)	.520
Time in institutions *x* Institution size (large)	1.03	(0.91, 1.13)	.446
Time in institutions *x* Institution org. (other)	1.01	(0.91, 1.12)	.878
Visits (yes) *x* Institution size (medium)	0.36	(0.05, 1.31)	.087†
Visits (yes) *x* Institution size (large)	0.70	(0.11, 2.00)	.537
Visits (yes) *x* Institution org. (other)	2.08	(0.83, 6.62)	.075†
Trust caregiver (one) *x* Institution size (medium)	1.22	(0.43, 3.40)	.670
Trust caregiver (many) *x* Institution size (medium)	1.67	(0.41, 6.65)	.344
Trust caregiver (one) *x* Institution size (large)	1.13	(0.36, 3.38)	.799
Trust caregiver (many) *x* Institution size (large)	0.72	(0.17, 3.39)	.563
Trust caregiver (one) *x* Institution org. (other)	1.37	(0.50, 3.34)	.426
Trust caregiver (many) *x* Institution org. (other)	2.71	(1.29, 7.84)	.014*

Note. [a]CI were obtained by bootstrap method. † $p < .10$. *$p < .05$. [b]Reference groups are females, parents' visits (no), children's trust in a staff person (no such person), small institutions, and institutions organized in classical way.

Table 7

Multilevel logistic model for influence of children's and institution's characteristics on abuse

Model	Deviance	σ2 (Variance of institution intercept)
Model 1 (Unconditioned model)	1508	2.01
Model 2 (Child Level Variables)	1276	1.83
Model 3 (Child & Institution Level Variables)	1235	1.40

Note. Model 1 vs. Model 2: -2 log likelihood (5 *df*) = 231.96, $p < .001$.

Model 2 vs. Model 3: -2 log likelihood (18 *df*) = 41.03, $p = .002$.

Discussion

The main two objectives of this study were to explore the extent in which Romanian institutionalized children were punished by the institution staff, and to identify the most important individual and institutional characteristics that facilitated abuse within these orphanages.

The results of the present study partially supported our hypotheses and two general patterns of results emerged: (1) the probability of being punished was lower for boys than for girls when they were placed in large size institutions; and (2) having many adult persons in the institution that the child trusted increased the probability of being punished when children were placed in a family-type or mixed-type model of institutional organization (other institutions). Taken together, the findings of the current study provide support for the premise that children were punished within Romanian institutions, and children's personal characteristics and relationships as well as institutional characteristic had a significant effect on the probability of being punished by institutional staff.

Prevalence of Abuse in Romanian Institutions

The present study was the first to examine the prevalence of the punishment within a relatively large number (43) of Romanian institutions. Out of 1,391 children, 511 (38.2%) declared that they were punished by the staff. This relatively high rate of punishment that children received form their caregivers should be understood in the context that this data was obtained after an extensive governmental effort to reduce the abuse and neglect within institutions. Beginning with 1997, after the new legal framework of child protection principles were implemented, children in most residential care institutions were informed about their rights, including a ban on any kind of physical punishment. However, this ban was generally only effective in diminishing severe beatings, while so-called "light" punishments were easily overlooked. Therefore, a slap, a box on the ear, a punch, a kick, hair-pulling or the like, continued to be used quite frequently (several times a day), and when the data for this study was collected in 1999, such punishments were still considered acceptable (Stativa et al., 2002). Thus, the relatively high rate of punishments institutionalized children continued to receive from the staff suggests that the work of the Romanian child protection authority to reduce abuse lacked a full implementation. In general the institution staff still followed their traditional attitudes regarding punishments. These attitudes of staff regarding punishment of institutionalized children were captured by Stativa and her colleagues (2002) who organized several focus group discussions with staff during the time period that data was collected. These attitudes are very well summarized by following statements:

- "Punishment is necessary to correct things that are wrong".
- "Yes, punishment is necessary, but we do not need to use it too often, as children will get used to being punished, and everything will be in vain".
- "Children have to be punished, but the punishment has to be mild; after all, punishment is part of a child's education".

