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Caring and thriving: An international qualitative study of caregivers of orphaned and vulnerable children and strategies to sustain positive mental health

Rae Jean Proeschold-Bell[a,*], Nneka Jebose Molokwu[a], Corey L.M. Keyes[b], Malik Muhammad Sohail[c], David E. Eagle[a], Heather E. Parnell[a], Warren A. Kinghorn[d], Cyrilla Amanya[e], Vanroth Vann[f], Ira Madan[g], Blen M. Biru[h], Dean Lewis[i], Misganaw Eticha Dubie[j], Kathryn Whetten[k,l]

[a] Center for Health Policy and Inequalities Research, Duke Global Health Institute, Duke University, 310 Trent Drive, CB 90392, Durham, NC 27708, United States
[b] Department of Sociology, Emory University, 1555 Dickey Dr., 225 Tarbutton Hall, Atlanta, GA 30322, United States
[c] Department of Anthropology, Harvard University, Tozzer Anthropology Building, 21 Divinity Avenue, Cambridge MA 02138, Peabody Museum, 11 Divinity Avenue, Cambridge, MA 02138, United States
[d] Duke University Medical Center, Duke Divinity School, Box 90967, Durham, NC 27708, United States
[e] Research Department, ACE Africa Kenya, P.O. Box 1185, 50200 Bungoma, Kenya
[f] Development for Cambodian Children, #130, Group 09, Snapimuk Village, Prek Khpob Commune, Ek Phnom District, Battambang City, Battambang Province, Cambodia
[g] Sahara Centre for Residential Care & Rehabilitation, H 62 D, Saket, New Delhi 110017, India
[h] Duke Global Health Institute, 310 Trent Dr, Durham, NC 27710, United States
[i] Sahara Centre for Residential Care & Rehabilitation, 403 404 Olar St Sebastian Rd, Bandra, West Mumbai 400050, India
[j] Stand for Vulnerable Organization (SVO), Addis Ababa, Ethiopia
[k] Center for Health Policy and Inequalities Research, Duke Global Health Institute, Box 90519, Duke University, Durham, NC, United States
[l] Terry Sanford Institute of Public Policy, Box 90239, Duke University, Durham, NC, United States

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ABSTRACT

Background: Child well-being is associated with caregiver mental health. Research has focused on the absence or presence of mental health problems, such as depression, in caregivers. However, positive mental health – defined as the presence of positive emotions, psychological functioning, and social functioning – likely prevents depression and in caregivers may benefit children more than the mere absence of mental health problems. Little attention has been given to how caregivers sustain positive mental health, particularly when doing challenging work in impoverished settings.

Objective: The study's objective was to determine what successful caregivers of orphaned and vulnerable children (OVC) in diverse countries do to sustain their positive mental health.

Methods: Using a mixed-methods, cross-sectional study design, trained local interviewers recruited a convenience sample of OVC caregivers through residential care institutions from five geographic regions (Kenya; Ethiopia; Cambodia; Hyderabad, India; and Nagaland, India). Participants completed surveys and in-depth interviews about strategies used to sustain their mental health over time or improve it during challenging times.

Results: Sixty-nine OVC caregivers from 28 residential care institutions participated. Positive mental health survey scores were high. We organized the strategies named into six categories ordered from most to least frequently named: Religious Practices; Engaging in Caregiving; Social Support; Pleasurable Activities; Emotion Regulation; and Removing Oneself from Work. Prayer and reading religious texts arose as common strategies. Participants reported promoting positive emotions by focusing on their work's meaning and playing with children. The similar findings across diverse regions were striking. Some differences included more emphasis on emotion control in Ethiopia; listening to music/singing in Kenya and Hyderabad; and involving children in the tasks the participants enjoyed less (e.g., cleaning) in Cambodia.

Conclusions: Under real-world conditions, small daily activities appeared to help sustain positive mental health.

