

Assessment of Strategies to develop Resilience in Children in a Residential Child Care Model of India

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Abstract

Children without parental care are vulnerable to potentially traumatic life events (PTEs), which can have grave impact on their development. Trauma responses to these events are unique and can take multiple pathways towards well-being and continued risks. Not all children exposed to adversities develop problems of the same type or severity, an indication of the adaptability of the person to risks and opportunities in their environment. This study investigates a longitudinal 5-year sample of 121 children without parental care, living in group residential homes, Udayan Ghars, established by Udayan Care, a non-profit organisation based in India. The participant population, like most children without parental care, has experienced tremendous adversities, ranging from death in the family and abuse to extreme financial and social insecurity. Over half the sample (66%) have experienced 3 or more PTEs. Yet, encouragingly, preliminary analysis suggests that despite past adverse life experiences, these children without parental care have developed sources of resilience that can help mitigate the on-going mental health risks and have above average ego-resilience and average self-concept, signifying sources of mental health strength. It is postulated that the Living In Family Environment (L.I.F.E: Living in Family Environment) Model practised in these homes (Ghars) contributes to these outcomes, where 'Group Care' ensures that children are shown emotional warmth and are cared for by voluntary, long-term committed mentor parents, social workers and caregivers, who are trained regularly in attachment theory and trauma informed care (TIC). Using a biopsychosocial framework, with tenets of Erikson's theory of Psychosocial Development (1968) and Bronfenbrenner's Ecological Model (1979) applied to the TIC care model, discussion is framed in the context of the person-in-environment model of development and in understanding the ways care providers can use sources of resilience as tools to bolster support structures for vulnerable populations.

Keywords: Resilience, Trauma Informed Care, Child Care, Child without Parental Care

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Introduction

Potentially Traumatic Life Events (PTE's) in the life of a 'Child without Parental Care' and its link with Resilience

Potentially Traumatic Events and Alternative Care

Potentially traumatic events include exposure to actual or threatened death, serious injury, or sexual violence and have the potential to cause feelings of intense fear or psychological distress (American Psychiatric Association, 2013). Traumatic events are emotionally distressing and while many people are able to recover, for others, the type and duration of PTEs can lead to long-term mental health issues such as post-traumatic stress disorder (PTSD), depression, and anxiety or substance use disorders. Research about children without parental care has highlighted that potentially traumatic events (PTEs), such as parental neglect, abandonment and lack of family and its consequence of disadvantageous socio-economic conditions, lead to poor health outcomes.

Alternative care for children without parental care include formal public and private facilities (foster care, residential, and kinship care) some of which provide family-like environmental settings, or informal kinship or social network care settings prior to any order by judicial authority (United Nations, 2010). Residential care homes are group homes where children from different families live together under the care of an unrelated caregiver(s) under the supervision of government juvenile laws. As mentioned above, given the PTEs that lead to the need for alternative care, children in these environments often have greater levels of neurodevelopmental disorders, psychopathology and educational difficulties as compared to other peers (Ford et al., 2007). Yet, the emotional dynamics of children in alternative care has received little attention. Amongst the limited research addressing this issue, one of the studies suggest that children without parental care who are accommodated in residential care homes experience higher rates of depression, suicidal tendencies, and PTSD compared to their non-institutionalized peers (Gearing et al., 2015). These differences could be attributed to the high rate of PTEs experienced by children before entering care followed by their experiences in the care homes. In support of this rationale, suffering as a result of PTEs

experienced by children before and in institutional care has been found to impact achievements and functioning (Gray et al., 2015). These alternative findings support further investigation of both risk factors and protective factors required for healthy functioning among children receiving alternative care.