- "I don't think punishment is necessary, blackmail could work much better. You won't get desert if...".
- "Sometimes punishment is necessary, because like any other being, children develop the feeling of fear at an early age: fear of being hit, fear of not getting something, of not having mother around. They will have to know that they can or cannot get what they want at a given moment".
- "Punishment only makes a child's conduct worse".
- "Punishment isn't necessary because it works as an inhibitor on children".

To our knowledge, the prevalence of abuse at the hands of staff in Romanian institutions was not studied before the data used in this study was collected. Therefore, there is no related Romanian study to compare with these results. However, Gavrilovici and Groza (2007) is the single study we are aware of, apart from the large-scale study conducted by Stativa and colleagues in 1999 (Stativa et al., 2002) that was the basis for the current investigation, that addressed the problem of violence within institutions. While Gavrilovici and Groza found that a large percentage of institutionalized children self-reported being threatened, slapped/hit/punched, and attacked/stabbed with a knife, there was no assessment to determine whether this abuse stemmed from their caregivers, teachers, peers, other individuals, or some combination of these.

Nevertheless, the results of the present study are consistent with this author's experience working with postinstitutionalized teens who confirmed the high rate of abuse within institutions. Furthermore, the presence of abuse by caregivers and peers in institutions was sometimes reported by Romanian and international mass media.

Predictors of Abuse

As it was hypothesized (see Hypotheses 1), punishment of Romanian institutionalized children by staff tended to be a generalized phenomenon across all institutions and regions in

the country. However, prevalence of reported punishments varied by institutions and regions, with some considered more or less abusive than the average. The widespread abuse across Romanian institutions may be explained by the fact that staff, like most people in the general Romanian population, enforced discipline through rough/punitive methods is rooted deep in cultural beliefs and practices. There are two studies that encourage us to consider this assumption. First, a relatively recent study (Iliescu, Preda, Stativa, Vitcu, & Ovedenie, 2007) described discipline practices among parents in Romania, and specifically regarding punishment, it showed that 64% of parents reported using verbal punishment (e.g., "I shout at him," "I scold him," "I threaten him," etc.), 42% use physical punishment (e.g., beating, slapping, ear and hair pulling, shaking, etc.), and 41% simply disallow the child to continue the activity. Second, another relevant study (Browne, Cârtână, Momeu, Păunescu, Petre, & Tokay, 2002) showed that four out of five parents disciplined children by hitting them, 47.2 % on a regular basis, and 28.6 % admitted using an object (e.g., a stick, belt, etc.) when hitting the children. Therefore, even though caregivers were informed that punishments (including light and physical beatings) were banned within institutions, they may have continued to use discipline tactics consistent with prevalent cultural beliefs that valued these punishments.

The results of the current study showed that the institution-level factors did account for significant variance in the probability of institutionalized children being abused and did confirm that both children's and institution's characteristics would have a significant effect (see Hypotheses 2). In other words, the final model (Model 3) posits that the institution level factors (i.e., institution size and the model of organization of institution) did affect the probability of children to be punished by the staff when combined with the individual factors (i.e., gender; the frequency of parent's visits; and children's trust in a staff person).

One of the major strengths of this study is the large scale and the representative nature of the study population that is a unique feature for studies done in Romania. The stratified

random sampling procedure used in collecting data for the Survey on Child Abuse in Residential Care Institutions in Romania (Stativa et al., 2002), which our study is based on, strengthens our capacity for generalizing from our results that abuse expressed in punishments children received from staff was a widespread problem in Romanian institutions.

The effects of gender and institution size

The results of the present study showed that the probability of being punished was lower for boys when they were placed in large size institutions. There are studies (Broidy et al., 2003; Crick & Zahn-Waxler, 2003; Holtan, Ronning, Handegard, & Sourander, 2005) that have shown that boys, whether or not they have histories of institutionalization, tend to have more adjustment problems expressed as externalizing behaviors (attention deficit hyperactivity disorder, conduct disorder, and oppositional defiant disorder). We know that the staff might have addressed such maladaptative behaviors with punishments rather than with specialized interventions because their focus group responses indicated a typical feeling that "boys are more mischievous than girls and, as a consequence, they need some constraints in order to not be spoiled children or become more malicious" (Stativa et al., 2002). However, this counterintuitive result may suggest that boys placed in large institutions with 201 to 350 or even more children might have had more opportunities to form groups which acted as gangs, which may have included certain gang members acting as "look outs" for other members who were engaged in deviant behavior, thus decreasing the odds of getting caught. Also, these boys' gangs inside institutions might have intimidated the institutional staff, and, as a consequence, staff avoided punishing these children. Also, because large institutions had fewer staff to watch over larger numbers of children, there were likely more instances when these children were unsupervised, and because the amount of time spent in direct contact with staff was less, there was less opportunity for each child to have a direct conflict with a staff member. Specifically, with fewer interactions with staff, and less supervision as compared to