Abbreviations: OVC, orphaned and vulnerable children

* Corresponding author.
E-mail addresses: rae.jean@duke.edu (R.J. Proeschold-Bell), nneka.molokwu@duke.edu (N.J. Molokwu), corey.keyes@emory.edu (C.L.M. Keyes), david.eagle@duke.edu (D.E. Eagle), heather.parnell@duke.edu (H.E. Parnell), warren.kinghorn@duke.edu (W.A. Kinghorn), biru22b@mtholyoke.edu (B.M. Biru), k.whetten@duke.edu (K. Whetten).

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In addition, fostering structures that allow caregivers to engage regularly in rewarding caregiving tasks may be an affordable and scalable idea which could potentially benefit caregivers, children, and employers.

1. Introduction

While no one is certain how many orphaned and vulnerable children (OVC) live in residential care, estimates indicate at least two million (UNICEF, 2009). For these children, it is important that they receive high-quality care from caregivers who stay with them for long periods of time, because strong attachment with a loving caregiver results in positive long-term outcomes for children. Research is lacking on how OVC caregivers, who often work in impoverished settings, sustain themselves in their work long-term and maintain their own positive mental health. This study's objective was to determine what successful OVC caregivers in diverse countries do to sustain their positive mental health.

1.1. Background

Child well-being is associated with caregiver mental health (O'Connor et al., 2016; Ramchandani & Murphy, 2013). Children who are cared for by parents who are depressed are more likely to have childhood mood disorders (Elgar et al., 2007; Goodman, 2007), and children cared for by depressed mothers are more likely to have externalizing and internalizing problems, compared to children cared for by mothers who are not depressed (Goodman et al., 2011). This relationship between caregiver mental health and child well-being may be particularly important for children living in stressful environments. Better caregiver mental health has been found to explain why some children in families with low levels of social support avoid externalizing and internalizing problems, and to partly explain why some children do not develop internalizing problems even when the family experiences high stress (Quinn et al., 2014). However, this body of research has focused on mental health problems in caregivers, rather than on the presence of positive mental health in caregivers.

Positive mental health is composed of frequently experiencing positive emotions and having good psychological functioning (e.g., positive relations with others, meaning in life) and social functioning (feelings of belonging, contributing to the world) (Keyes, 2002). The promotion of positive mental health may be a way to proactively prevent depression and other mental health problems (Keyes, 2007). High positive mental health has been associated with lower prevalence and incidence of depressive and anxiety disorders over one-year (Grant, Guille, & Sen, 2013; Lamers, Westerhof, Glas, & Bohlmeijer, 2015), three-year (Schotanus-Dijkstra, ten Have, Lamers, de Graaf, & Bohlmeijer, 2017) and ten-year timespans (Keyes, Dinghra, & Simoes, 2010).

In this study, we investigate how caregivers of OVC in multiple countries maintain positive mental health in the face of caregiving challenges. Worldwide, there are nearly 140 million children who have lost at least one parent, with approximately 15.1 million of those children living without both parents (UNICEF, 2017). The care of OVC occurs in multiple ways, including care from kin networks and care in group homes. In the current study, we focus on caregivers providing care to children in group homes. A 2009 report by UNICEF indicated that over two million OVC internationally were estimated to live in group homes, although the authors acknowledged that the number is likely low due to reporting gaps (UNICEF, 2009).

Group home care for children has received negative attention, primarily due to studies in impoverished institutions in Romania and Russia and the care of infants (Whetten et al., 2014). All group homes, alternatively called orphanages or residential care, have been lumped together with the findings from these socially and emotionally deprived institutions for infants. However, 95% of all orphaned children are over age five (UNICEF, 2017), and a variety of institutional structures exist in which OVC can live and prosper. In fact, in a longitudinal study comparing child outcomes in institutional versus home-based care across three years, few differences were found in child health, with the main differences indicating better physical health for institution-dwelling children (Whetten et al., 2014). Notably, differences in child outcomes were found between settings, suggesting that the quality of caregiving, as opposed to group home versus kinship network care, plays a larger role in child outcomes. This finding led us to be particularly interested in group home caregivers. In addition, because prolonged attachments to caregivers are better for children, it is important that caregivers who begin working in a caregiving setting stay there for some time (Atkins-Burnett et al., 2015).