Resilience, Self-Concept and Alternative Care

Resilience refers to “the ability to cope after a trauma/stressor” (Masten et al., 1999; Masten, 2001) and is further defined as “a set of individual features that may offer coping/protection in facing adversity” (Hoge et al., 2007; Lou et al., 2018). Resilience provides children the capacity to bounce back from adverse life circumstances thus proving to be a mechanism for survival (Tugade & Fredrickson, 2011). Ego resilience is “the ability to modify ego-control (e.g., impulse control) in accordance with environmental changes” (Block & Block, 1980). “Individuals with high ego resilience utilise resources, adjust to environmental change, and cope with stressors well” (Willson & Hughes, 2006). Sources of resilience in children can help mitigate mental health risks. Children’s self-concept is defined as “their representations and evaluations of themselves” (Brummelman & Thomaes, 2017) and is often seen as an important milestone in social and emotional development (Harter, 2006). For example, some studies have highlighted the positive link between self-concept and academic achievement and negative association between self-concept and anxiety and behavioural problems (Fathi-Ashtiani et al., 2007; Garaigordobil et al., 2005; Valentine et al., 2004).

Chmitorz and colleagues (2018) demonstrated that resilience occurs in the context of facing adversity which provides the opportunity to challenge negative circumstances, and improve self-esteem. Since the development of resilience requires some type of successful outcome in order for positive experiential adaptation it is made more difficult for ‘out of home care children’ often exposed to high levels of risk and ongoing challenges. Studies in residential care homes have linked resilience with the positive social environment and supportive relationships formed between children, peers and adults that provide the context for successfully challenging and overcoming past and current adversity. These positive life experiences and improved peer and adult relationships in turn can support positive effects on educational achievement,

Gurneet Kalra, Anna D. Bartuska, Kiran Modi, Michael Belden & Sumedha Ariely self-esteem, psychological health, and social skill development (Perry, 2006; Massinga & Pecora, 2004). Hence, a better quality of life in care homes and health status of these children has been often linked to improved outcomes as evidence of resilience and self-concept, as mentioned above (Chia & Lee, 2015).

Trauma Informed Care and Resilience

One type of care that has been incorporated into alternative care programs to support healthy functioning among children is Trauma Informed Care (TIC). TIC focuses on strengthening the behavioural response to trauma through a strength- based framework (Hopper et al., 2010). A child can respond to PTEs with both externalising behaviours and internalising indications. TIC's objective of building resilience is achieved by encouraging caregivers to focus on promoting children's strengths rather than merely supporting them in overcoming past traumatic experiences. They identify each child's unique set of risk and protective factors, including the child's strengths, so that risk factors can be reduced and protective factors promoted. TIC based programs, personnel, and services increase the chances of resilience following childhood trauma by providing a sense of safety and predictability, protect children from further adversity, and offer pathways for their recovery. Caregivers respond to children by making necessary adjustments at all levels of support and interactions, in their own language and behaviour, followed by changes to the child's environment and changes to policies, procedures, and practises to support the child's recovery process and resilience formation (Barlett et al., 2019).

TIC acknowledges children's strengths as sources of resilience. In response to the impact of trauma, TIC emphasises psychological, physical and emotional safety for child survivors and creates opportunities for them to feel empowered and rebuild a sense of control (DeCandia & Guarino, 2015). The key components of TIC involve understanding trauma, child survivor, services and service relationship (Hodas, 2006). Effective TIC is founded on strengths-based practises and beliefs. Certain strengths-based beliefs include the presumption that the trauma impacted child is doing the best that they can, and has potential and wants to do better. TIC is based on the principle that under the right circumstances, resiliency can be promoted in all children irrespective of the place of care.

TIC involves provisions of safety to the traumatised child by adult caregivers, at emotional and physical level and can be implemented in an individual or group format (Hodas, G.R., 2006). TIC recognizes and addresses the effects and prevalence of trauma while emphasising emotional, physical and psychological safety and creating opportunities for children to rebuild a sense of empowerment and control (Hopper et al., 2010). It assists children with the process of self-discovery while believing in and respecting each child's unique subjective PTEs (Miller & Rollnick, 2013). The process involves empowering the child to define his own needs and explore the ways to get those needs met (Raja et al., 2015)