smaller institutions, children had more opportunities to escape punishment than those who resided in institutions with closer supervision by staff.

The effects of children's trust in adults and institution type of organization

The results of the current study showed that having many adult persons in the institution that the child trusted increased the probability of being punished when children were placed in family-type or mixed-type model of institutional organization. One explanation may be that children who exhibited traits of indiscriminate friendliness or other disregulated behaviors (Pears, Bruce, Fisher, & Kim, 2010), likely had more opportunities in these institutions to approach caregivers at inappropriate times, or in inappropriate ways, thus increasing the likelihood of receiving punishments for these actions. Punishments by caregivers in these circumstances may not have alienated children from feeling some sense of trust in their caregivers. For instance, even though certain maladaptive patterns may have existed in these relationships, these were nevertheless the only consistent relationships available to these children.

Another possible explanation for the reporting of trusting relationships by children who received more punishments, could be that those who experienced consistently harsher punishments by staff may have developed some type of Stockholm syndrome. This syndrome is characterized by the paradoxical development of reciprocal positive feelings between hostages and their captors, which may enhance captives' coping with traumatic experiences (Auerbach, Kiesler, Strentz, Schmidt, & Serio, 1994). Some of the conditions that can lead to Stockholm syndrome are physical abuse, powerlessness, dehumanization, humiliation, and/or the need to avoid incurring further wrath of captors (Allodi, 1994). Other conditions attributed to Stockholm syndrome are cases in which prolonged repeated trauma occurs under conditions where the victim is in a state of captivity, unable to flee, and under control of the perpetrator (Herman, 1992). While generally attributed to victims of kidnapping and domestic

abuse, there is a possibility that some of these conditions may have existed within institutions.

The effect of family visits and institution's size. The effect of family visits and institution type of organization

Although marginally significant, the results of the current study showed children residing in medium-sized institutions, and who received visits from their biological families, had a reduced likelihood of being punished by the staff. However, children residing in family-type or mixed-type institutions, and who received visits from their families, had an increased probability of being punished by the staff.

This counterintuitive result may suggest that institutionalized children struggled emotionally after they were visited by their biological parents resulting in a higher likelihood of displaying maladaptative behaviors. However, as discussed in the previous paragraphs, the increased proximity to staff in family-type or mixed-type institutions likely resulted in increased likelihood that these behaviors would be noticed and addressed by the staff. Such behaviors were found in studies of foster care, where children's behavior following parental visits has been known to include crying, angry outbursts, or withdrawal. One explanation is that these visits cause both parent and child to re-experience painful emotions regarding reunion and separation (Haight, Kagle, & Black, 2003). For instance, in one longitudinal study of foster care, biological parents and their children who resided in foster care reported that visitation evoked painful emotions about separation, and some foster parents reported that children's behavior was worse following parental visits (Jenkins & Norman, 1975). Also, foster care caseworkers have reported that frequent parent visits may challenge children's capacity to cope with the separation, especially for those in long-term placements (Fanshel & Shinn, 1978). Thus, institutionalized children may also experience difficulty in regulating strong emotions following parental visits, resulting in the types of behaviors that may lead to increased levels of punishments.