Thus, to promote child well-being, it is essential to identify how caregivers of OVC can sustain their work long-term while also maintaining their own good mental health. There is a particular need for studies in real-world settings on what strategies OVC caregivers use to remain emotionally well. Further, because OVC caregiving occurs around the world, potentially a lot can be learned by studying the strategies of caregivers from multiple group home structures and locations, including strategies used by OVC caregivers doing challenging work in poor settings.

In the current study, we recruited OVC caregivers from five geographic areas (Ethiopia; Kenya; Cambodia; Nagaland, India; and Hyderabad, India). We recruited caregivers whose supervisors identified them as doing quality work, because we were most interested in positive mental health strategies used by caregivers that were consistent with good care for children. We asked the caregivers how they stay interested and engaged in caregiving over time, as well as what they do regularly and during challenging times to take care of their mental health. The objective of this mixed-methods study was to identify OVC caregiver strategies that are common across diverse caregiving settings, as well as to uncover less obvious strategies that might be beneficial to sustain their positive mental health. We did not postulate any a priori hypotheses because of the dearth of positive mental health research on OVC.

2. Methods

2.1. Study design

This study utilized a mixed-methods study design.

2.2. In-country research teams

Our large research team included researchers in four countries working at four non-governmental organizations (NGOs) that are devoted to the welfare of children but which do not necessarily care for OVCs themselves. These researchers recruited caregivers from OVC institutions in: Hyderabad, India and also Dimapur/Kohima in Nagaland state, India (researchers based in Sahara Centre for Residential Care and Rehabilitation); Bungoma County, Kenya (researchers based in Action in the Community Environment (ACE) Africa-Kenya); Addis Ababa, Ethiopia (researchers based in Stand for Vulnerable Organization); and Battambang, Cambodia [researchers based in Meahto Phum Ko'mah (MPK, or “Homeland”)]. Researchers across countries used consistent methods, with some minor variation in recruitment and participant compensation, noted below.

2.3. Recruitment

Convenience sample approaches were used in engaging institutions and then recruiting caregivers. The only inclusion criterion for institutions was that they have at least one caregiver and multiple children. The inclusion criteria for caregivers were that they were currently a caregiver for orphaned and vulnerable children; had extensive direct contact with the children (for example, were not a cook); had worked for at least the last 3 years as a caregiver, and that their residential care director identified them as having a reputation for excellence in caregiving, although enacting this "excellence" criterion varied by country, as detailed below.

To recruit institutions, researchers in each country identified OVC institutions in their geographic area. In regions where institutions were supported by various religious groups, research staff targeted institutions of diverse religions. Specifically, in Kenya, researchers contacted Christian- and Muslim-affiliated institutions and in Hyderabad, India, researchers contacted Christian-, Muslim-, and Hindu-affiliated institutions.

To recruit caregivers, in Ethiopia and Kenya, staff initiated recruitment by talking to the OVC institution director, who then suggested caregivers who are good with children. Staff contacted the caregivers by phone or in person and explained the study. Staff in Hyderabad likewise first spoke with the OVC institution director, and then met in person with only senior caregivers, as these long-term caregivers were assumed to be good caregivers. In Nagaland, there were only a few OVC institutions, each of which were small and had just one or two caregivers. Staff called the institution directors, who were often also the institution's caregiver, and scheduled an in-person visit. In Cambodia, staff sent a letter to directors and met with those willing to discuss the study. At each institution, with the director's permission, staff convened a meeting with all caregivers simultaneously and described the study. Caregivers could decline participation. Thus, from institutions in Cambodia, it is possible that we recruited caregivers whose supervisors would not consider them to be good caregivers, and in Nagaland, institutions were too small to make a determination of good caregivers.

2.4. Data collection

Data were collected in-person by trained research staff from the four countries. Staff collected three sources of data from caregivers: an in-depth interview, a survey, and a week-long diary. This study makes use of the in-depth interview and survey data. Data were collected across two or three visits during the timeframe of November 2016–September 2017.