Udayan Ghars: An Innovative Residential Care Model in India

Udayan Care, a non-profit NGO in India, has the vision of “regenerating the rhythm of life of the disadvantaged.” Contrasting to other large residential care institutions, as prevalent in India, Udayan Care has developed small group homes called Udayan Ghars (hereinafter referred to as ‘homes’) based on a unique L.I.F.E. model (Living in Family Environment) which provides care and protection to a maximum of 12 children per home as a unit, and in some larger spaces, 2 units of children are accommodated. Children are placed in these gender separated homes through orders from the statutory body, Child Welfare Committee (CWC), based under the Juvenile Justice Law. At present, there are 17 homes across four states of India and each home includes a carer team. It has a group of 2-5 long-term volunteers namely Mentor Parents, a social worker, at least 2-3 full-time residential caregivers, a part time mental health professional team, consisting of a child and adolescent psychiatrist, psychologist and counsellor, and full-time staff and volunteers at the Head Office. All homes are located in middle class communities, drawing the support and strength of local communities, leading to positive peer influence, where full-time managers work centrally with the aim to provide psychological, financial and legal support and training to children (Modi. & Hai, 2018).

Udayan Ghar model uses a biopsychosocial framework, with tenets of Erik Erikson's theory of Psychosocial Development (1968), in combination with Bronfenbrenner's Ecological dynamic person-environment relationship model (1979), and attachment theory (Bowlby, 1970) to support TIC care. This unique model provides a supportive, understanding and safe environment to children by providing them a family-setting. In the Udayan Ghars, children

get to have one-to-one relationships with mentor parents and live-in care-staff along with support from mental health specialists and social workers. Formation and sustainment of reciprocal and positive relationships with others is intended to help children develop a sense of self-concept and ego-resilience. Each child growing up in these homes is provided with individual focus and attention followed by individual care planning. The homes' environment, children's relationship with the carer team, and the quality of care provided in these homes illustrates a classic example of person-environment relationship, which is found to be linked with resilience in several studies (Sciaraffa et al., 2018). The carer team undergoes training workshops on TIC on a regular basis and are educated about traumas and to recognize different responses and behaviours of children which many times are their ways of coping with PTEs. Children's needs are taken care of by providing a safe emotional and physical environment, ensuring safety measures, and aiding them to gain a sense of confidence and control over their lives.

Ecological theory (Bronfenbrenner, 1979) states that an individual's development is influenced by the ecology or the environment in which their interactions take place. The ecology incorporates five socially organised interconnected ecological systems which shape human development. Bronfenbrenner's ecological model of childhood (BEMC), 1979, and its framework have found application in varied areas of child well-being and health (Earls & Carlson, 2001) which addresses the broader framework of social issues which affect children (Hong & Eamon, 2012). It states that a person's development is highly prejudiced by the environment in which interactions among humans take place. For the purpose of conceptualising the challenging factors for mental health of children, Udayan Care has maintained the basic framework of the ecological care environment of children as mentioned in the original BEMC. The contents of the five major socially prearranged interconnected ecological systems lead to development of humans; namely macro system which constitutes the social and cultural values; exo-system constituting the indirect environment; meso system referring to the interconnections between two or more microsystem components; the microsystem which caters to the immediate environment and the individual at the centre. Similar patterns have been observed in other studies on care homes which stated that the interaction processes, which takes place within the care homes, where interaction occur

between the child welfare system and the social workers on one end and between the social workers, counsellors, caretakers and the microsystem of the children on the other end, provides them permanence and stability aiding these children to handle their trauma (McGregor et al., 2019). Person-in-environment relationships can be illustrated by the literature which links resilience to the care home environment and the relationships formed in these homes (Perry, 2006). In these environments, care providers use sources of resilience as tools to provide support structures for vulnerable children.

Udayan model works to impact the patterning of the chronosystem, where each child interacts with his immediate environment namely the microsystem which includes social workers, mentor parents, peers, caretakers; followed by interactions between two or more components of mesosystem, namely, child welfare committees; followed by interactions with indirect environment, namely, exo-system including workplace of mentors, extended neighbourhood and lastly the interactions with the social and cultural systems and values which constitutes the macro-system. . With respect to children in care settings who have experienced trauma, Erikson's theory can be applied, which states that any crisis (e.g., PTEs) must be mastered successfully before succeeding to other developmental stages. Children in their earlier stages of development use these experiences as sources of strength to develop resilience.