These results also suggest that parents were not able to influence the relationship dynamic between their children and institution staff. This should be understood in the context that parents were not informed of any rationale for the punishments their children received and, often, children hid these experiences from their relatives. Institution staff were not interested in helping children and their parents develop strong relationships that might result in children being taken back home. Keeping children in institutions was seen by many staff as a way of keeping their job. Moreover, some children may have realized the benefits of being institutionalized and having a shelter, food, or clothes and were afraid of reporting the punishments to their relatives in order to avoid being taken back in their biological families. On the other hand, they may have feared possible retribution by staff if their complaints became known to the staff. Also, this non-reporting of abuse to relatives may indicate that some children simply had not had the opportunity to establish a trust-based relationship with their families. It may be that children's lack of a close relationship with their relatives caused them to be cautious about what they shared with them.

Limitations of the Study

This study has several limitations. First, the structure of our data did not allow us to investigate the characteristics of the staff (e.g., personality; psychopathology; education and training, skills) and how these features are related with the punishments they handed to the children. Furthermore, even though we were able to model the relationship between abuse and some of institutions' characteristics, we know little about the residential culture of Romanian institutions (e.g., the criteria of staff selection, type of management, the procedure of identifying abusive staff and methods of disciplining them).

Most importantly, there was no information in children's files about the punishments or abuse they experienced in institutions, and, therefore, our study relied on the children's response to the interview, data that may be biased. Specifically, the children's perception

about the way the punishment was received (self-reported measure of punishments handed by staff) is considered highly subjective. Therefore, there is a real potential that the self-reported measure of punishments was over- or underestimated by the institutionalized children and possible unwillingness to disclose such sensitive information despite confidentiality being assured. Additionally, the design of the present study only allowed us to investigate the association between variables, but no causal relationship could be assumed. Moreover, little is known about those children in our sample that did not report punishment by their staff. Future studies could show whether these children were more resilient than those punished, and/or exhibited less maladaptive behaviors that were addressed with punishments by the institutional staff.

Finally, the original study was conducted 13 years ago during a period of very intense policy reform of the Romanian child protection system. That period may be considered a transition between the old child protection system and the new, decentralized one. Therefore, the magnitude of punishments in institutions might have decreased during subsequent years when most of the large institutions were closed and new forms of child protection were developed (e.g., family-type services, residential and day care services; for a review, see Rus, Parris, Cross, Purvis, & Drăghici, 2011). It would be important to replicate the current study during the current time period to ascertain whether or not policy changes have been effective.

Conclusion

In the time leading up to Stativa and colleagues original study in 1999, there appeared to exist a widespread awareness of the phenomenon of child abuse in Romania, particularly following extensive coverage in the media. However, until the Stativa et al. (2002) study was conducted, there were no reliable data available that could be used to accurately assess the dimensions and forms of abuse present in Romanian residential care institutions. The present study, a secondary analysis based on the Stativa et al. cross-sectional Survey on Child Abuse

in Residential Care Institutions in Romania, described and quantified this abuse (punishments children got from the institution staff) for the first time, especially across the 43 residential placement centers (orphanages) included in the analysis. Furthermore, for the first time, the present research showed that children's individual characteristics (i.e., gender, relationships, and visits with parents) had a significant effect of the probability of being abused by institutional staff (educational and caregiving personnel) as well as institutional characteristics (i.e., institution size and type of organization). The result of our study enriches the knowledge about child abuse in residential care institutions that, as shown in studies conducted in West, has been attributed to a blend of many factors such as substandard education, training, supervision, and selection of staff; poor management of these institutions and inappropriate organizational cultures; failure to identify staff that abused children, and a lack of responsiveness regarding children who abused other children (Colton, 2002).

The results of the present study highlight the importance of understanding the consequences of institutionalization in a broader way, where children not only experienced deprivation as documented in other studies, but also high levels of abuse (physical and emotional) by institutional staff. Therefore, the adverse physical, emotional, and behavioral outcomes of institutionalized children may be the consequences of both neglect and abuse.

In addition, this study showed that institutionalized children's lives were affected by punishments that can be linked to various origins within their microsystem, exosystem, and macrosystem. Specifically, children existed within a microsystem (e.g., institution type of organization where children were housed and their relationships with this environment) that was connected with the exosystem (e.g., national reforms within child protection system and the policy of reducing abuse in institutions). Also, it was shown that the presence of the punishments (abuse) in institutions was influenced by their macrosystem in which discipline of children through physical and emotional punishments was considered a cultural norm.