2.5. Qualitative in-depth interviews

We conducted qualitative, semi-structured in-depth interviews with caregiver participants in person in a private location and audio-recorded. Staff were trained in meetings by the lead study researchers on a semi-structured interview guide of open-ended questions until they understood conceptually the goal of each question, enabling them to generate follow-up questions during the interview to get detailed perspectives in a single interview session. Of the 31 interview questions, in the current study we focused on the following three sets:

1) Are there things that you do regularly in order to improve or maintain (take care of) your mental health?
2) Are there other things that you do that you think might help keep you mentally healthy, even if you don't do them specifically to care for your mental health?
3) When something difficult happens at work, do you do anything to make you feel better and keep your spirits up? If so, what do you do? What strategies work best for you to stay positive in the face of work challenges?

The interviews took 30–120 min to complete. Interviews were conducted in a language spoken by both the caregiver and interviewer. In Cambodia, interviews were conducted in Khmer; in Ethiopia, Amharic; and in Kenya, Kiswahili. In Hyderabad, interviews were conducted in the participant's choice of Telugu or English. In Nagaland, all interviews were conducted in English, with some details asked in Nagamese for clarity. The interviewer transcribed the interview in the original language and then translated it into English.

2.6. Quantitative surveys

In Kenya, Cambodia, Ethiopia, and Hyderabad, research staff read all survey questions aloud and marked the participants' answers on paper surveys. In Nagaland, participants self-administered paper surveys. Surveys contained 59 items and took 20–35 min to complete in each country except Hyderabad, where they took up to 60 min. Research staff in each country were given the items in English. In Nagaland, surveys were administered in English only. In Kenya and Hyderabad, the staff translated and then back-translated all items. In Cambodia and Ethiopia, research staff forward-translated the items only. In addition, staff from each country met with the author of the positive mental health measure and discussed the intent behind each item and any potential cultural and translation issues. We gave special attention to this one measure because measurement of positive mental health was a key study aim.

2.7. Measures

Positive mental health was measured using the Mental Health Continuum-Short Form (Keyes, 2002), a 14-item measure of: positive emotions (e.g., "During the past month, how often did you feel happy?"); psychological functioning (e.g., "During the past month, how often did you feel that you had warm and trusting relationships with others?"); and social functioning (e.g., "During the past month, how often did you feel that you had something important to contribute to society?"). Scores were dichotomized into categories of flourishing and not flourishing. To qualify as flourishing, participants had to answer "everyday" or "almost everyday" to at least one of the three emotions questions and at least six of the eleven psychological and social functioning questions. Within "not flourishing," there were categories of languishing and moderate mental health. To qualify as languishing, participants had to answer "never" or "once or twice" to at least one of the three emotions questions and to at least six of the eleven psychological and social functioning questions. Those who did not qualify as flourishing or languishing were categorized as having moderate mental health.

Depressive symptoms were measured using the Patient Health Questionnaire-9, which consists of nine items assessing symptoms during the past two weeks (e.g., "Over the last two weeks, how often have you been bothered by … little interest or pleasure in doing things?" … "feeling tired or having little energy?") (Kroenke et al., 2001; Spitzer et al., 1999). Scores range from 0 to 27. Based on previous validation studies, depression was defined as a score of 10 or higher (Kroenke et al., 2001; Spitzer et al., 1999).

Anxiety symptoms were measured using the Generalized Anxiety Disorder-7, which consists of seven items assessing symptoms during the past two weeks (e.g., "Over the last two weeks, how often have you been bothered by … feeling nervous, anxious, or on edge?" … "worrying too much about different things?") (Spitzer et al., 2006). Scores range from 0 to 21. Based on prior studies, anxiety was defined as a score of 8 or higher (Plummer et al., 2016).

Work-related burnout was measured using the Oldenburg Burnout Inventory (OLBI), which is a 16-item measure (Halbesleben & Demerouti, 2005) with scores ranging from 1 to 4. Example items

include, “During my work, I often feel emotionally drained,” and “I feel more and more engaged in my work.”