In Udayan Ghars, core ideas of Erikson's theory of Psychosocial Development (1968), Bronfenbrenner's Model along with principles of TIC are tracked to address the PTE's of children, understand their individual needs and devise ways to adequately fulfil them. As laid in the Bronfenbrenner's ecological theory, environment plays an important role, therefore, safe environmental and physical environments are established across these care homes where children's needs are catered to along with ensuring their safety and support. The decision-making procedure is shared transversely at all levels of the organisation, from matters regarding daily life of the children to policies and practises with the main motive to ensure that these children regain a sense of control over their lives along with ensuring child participation. Based on the importance of psychological development theory of Erickson in overcoming the PTEs, focus of care for children in these homes is holistic where due attention is given to their social, psychological, physical and spiritual health (Modi & Hai et al., 2018). John Bowlby first outlined his theory of attachment and its

central role in child development more than 50 years ago. Attachment theory is a theory of personality development in the context of close relationships. As relationships play an important role in the healing process; these care homes put into practice development of an authentic, positive and trustful relationship between the caregivers and children thereby broadening their scope of support.

Study Aims

The primary goal of this study is to expand upon current literature regarding children without parental care by: 1) describing the prevalence of previously reported potentially traumatic events (PTEs) among children receiving care in residential homes (Udayan Ghars), run by Udayan Care, in India, between 2014 and 2018, and 2) exploring the associations between the number of PTEs and mental health outcomes, namely trauma symptoms, self-concept, and ego-resiliency, among a subset of children who were interviewed in 2018 and completed all relevant measures. The results will be discussed in relation to the care and services provided by Udayan Care, an alternative care program in India.

Methodology

Participants

Children without parental care living at Udayan Care residential homes were selected, using a sampling frame during 2014, the inaugural study year. Stratified random sampling was used to proportionally select participants by age and gender. Children were stratified into three age groups prior to randomization (group 1 = ages 4–8, group 2 = ages 9–14, group 3 = ages 15+). To ensure roughly equal age groups, all children ages 4–8 were included in the study. The study sample was selected to make the gender proportion slightly more even (60% female). Overall, the original sample included 89 children across eleven homes. Every subsequent year, till 2018, all newly entering children were added, including the full group of kids living in any newly created home.

For the purposes of describing the prevalence of previously reported potentially traumatic events (PTEs) among children receiving care in residential homes, all children who had resided in residential care homes at any point between 2014 and 2018 and had a health record on file at the time of assessment were

included (N=121). For exploring the associations between the number of PTEs and mental health outcomes, namely trauma symptoms, self-concept, and ego-resiliency; the cross-sectional sample included children who were old enough to complete the Piers-Harris Children's Self-Concept Scale (PH2), Trauma Symptoms Checklist for Children (TSCC), and Ego-Resiliency Scale (ER-89) (i.e., at least 12 years old) and enrolled in programming during 2018 (N=61). In addition to the age-based cut-off criteria, the smaller size of the cross-sectional sample is partially attributable to 51 children leaving the program before 2018. Children left the program for multiple reasons including restoration back to families, or graduating out of the program.

Procedure

In order to understand the mental health of Udayan Care children, both their needs and sources of strengths, Udayan Care and Duke University global health student team have been conducting an ongoing longitudinal study since 2014 (Sridharan et al., 2017; Bensley et al., 2017; Ahuja et al., 2017). Interviews were conducted to assess the mental health outcomes of children (e.g., self-concept, ego-resiliency, trauma) using qualitative and quantitative measures. Interviews lasted between sixty to ninety minutes and were conducted in English or Hindi in private rooms by Udayan Care research assistants, a translator, or the student researcher. Interviews conducted by a research assistant or translator had a student researcher present at all times, and a social worker or counsellor was either in the home or on-call for all interviews. Mental health outcomes for the youngest children were assessed using age-appropriate measures that required a caregiver report of functioning. For example, the Devereux Student Strengths Assessment (DESSA) was administered for ages 5 to 12 and the Trauma Symptom Checklist for Young Children (TSCYC) for ages 3 to 8. Once a child became old enough to answer questions from our primary measures, caregiver report measures were omitted and the TSCYC was replaced by the TSCC and the DESSA was replaced by ER-89.