The findings of the present study draw attention to the intersection between the individual and institution characteristics that facilitated punishments (abuse) children experienced in Romanian institutions. Specifically, this study is a snapshot of the punishments given by institutional staff during 1999. The outcomes have an important implication for child protection authorities. First, such data could help authorities make informed decisions about revising policies regarding the discipline of children reared by caregivers. Moreover, knowing that one of the most important trends to emerge from the Romanian child welfare reforms was the movement of children from institutions to family-type care, it is important to measure the level of punishments given by foster parents to the children in their care. In addition, findings from this study suggest that follow-up studies may be warranted to determine whether the level of physical and/or mental punishments by caregivers has improved since this data was collected. This study provides a reference point that can be used for such future comparisons. In addition, the outcomes of this study indicate that special trainings that address the problem of caregiver violence towards children may be warranted if high levels of such punishments still occur at the hands caregivers in the child protection system (whether by foster parents or institutional caregivers).

REFERENCES

Allodi, F. A. (1994). Post-traumatic stress disorder in hostages and victims of torture. *Psychiatric Clinics of North America, 17*, 279-288.

Ames, E. W., Carter, M., Chisholm, K., Fisher, L., Gilman, L. C., Mainemer, H., et al. (1992). The development of Romanian orphanage children adopted to Canada. *Canadian Psychology, 33*(2), 503.

Auerbach, S. M., Kiesler, D. J., Strentz, T., Schmidt, J. A., & Serio, C. D. (1994). Interpersonal impacts and adjustment to the stress of simulated captivity: An empirical test of the Stockholm syndrome. *Journal of Social and Clinical Psychology, 2*, 207-221.

Bates, D., Maechler, M., & Bolker, B. (2011). lme4: Linear mixed-effects models using S4 classes. R package version 0.999375-39. Retrieved, February 16, 2012, from http://CRAN.R-project.org/package=lme4

Broidy, L. M., Tremblay, R. E., Brame, B., Ferguson, D., Horwood, J. L., Laird, R., & et al. (2003). Developmental Trajectories of Childhood Disruptive Behaviors and Adolescent Delinquency: A Six-Site, Cross-National Study. *Developmental Psychology, 39*(2), 222-245. doi: 10.1037/0012-1649.39.2.222

Browne, K., Cârtânã, C., Momeu, L., Pãunescu, G., Petre, N., & Tokay, R. (2002). Child abuse and neglect in Romanian families: A national prevalence study 2000. Bucharest: Romanian Government National Authority for Child Protection.

Bruce, J., & Gunnar, M. R. (2009). Disinhibited Social Behavior Among Internationally Adopted Children. *Development and Psychopathology*, *21*(1), 157-171. doi:10.1017/S0954579409000108.

Bronfenbrenner, U. (1977). Toward an Experimental Ecology of Human Development. *American Psychologist, 32*(7), 513-531.

Bronfenbrenner, U., & Morris, P. A. (1998). The Ecology of Developmental Processes. In Damon, W., & Lerner, R. M. (Eds.), *Handbook of Child Psychology. Fifth Edition: Vol.*

1. Theoretical Models of Human Development (993-1028). New York: John Wiley & Sons, Inc.

Castle, J., Groothues, C., Bredenkamp, D., Beckett, C., O'Connor, T. and Rutter, M. (1999), Effect of qualities of early institutional care on cognitive attainment. *American Journal of Orthopsychiatry, 69*, 424–437. doi: 10.1037/h0080391

Children's Health Care Collaborative Study Group (Ministry of Health, Institute of Mother and Child Care, United Nations Children's Fund). (1991). *Causes of institutionalization of Romanian children in leagane and sectii de distrofici: Report of a population-based study with recommendations.* Bucharest: UNICEF.

Children's Health Care Collaborative Study Group (1992). Romanian health and social care system for the children and families: future directions in health care reform. *BJM (Clinical Research Ed.), 304*(6826), 556-559.

Cojocaru, S. (2009). Child rights based analysis of children without parental care or at risk of losing parental care in Romania. *Review of Research and Social Intervention [Revista de Cercetare ºi Intervenþie Socialã]*, 24, 41-71.