Demographic items included gender, age, number of years caring for orphans, education, financial stress (“How stressful is your current financial situation for you?”), marital status, caring for biological or adopted children of their own, religion, frequency of prayer, visiting places of worship, and reading from religious books or sacred texts.

Additional descriptive items included caregiving responsibilities outside of institutional caregiving. The survey included the following item, “Do you have any children or grandchildren of your own (biological or adopted) that you care for regularly, for example, because they live with you?”, with response options yes or no. The survey included an item on financial stress, specifically, “How stressful is your current financial situation for you?”, with five response options ranging from not at all to extremely stressful.

2.8. Participant compensation

Following data collection, caregivers were compensated for their time in ways consistent with their cultural norms and in-country ethics approvals. In Kenya, the institution received a gift (cooking oil, sugar, or soap worth ksh 2000) to share and the caregivers received a small gift (sugar, tea, soap, or talk time scratch cards worth ksh 1000). In Nagaland, caregivers received a small gift of stationary sets. Monetary compensation was given to individual caregivers in Cambodia ($10 USD), Ethiopia ($13 USD), and Hyderabad ($8 USD).

2.9. Analysis

The qualitative analysis team included authors with backgrounds in social work, psychology, sociology, and global health. One of the analysis team members helped conduct caregiver interviews in Ethiopia. Our research paradigm was interpretivist, to gain understanding from subjective, individual experiences. We brought a phenomenological approach to the data (Creswell, 2013), seeking to describe caregivers' mental health care strategies. The analysis process was iterative with multiple steps. In each step, at least two researchers were involved to promote discussion and prevent idiosyncratic interpretations. To develop the codebook, five interview transcripts were read and data-driven codes (e.g., “motivation for caregiving,” “religious practices”) were developed. To those codes, we added any a priori codes that did not already arise. These were codes such as “having a good attitude” and “appraisal of an event as a challenge.” We defined each code and two researchers coded 15 of the same transcripts, meeting periodically to review text for which they did not assign the same code and discussing those instances until they agreed or refined the definition. This improved codebook was used to code the remaining transcripts. When data did not fit, we created new codes or refined the definitions. In addition, after coding a transcript, researchers wrote a brief summary of the interview for all team members to use.

The current study focused on the three interview questions specified above. For responses to those questions, two researchers examined the coded data. They made a list of strategies that participants named to sustain or bolster their mental health, as well as ideas participants gave that they thought benefited their mental health (e.g., praying), even if the participants did not specifically enact it for mental health reasons. For each strategy or idea, we noted which country (hereafter referred to as “region,” because we treated data from the two regions in India separately) the participant was from and attended to when certain themes were absent or seemed different for specific regions. The researchers then categorized the strategies and ideas into larger categories, repeatedly returning to the data to cross-check ideas and categories.

Following the creation of categories, we presented the findings to in-country research collaborators at the NGOs, first in writing and then in a combination of meetings utilizing online chat functions, Skype calls, and emails. Staff in each region were asked questions such as, “Do any of the findings seem wrong to you?” and “Of all the findings, which do you think are most important to emphasize?” We took care to include their comments in the manuscript. Data analysis used NVivo version 11.0 (QRS International, 2017) and R version 3.4.2 (R Core Team, 2017).

Table 1
Number of institutions by region and religious affiliation.

Region	Christian	Muslim	Hindu	Buddhist	Non-religious	Total
Kenya	7	2	0	0	0	9
Nagaland	4	0	0	0	0	4
Hyderabad	1	1	3	0	1	6
Ethiopia	3	0	0	0	3	6
Cambodia	0	0	0	1	2	3
TOTAL:	17	3	3	1	6	28

2.10. Ethics approvals

Researchers from each NGO secured in-country ethics approvals, with local approvals for Hyderabad, Nagaland, and Ethiopia. Country-level approvals were secured for Kenya (Kenya Medical Research Institute) and Cambodia (Provincial Department of Social Affairs, Veterans, and Youth Rehabilitation). In addition, all procedures were approved by the Duke University Arts & Sciences Institutional Review Board. All participants gave written consent.