Ethical approval was obtained from Duke University's Institutional Review Board and locally from Udayan Care's Managing Trustee and Board. Each participant provided documented written consent prior to the interview. All identifiable information was kept on an encrypted server, and all data was de-identified before analysis.

Measures

The Piers-Harris Children's Self-Concept Scale (PH2), Trauma Symptoms Checklist for Children (TSCC), and Ego-Resiliency Scale (ER-89) were used for their cross-cultural validity, extensive use in the United States, and/or use in low- and middle- income countries. All measures were translated and back translated prior to administration in Hindi.

Self-Concept

Self-concept scores were measured using the Piers-Harris Children's Self-Concept Scale, 2nd Edition (PH2) which has been validated for children, aged 7 to 18 years old, and contains 60 yes/no questions (Piers & Herzberg, 2002). Internal consistency for the PH2 has been found to be good with alpha coefficient values approaching 0.91 (Piers & Herzberg, 2002; Flahive et al., 2015). Any questionnaire with seven or more missing or invalid responses was considered invalid and not included within this study. Total scores were transformed into T-scores for the purposes of data interpretation. PH2 T-scores are interpreted as very low (<30), low (30-39), low average (40-44), average (45-55), high average (56-59), high (60-69), and very high (>69) self-concept.

Ego-resilience

Ego-resiliency was measured using the Ego-Resiliency Scale (ER-89). The ER-89 contains 14 items which are rated on a 4-point scale (1=does not apply at all, 2=applies slightly, if at all, 3=applies somewhat, and 4=applies very strongly). Total scores range from 14 to 56 and are interpreted as follows: low ego-resiliency (20-38), average ego resiliency (39-42), and above average ego resiliency (43-56), with higher scores indicating better ego-resiliency (Block & Kremen, 1996). This scale has been shown to have good reliability with alpha coefficient values approaching 0.8 (Block & Kremen 1996, Campbell et al., 2009).

Trauma Symptoms

The Trauma Symptoms Checklist for Children (TSCC) was used to assess trauma (Brier, 1996). The TSCC contains 54 items which are rated on a 4-point scale (0=never, 1=sometimes, 2=lots of times, 3=almost all the time). This scale has been shown to have good reliability with internal consistency

(Chronbach's alpha) values of 0.94 (Nilsson et al., 2008). Trauma symptoms scores were calculated in adherence to the TSCC manual's scoring guidelines and were normalised to take into account children who did not answer one or more questions. Scores on the TSCC were converted to T-scores and scores above 65 are considered to reflect risk.

Potentially Traumatic Event Histories

Descriptive histories were gathered from social workers, health records and background files of the child's experiences prior to entering the program. Trauma histories were updated each year during the time of interviews between the years 2014-2018. Descriptive background histories were coded for potentially traumatic events using a categorization system derived from previous studies (Whetten et al., 2014, Gray et al., 2015) and from quantitative traumatic event measures (Gray et al., 2004). Child histories were scored by three different assessors and final scores were calculated after inter-rater reliability was attained. Categories include parental death, abandonment, physical abuse, sexual abuse, familial violence, begging, lost, child labor, insufficient care (due to caregiver mental, physical, financial, or otherwise unspecified constraints), and exposure to substance abuse. Poverty was not included because it was inferred that as children without parental care, all children had experienced some reasonably significant level of poverty as defined by the Indian context. 'Financial constraints' were only coded when listed explicitly in a child's descriptive history as an additional significant barrier to receiving adequate care. 'Abandonment' was understood as a clear indication that a family member left the child without any indication of an inability to provide care. 'Lost' was coded for any child record that explicitly noted that the child was lost, found roaming, or wandering. Finally, the 'other' category was established for additional potentially traumatic events such as familial prostitution, parental separation, or intense physical injury that resulted in objective physical or emotional impairment.