Colton, M. (2002), Factors associated with abuse in residential child care institutions. *Children & Society*, *16*, 33–44. doi: 10.1002/chi.683

Colvert, E., Rutter, M., Beckett, C., Castle, J., Groothues, C., Hawkins, A., et al. (2008). Emotional difficulties in early adolescence following severe early deprivation: Findings from the English and Romanian adoptees study. *Developmental Psychopathology*, 20, 547–567. doi:10.1017/S0954579408000278

Crick, N. R., & Zahn-Waxler, C. (2003). The development of psychopathology in females and males: Current progress and future challenges. *Development and Psychopathology, 15*, 719-742. doi: 10.1017.S095457940300035X

David, D., Moore, M., & Domuta, A. (2002). Romanian Psychology on the International Psychological Scene: A Preliminary Critical and Empirical Appraisal. *European Psychologist*, 7(2), 153-160. doi:10.1027//1016-9040.7.2.153

Dickens, J. & Groza, V. (2004). Empowerment in difficulty: A critical appraisal of international intervention in child welfare in Romania. *International Social Work, 47*(4), 469-487. doi:10.1177/0020872804046254

Efron, B., & Gong, G. (1983). A leisurely look at the bootstrap, the jaekknife, and cross-validation. *American Statistician, 37,* 36-48.

Ellonen, N. and Pösö, T. (2011), Violence Experiences in Care: Some Methodological Remarks based on the Finnish Child Victim Survey. *Child Abuse Review, 20,* 197–212. doi: 10.1002/car.1181

Fanshel, D., & Shinn, E. (1978). *Children in foster care: A longitudinal investigation*. New York: Columbia University Press.

Field, A. P. (2009). *Discovering statistics using SPSS: and sex and drugs and rock 'n' roll* (3rd edition). London: Sage.

Fisher, L., Ames, E. W., Chisholm, K., & Savoie, L. (1997). Problems reported by parents of Romanian orphans adopted to British Columbia. *International Journal of Behavioral Development,* 20(1), 67–82.

Gallagher, B. (1999). The abuse of children in public care. *Child Abuse review, 8*, 357-365.

Gavrilovici, O., & Groza, V. (2007). Incidence, prevalence and trauma associated with exposure to violence in Romanian institutionalized children. *International Journal of Child & Family Welfare, 10*(3-4), 125-138.

Gelman, A., & Hill, J. (2007). *Data analysis using regression and multilevel/hierarchical models*. New York: Cambridge University Press.

Greenwell, F. (2006). The Impact of Child Welfare Reform on Child Abandonment and Deinstitutionalization, Romania 1990-2000. *Annales de démographie historique, 111*, 133-157.

Gunnar, M. R., & van Dulmen, M. M. (2007). Behavior problems in postinstitutionalized internationally adopted children.*Development And Psychopathology, 19*(1), 129-148. doi:10.1017/S0954579407070071

Haight, W. L., Kagle, J. D., & Black, J. E. (2003). Understanding and supporting parent-child relationships during foster care visits: Attachment theory and research. *Social Work, 48*(2), 195-207.

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress, 3*, 377-391.

Hobbs, G. F., Hobbs, C. J., and Wynne, J. M. (1999). Abuse of children in foster and residential care, Child Abuse & Neglect, 23(12), 1239-1252. doi: 10.1016/S0145-2134(99)00096-4.

Holtan, A., Rønning, J. A., Handegård, B. H., & Sourander, A. (2005). A Comparison of Mental Health Problems in Kinship and Non-kinship Foster Care. *European Child & Adolescent Psychiatry*, *14*, 200-207. doi: 10.1007/s00787-005-0445-z

Iliescu, M., Preda, V., Stativa, E., Vitcu, A., & Ovedenie, A. (2007). *Knowledge, attitudes and practices on parenting in Romania. Section II.* Buzau: Alpha MDN.

Jenkins, S., & Norman, E. (1975). Beyond placement: Mothers' view foster care. New York: Columbia University Press.