3. Results

As shown in Table 1, caregivers from a total of 28 institutions participated. These institutions were affiliated with a variety of religions (Christian, n = 17; Muslim, n = 3; Hindu, n = 3; Buddhist, n = 1), and 6 were also non-religious. A total of 69 caregivers participated in in-depth interview data collection, with the following number of participants by region: Nagaland, 6; Hyderabad, 9; Ethiopia, 12; Cambodia, 18; and Kenya, 24 (see Table 2). Table 2 depicts how the numbers of caregiver participants were distributed by region and by the institutions' religious affiliations. Kenya had a substantial number of caregivers participating from both Christian (15 caregivers) and Muslim (9 caregivers) institutions, whereas all 6 of the caregivers from Nagaland were recruited from Christian-affiliated institutions. In Hyderabad, 4 caregivers were recruited from Hindu-affiliated institutions.

As shown in Table 3, participants had been caregivers for an average of 8.4 years, and had a mean age of 36.1 years; a minority were male (23.2%). A strong majority of 76.8% had flourishing mental health. The percentage of caregivers with qualifying scores for depression or anxiety varied by region, with a range of 0%–29.2% with an overall mean of 17.4% for depression and 0%–62.5% with an overall mean of 39.1% for anxiety.

The strategies that emerged were categorized into six categories, chosen because they were named by multiple participants. Table 4 shows the percentage of caregivers from each region that named each strategy. Ordered roughly from most to least frequently named, the strategies were: Religious Practices; Engaging in Caregiving; Social Support; Pleasurable Activities; Emotion Regulation; and Removing Oneself from Work. Quotes provided below were representative of interview data from multiple participants.

3.1. Religious practices

In response to this study's questions about improving and maintaining one's mental health and staying positive in the face of challenges, religious practices were the most commonly named activities. Of all activities in any of the six categories, more participants named prayer than any other; across four regions, prayer was identified by between 44% and 67% of participants. In Cambodia, only 6% of

Table 2
Number of caregivers by region and institution's religious affiliation.

Region	From Christian institutions	From Muslim institutions	From Hindu institutions	From Buddhist institutions	From non-religious institutions	Total
Kenya	15	9	0	0	0	24
Nagaland	6	0	0	0	0	6
Hyderabad	2	1	4	0	2	9
Ethiopia	6	0	0	0	6	12
Cambodia	0	0	0	3	13	18
Total:	29	10	4	3	21	69

participants mentioned prayer, but this is likely because Buddhism is the predominant faith in Cambodia. Today, prayer is not the way that most Cambodians enact Buddhism, which relies instead on precepts that guide your behavior to lead to your betterment. These precepts include: do not kill, do not steal, and do not tell lies. When experiencing a challenge, Buddhists in Cambodia often remember the idea of "do good, receive good; do bad, receive bad," which encourages them to enact good actions rather than bad, both to instill immediate peace in their hearts and to offer good karma. This idea of "do good, receive good," was named by 58% of Cambodian participants and helps one obey the precepts. For all regions except Cambodia, participants frequently named reading religious texts (e.g., 44% in Hyderabad and 33%

Table 3
Descriptive statistics of participants by country/region.