Table 1: Type of Potentially Traumatic Events Reported (2014-2018; N = 121)

	N (%)
Parental Death	65 (53.7%)
Dual Parental Death	18 (14.9%)
Abandonment	31 (25.6%)

Sexual Abuse	16 (13.2%)
Physical Abuse	31 (25.6%)
Witnessed Family Violence	14 (11.6%)
Lost	36 (30.0%)
Child Labor	13 (10.7%)
Begging	5 (4.1%)
Insufficient Care – Physical	7 (5.8%)
Insufficient Care – Mental	3 (2.5%)
Insufficient Care – Financial	14 (11.6%)
Insufficient Care – Unspecified	16 (13.2%)
Exposure to Substances	23 (19.0%)
Other PTE	4 (3.3%)

Data Analysis

All analyses were conducted using IBM SPSS Statistics (version 24). Descriptive analyses were conducted to describe the sample characteristics and prevalence of PTEs. Bivariate (Pearson) correlations were run to explore the association among PTEs, trauma symptoms, self-concept, and ego-resiliency among a cross-sample of children who completed all measures of interest in 2018 (N=61).

Results

Aim 1: Prevalence of PTEs

Sample Characteristics

The current study sample included 121 children without parental care, of which 69% were female and 31% were male. On an average, children in this sample entered Udayan Care's homes at 9 years old (SD=2.68) and were 16 years old at the time of assessment (SD=3.09).

Potentially Traumatic Events (PTEs)

On average, children were reported to have experienced two to three PTEs, with the majority of children reported to have experienced three or more PTEs (See Figure 1). Total number of PTEs experienced ranged from zero (N=2)

to five (N=11). The most frequently reported PTEs included parental death (54%), experience of being lost (30%), physical abuse (26%) and abandonment (26%; See Table 1). The average number of PTEs did not vary largely based on age of entry (See Figure 2).

Figure 1: Frequency of Total Number of PTEs Experienced (2014-2018; N=121)

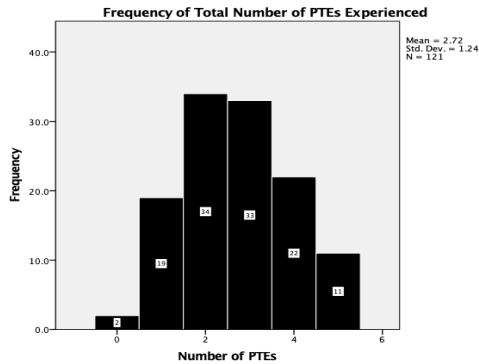
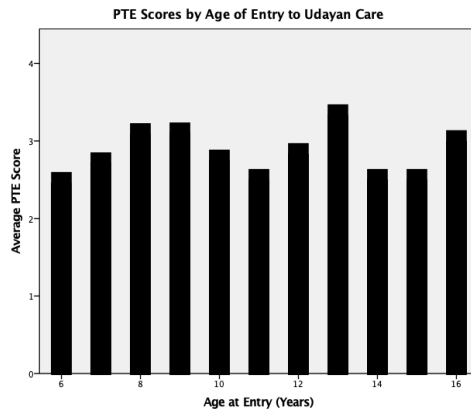


Figure 2: Average PTEs Experienced by Age of Entry to Udayan Care (2014-2018; N=121)



Aim 2: Association between PTEs and Mental Health Outcomes
Cross-sectional sample characteristics and mental health outcomes

Children who completed all study measures in 2018 (N=61) were on average 16 years old (SD=1.81) and first entered Udayan Care at 10 years old (SD=12.61). Similar to the larger sample within this study, the majority of children were female (54%) and were reported to have experienced an average of three PTEs. Despite the prevalence of PTEs, children on average reported above

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average ego-resilience ($M=43.56$, range=25-55), average rates of self-concept ($M=45.67$; range=26-61), and average rates of trauma symptoms below the risk threshold ($M=45.35$; range=2-129). Results are displayed in Table 2.