Johnson, R., Browne, K., & Hamilton-Giachritsis, C. (2006). Young Children in Institutional Care at Risk of Harm. *Trauma Violence Abuse, 7*(1), 34-60. doi:10.1177/1524838005283696

Johnson, D. E., Miller, L. C., Iverson, S., Thomas, W., Franchino, B., Dole, K., et al. (1992). The health of children adopted from Romania. Journal of the American Medical Association, 268(24), 3446-3451.

Juffer, F., & van IJzendoorn, M. H. (2005). Behavior Problems and Mental Health Referrals of International Adoptees: A Meta-analysis. *JAMA: Journal Of The American Medical Association*, *293*(20), 2501-2515. doi:10.1001/jama.293.20.2501

National Authority for Child Protection and Adoption (NACPA) & UNICEF (2004). *Child care system reform in Romania*. UNICEF Romania. Retrieved February 11, 2010, from http://www.unicef.org/romania/imas1.pdf

National Authority for the Protection of Childs's Rights (NAPCR) (September, 2006). *Child welfare in Romania: The story of a reform process.* Retrieved March 18, 2010, from http://www.eir.gr/

National Authority for the Protection of Child's Rights (NAPCR) (2010). National Strategy Project in the field of Protection of Child Rights 2006-2013. Retrieved March 30, 2010, from http://www.copii.ro/Files/strategy_EN_20075245313234.pdf

Pears, K. C., Bruce, J., Fisher, P. A., & Kim, H. K. (2010). Indiscriminate friendliness in maltreated foster children. *Child Maltreatment, 15*(1), 64-75.

R Development Core Team (2012). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0. Retrieved, February 04, 2012, from http://www.R-project.org

Raudenbush, S.W., & Bryk, A.S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks: Sage Publications.

Reyome, N. D. (1990). Executive Directors' Perceptions of the Prevention of Child Abuse and Maltreatment in Residential Facilities**.** *Journal of Child &Youth Care,* 4(6**)**, 45-60.

Rindfeisch, N. and Rabb, J. (1984). Dilemmas in planning for the protection of children and youths in residential facilities. *Child Welfare, 63*, 205-215.

Rus, A. V., Parris, S., Cross, D., Purvis, K., & Drăghici, S. (2011). Reforming the Romanian Child Welfare System: 1990-2010. *Review of Research and Social Intervention [Revista de Cercetare şi Intervenţie Socială]*, *34*, 56-72.

Rutter, M., Beckett, C., Castle, J., Colvert, E., Kreppner, J., Mehta, & et al. (2007). Effects of profound early institutional deprivation: An overview of findings from a UK longitudinal study of Romanian adoptees. *European Journal of Developmental Psychology*, *4*(3), 332-350. doi:10.1080/17405620701401846.

Sen, R., Kendrick, A., Milligan, I. and Hawthorn, M. (2008), Lessons learnt? Abuse in residential child care in Scotland. Child & Family Social Work, 13: 411–422. doi: 10.1111/j.1365-2206.2008.00566.x

Singer, J.D., & Willett, J.B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. London: Oxford University Press.

Smyke, A. T., Zeanah, C. H., Fox, N. A., Nelson, C. A. (2009). A New Model of Foster Care for Young Children: The Bucharest Early Intervention Project. *Child and Adolescent Psychiatric Clinics of North America, 18*, 721-734. doi: 10.1016/j.chc.2009.03.003.

Stativa, E., Anghelescu, C., Palicari, G., Stanescu, A., & Nanu, R. (2002). *Child Abuse in Residential Care Institutions in Romania*. Bucharest: Extrem Group.

Stephenson, P., Anghelescu C., Stativa, E., & Pasti, S. (1997). Cauzele instituţionalizării copiilor din România [The causes of children institutionalization in Romania]. Bucharest: UNICEF and International Foundation for Children and Families.

Stephenson, P., Anghelescu, C., Fumarel, S., Georgescu, A., Iorgulescu, D. McCreery, R., & et al. (1993). Training needs of staff in Romanian institutions for young children. Child: Care, Health and Development, 19, 221–234. doi: 10.1111/j.1365-2214.1993.tb00728.x

Zamfir, E., & Zamfir, C. (1996). Children at Risk in Romania: Problems old and new. *Innocenti Occasional Papers*, Economic Policy Series, No. 56 (September). Florence, Italy: UNICEF International Child Development Centre.