Country/region:	Hyderabad	Nagaland	Ethiopia	Kenya	Cambodia	Overall
n	9	6	12	24	18	69
Male (%)	6 (66.7)	3 (50.0)	1 (8.3)	6 (25.0)	0 (0.0)	16 (23.2)
Age (years, mean (sd))	36.1 (14.3)	33.2 (4.9)	42.2 (9.3)	36.4 (10.4)	45.8 (14.4)	39.5 (12.2)
Years being a caregiver of orphans (mean (sd))	4.4 (4.2)	6.8 (4.3)	13.5 (8.7)	6.9 (4.3)	9.6 (6.3)	8.4 (6.3)
Married/living with someone as married (%)	3 (33.3)	4 (66.7)	5 (41.7)	18 (75.0)	12 (66.7)	42 (60.9)
Caring for biological/adoptive children (%)	3 (33.3)	3 (50.0)	6 (50.0)	23 (95.8)	13 (72.2)	48 (69.6)
Highest education completed (%)						
Less than high school	5 (55.6)	0 (0.0)	6 (50.0)	11 (45.8)	14 (77.8)	36 (52.2)
High school	2 (22.2)	1 (16.7)	2 (16.7)	12 (50.0)	4 (22.2)	21 (30.4)
University graduate	2 (22.2)	5 (83.3)	4 (33.3)	1 (4.2)	0 (0.0)	12 (17.4)
Financial stress (%)						
Extremely stressful	0 (0.0)	0 (0.0)	0 (0.0)	6 (25.0)	0 (0.0)	6 (8.7)
Very stressful	0 (0.0)	3 (50.0)	6 (50.0)	5 (20.8)	0 (0.0)	14 (20.3)
Moderately stressful	1 (11.1)	2 (33.3)	2 (16.7)	1 (4.2)	12 (66.7)	18 (26.1)
Slightly stressful	2 (22.2)	0 (0.0)	3 (25.0)	4 (16.7)	3 (16.7)	12 (17.4)
Not at all stressful	6 (66.7)	1 (16.7)	0 (0.0)	8 (33.3)	3 (16.7)	18 (26.1)
Religion (%)						
Hindu	8 (88.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (11.6)
Muslim	1 (11.1)	0 (0.0)	0 (0.0)	7 (29.2)	0 (0.0)	8 (11.6)
Buddhist	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	18 (100.0)	18 (26.1)
Christian	0 (0.0)	6 (100.0)	12 (100.0)	17 (70.8)	0 (0.0)	35 (50.7)
How often visits a religious place of worship/attends religious service or meeting (%)						
More than once a day	1 (11.1)	2 (33.3)	1 (8.3)	4 (16.7)	0 (0.0)	8 (11.6)
About once a day	0 (0.0)	1 (16.7)	1 (8.3)	1 (4.2)	0 (0.0)	3 (4.3)
A few times a week	3 (33.3)	1 (16.7)	6 (50.0)	8 (33.3)	0 (0.0)	18 (26.1)
About once a week	2 (22.2)	2 (33.3)	4 (33.3)	8 (33.3)	2 (11.1)	18 (26.1)
About once a month	3 (33.3)	0 (0.0)	0 (0.0)	3 (12.5)	4 (22.2)	10 (14.5)
A few times a year	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	12 (66.7)	12 (17.4)
How often engages in prayer (%)						
More than once a day	2 (22.2)	6 (100.0)	9 (75.0)	22 (91.7)	0 (0.0)	39 (56.5)
About once a day	4 (44.4)	0 (0.0)	2 (16.7)	1 (4.2)	6 (33.3)	13 (18.8)
A few times a week	1 (11.1)	0 (0.0)	1 (8.3)	1 (4.2)	1 (5.6)	4 (5.8)
About once a week	1 (11.1)	0 (0.0)	0 (0.0)	0 (0.0)	2 (11.1)	3 (4.3)
About once a month	1 (11.1)	0 (0.0)	0 (0.0)	0 (0.0)	3 (16.7)	4 (5.8)
A few times a year	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (16.7)	3 (4.3)
Never	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (16.7)	3 (4.3)
How often reads from a religious book or sacred text (%)						
More than once a day	1 (11.1)	0 (0.0)	1 (8.3)	8 (33.3)	0 (0.0)	10 (14.5)
About once a day	1 (11.1)	0 (0.0)	1 (8.3)	8 (33.3)	1 (5.6)	11 (15.9)
A few times a week	2 (22.2)	0 (0.0)	0 (0.0)	4 (16.7)	3 (16.7)	9 (13.0)
About once a month	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (5.6)	1 (1.4)
A few times a year	4 (44.4)	6 (100.0)	9 (75.0)	4 (16.7)	4 (22.2)	27 (39.1)
Never	1 (11.1)	0 (0.0)	1 (8.3)	0 (0.0)	9 (50.0)	11 (15.9)
Mental Health Continuum raw score (mean (sd))	3.4 (0.8)	4.2 (0.6)	4.5 (0.4)	4.4 (0.4)	4.2 (0.6)	4.2 (0.6)
Positive mental health category (%)						
Flourishing mental health	3 (33.3)	4 (66.7)	12 (100.0)	20 (83.3)	14 (77.8)	53 (76.8)
Not flourishing: Moderate mental health	6 (66.7)	2 (33.3)	0 (0.0)	4 (16.7)	4 (22.2)	16 (23.2)
Not flourishing: Languishing mental health	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
PHQ-8 depression raw score (mean (sd))	3.56 (1.42)	4.67 (3.20)	5.50 (4.78)	6.58 (3.57)	3.89 (3.41)	5.13 (3.67)
PHQ-8 score of 10 or higher (%)	0 (0.0)	1 (16.7)	3 (25.0)	7 (29.2)	1 (5.6)	12 (17.4)
GAD-7 anxiety raw score (mean (sd))	5.33 (1.12)	6.67 (3.39)	5.83 (3.59)	8.54 (2.65)	6.94 (3.26)	7.07 (3.09)
GAD-7 score of 8 or higher (%)	0 (0.0)	3 (50.0)	3 (25.0)	15 (62.5)	6 (33.3)	27 (39.1)
Oldenburg Burnout Inventory raw score (mean (sd))	2.4 (0.2)	2.1 (0.3)	1.8 (0.3)	2.1 (0.3)	1.7 (0.4)	2.0 (0.4)