Table 2: 2018 Children Characteristics and Mental Health Outcomes

Characteristics	M (SD)
Age at Entry (years)	10.14 (2.61)
Age at Time of Assessment (years)	16.70 (1.81)
Number of PTEs	2.95 (1.19)
Mental Health Outcomes	
Trauma (TSCC)	45.35 (30.25)
Self-Concept (PH-2)	45.67 (8.27)
Ego-Resiliency (ER-89)	43.56 (6.70)

Table 3: Correlations between PTEs and Mental Health Outcomes (2018; N=61)

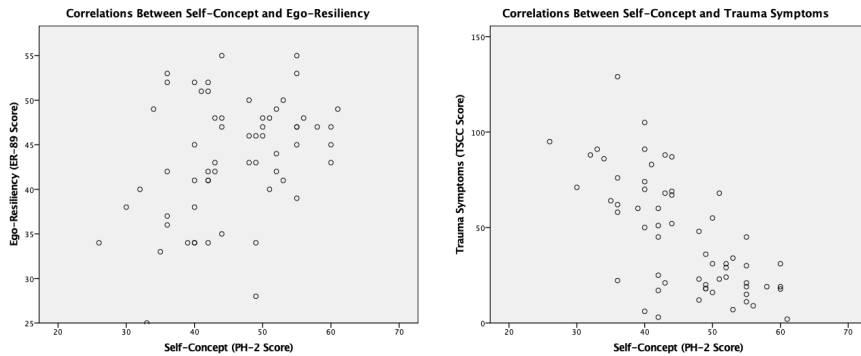
		Ego-Resiliency	TSCC	Self-Concept	PTEs
Ego-Resiliency	Pearson Corr.	1	-0.156	.361**	0.104
	Significance		0.230	0.004	0.426
TSCC	Pearson Corr.	-0.156	1	-0.679**	-0.121
	Significance	0.230		0.000	0.353
Self-Concept	Pearson Corr.	0.361**	-0.679**	1	-0.044
	Significance	0.004	0.000		0.736
PTEs	Pearson Corr.	0.104	-0.121	-0.044	1
	Significance	0.426	0.353	0.736	

****.** Correlation is significant at the 0.01 level (2-tailed). $N=61$.

Correlations between PTEs and mental health outcomes

Self-concept was found to be significantly positively correlated with ego-resiliency ($p=0.004$) and significantly negatively correlated with trauma symptoms ($p<0.001$; See Table 3 and Figure 3). Prior number of PTEs was not found to be significantly correlated with any mental health outcomes tested.

Figure 3. Correlations between Mental Health Outcomes (2018; N=74)



Discussion

The majority (54%) of children included in this study between 2014-2018 reported three or more PTEs. Similar rates of PTEs have been found to be experienced by orphaned children in residential and family care settings throughout parts of Asia and Africa (Whetten et al., 2011). The majority of the most common PTEs experienced by children in the study (i.e., parental death and forms of abuse) have been shown to be similarly prevalent among orphaned children in other low- and middle-resource settings (Gray et al., 2015). In contrast to prior research, this study also revealed high rates of the PTE of being “lost” (30%). The experience of being lost, found roaming, or wandering may be uniquely conceptualized as a PTE within the Indian context or this population. Further qualitative study could shed light on the stressors faced by children who have endured this PTE or understanding of this PTE by caregivers reporting “lost” within children’s histories.