Zeanah, C. H., Egger, H. L., Smyke, A. T., Nelson, C. A., Fox, N. A., Marshall, P., et al. (2009). Institutional Rearing and Psychiatric Disorders in Romanian Preschool Children. *American Journal of Psychiatry, 166*, 777-785.

Zeanah, C. H., Nelson, C. A., Fox, N. A., Smyke, A. T., Marshall, P., Parker, S. W., et al. (2003). Designing Research to Study the Effects of Institutionalization on Brain and Behavioral Development: The Bucharest Early Intervention Project. *Development and Psychopathology, 15*, 885–907. doi: 10.1017/S0954579403000452.

Wasserman, S., & Bockenholt, U. (1989). Bootstrapping: Application for psychologists. *The International Journal of the Society for Psychophysisological Research, 2*(2), 208-221.

Adrian V. Rus

adrian.rus@tcu.edu
aadrianrus@gmail.com

EDUCATION

2010 Texas Christian University, Fort Worth, TX
Master of Science, Experimental Psychology (Developmental Lab)
Thesis: *The Effects of Placement History Through the Romanian Protection System on the Development of Children Reared within Foster Families*

2007 Dimitrie Cantemir University of Tirgu-Mures, Romania
Master of Science, Psycho-Diagnosis, Counseling & Psychotheraphy
Thesis: *Personality Traits and Vocational Interests: Implications for Oraganizational Context*

2004 Dimitrie Cantemir University of Tirgu-Mures, Romania
Bachelor of Science, Socio-Psycho Pedagogy
Honors Thesis: *Relationship Between Work Motivation and Job Satisfaction at the Work Place*

PROFESSIONAL EXPERIENCE

8/2008 – Present Teaching Assistant
Psychology Department,Texas Christian University, Fort Worth, TX

Techniques of College Learning (Fall 2008)
Introduction to Psychological Measurement (Spring, 2009)
Comparative Psychology (Summer 2009)
Basic Leadership Skills (Fall 2009, Fall, 2011, Spring 2012)
General Psychology (Spring 2010, Fall 2010, Summer 2011)
Tao of Strategy (Spring 2011)
Organizational Psychology (Spring 2012)
Advanced Leadership Skills (Spring 2012)

10/2007 – 6/2008 Instructor
Psychology and Educational Sciences
DIMITRIE CANTEMIR UNIVERSITY of Tirgu-Mures, str. Bodoni Sandor nr. 3-5, Tirgu-Mures, 540545, Mures, Romania

2/2005 – 5/2008 Psychologist (collaborator)
"LOC" (Livada Orphan Care) Foundation, str. Abrudului nr. 15, Tirgu-Mures, Mures, Romania

1/2003 – 9/2004 Psychologist
"CHILDREN'S HOPE CHEST", Foundation, str. Luduşului nr. 29, Tirgu-Mures, Mures, Romania

ABSTRACT

CHILD ABUSE IN RESIDENTIAL CARE INSTITUTIONS
IN ROMANIA

By Adrian V. Rus, Ph.D., 2012
Department of Psychology
Texas Christian University

Dissertation Advisor: David R. Cross, Professor of Psychology

The main two objectives of this study were to first (1) explore the extent in which Romanian institutionalized children were punished by the institution staff (educational and caregiving personnel), and then (2) identify the most important individual and institutional characteristics that facilitated abuse within these orphanages.

The results of the present study partially supported our hypotheses and several general patterns of results emerged: (1) the probability of being punished was lower for boys than for girls when they were placed in large size institutions; and (2) having many adult persons in the institution that the child trusted increased the probability of being punished when children were placed in a family-type or mixed-type model of institutional organization (other institutions). Taken together, the findings of the current study provide support for the premise that children were punished within Romanian institutions, and children's personal characteristics and relationships as well as institutional characteristic had a significant effect on the probability of being punished by institutional staff.

The present study, a secondary analysis based on the Stativa et al. (2002) cross-sectional Survey on Child Abuse in Residential Care Institutions in Romania, with data retrieved from 43 residential placement centers (orphanages), described and quantified this abuse (punishments children received from staff in Romanian institutions) for the first time.