Despite high rates of PTEs, surprisingly and encouragingly, results show that these children show high ego-resilience and average self-concept over time, signifying potential sources of strength and resilience despite past PTEs. One possible reason for this display of resilience could be the supportive model and care of Udayan Care. At Udayan Care, the programs are designed to address the childhood trauma, and support positive developmental trajectories among children staying at Udayan Ghars, even if they have experienced trauma. Children are provided with a sense of safety at care homes, efforts are made to help children improve their self-worth, increase their self-esteem, and strengthen their spiritual and cultural beliefs to provide them a sense

of meaning to life. Udayan Care programs also help youth develop goals, or dreams for the future, and help them cultivate their unique talents and skills. Lastly, Udayan Care helps children build coping skills so as to apply to various situations. This comprehensive programming offered by Udayan Care, likely contributes to the relatively high rates of protective factors (i.e., ego-resiliency and self-concept) reported by children within this study. Apart from the model, the resilience demonstrated by these children could be the result of multiple factors, including personality traits, epigenetics, and beliefs (Southwick et al., 2014). Beyond individual features, environmental factors also play an important role in developing resilience (e.g. social environment, availability of and access to economic resources) and could be impacting the scores reported within this study. By enrolling mentor parents for a lifetime, children at Udayan Ghars learn to develop attachment and are provided with a sense of security and safety.

Conclusion and Way Forward

This study corroborates prior research indicating that children without parental care in general face various PTEs including disasters or accidents; being forced to leave one care setting and shift to another; physical or sexual abuse; witnessing violence; war, riots, or killings; witnessing family death etc. (Masten, 2001). Caring for children without parental care presents a multifaceted problem which demands evidence-based solutions. Therefore, development of policies or interventions for such vulnerable populations should be done taking into account the magnitude of PTEs. A study on the impact of past life events found that the influence of childhood trauma was greater in depressive disorders than in anxiety show that these children without traditional parental care, show high ego-resilience and average self-concept over time, signifying potential sources of strength and resilience despite past PTEs. Theoretically, we have speculated that resilience is considered to be a balance of risk as well as protective factors which affect a child where protective factors include a child's residential environment (Coatsworth and Duncan, 2003).

Udayan Care model provides these children with a stability and structure in these homes, positive relationships, sense of purpose, self-esteem, optimistic beliefs and values, open communications, participatory approach in decision making, support in development of belief to attain goals as well as underlying

foundations of basic social support that can help repair past traumas and give coping skills for current traumas. This model also aims to identify each child's unique set of protective and risk factors including children's strengths in order to promote protective factors. These post-traumatic life experiences are used as sources of resilience by the care team to provide support structures to children and make them self-reliant. As seen in the above theories, the model clearly describes how children are benefited from interactions between the different chronosystems which exist within Udayan Ghars.

Residential care generally pays more attention to the avoidance of negative behaviours of children, rather than promoting positive outcomes, as indicated in one of the research as stated below. As a result of risk-averse practices, care home environments may be too restrictive to allow prospects for resilience to children to be expressed and developed. Nurturing resilience in residential care settings is hence of particular importance. This is also reflected in the evidence base for resilience in residential care in studies, where measurement seems to reflect a problem-focus (or absence of problem), as opposed to a strength-focus direction (Born et al., 1997). Whilesome other studies have stated evidence of residential care homes promoting strengths and resilience in adolescents. Lietz (2007) recommended a new theoretical framework of residentialmanagement, using resilience as the substance along with social learning theory as the approach. "Resilience-building and social learning theory are hypothesised to work on both internal andexternal, as well as long-term and short-term changes." Three popular case studies also examinedtwo groups from residential facilities using the above mentioned framework (Lietz, 2007; Nourian et al., 2016; Sesma, Mannes, & Scales, 2013) and recommended a developmental assetsframework, which comprised of 40 research-based, positive practices and qualities impellingchildren's development.

Child care homes can offer trauma informed care along with continuing to build the evidence base for both trauma informed treatment programs and specialised treatment in response to the children who have been exposed to trauma and hence its negative consequences. As resilience is found to be linked to person-environment relationships, the care homes should work to establish a safe and secure environment along with focusing on healthy in-home relationships. It is also recommended to ensure that all levels of childcare systems recognize the prevalent role of trauma in the lives of children as stated

by this study and acknowledge the need to implement evidence-based support programming such as TIC. Programming that acknowledges the prevalence of PTEs among children will help address the underlying trauma-related issues and also increase the likelihood that children develop resilience.

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