Table 4
Percentage of participants (n = 69) who considered specific strategies to be promoting, improving, or sustaining of their mental health regularly or during times of challenge.

Strategies	Hyderabad (n = 9)	Nagaland (n = 6)	Ethiopia (n = 12)	Kenya (n = 24)	Cambodia (n = 18)	Combined (n = 69)
Religious practices						
Praying, talking to God	44	50	50	67	6	43
Reading Bible, Quran, devotional books	44	33	33	33	0	26
Being involved at place of worship (church, mosque, temple)	33	17	8	33	0	19
Meditating	22	0	0	38	0	16
Listening to/singing gospel music/hymns, attending choir practice	22	0	0	21	6	12
Religious reasoning/thinking	0	0	8	13	0	6
Do good, receive good; do bad, receive bad	0	0	0	0	56	14
Engaging in caregiving						
Spending time with children (ex. talking/laughing, playing)	44	67	17	33	28	33
Keeping busy at work	22	0	33	17	33	23
Reminding self of passion for caregiving	11	0	17	21	11	14
Involving children in chores/tasks	0	0	0	0	11	3
Social support						
Talking to/getting support from a friend or family	22	50	17	54	11	32
Talking to colleagues/caregivers	22	17	17	33	28	26
Talking to/getting advice or support from others not specified	11	17	17	4	11	10
Being around people/distract	22	17	8	8	0	9
Doing good for others/helping others	0	0	17	13	0	9
Talking to their guide, elders	11	17	0	0	6	4
Pleasurable activities						
Exercising and playing sports	22	17	8	38	17	23
Watching TV/movies	22	0	8	29	17	19
Listening to music	33	0	0	33	6	17
Reading books, newspapers	33	0	8	21	17	17
Sleeping/resting/napping/relaxing	22	17	0	29	0	14
Dancing/singing	0	0	8	33	0	13
Working with hands/producing	0	0	17	13	0	7
Intentionally trying to relax while doing work/doing work they find relaxing	0	0	0	8	11	6
Emotion regulation						
Controlling their emotions, staying calm/patient	0	17	58	4	6	14
Taking time alone/reflecting	11	33	17	8	6	12
Cognitive self-talk/self-encouragement	0	0	17	17	6	10
Reminding self that has done work well, satisfied by children doing well	0	0	0	21	0	7
Avoiding stressful situations	0	0	42	0	0	7
Crying when frustrated/releasing emotions	0	0	8	0	17	6
Making a difference in this world/giving back	0	17	0	8	0	4
Removing oneself from work						
Visiting places/getting away	11	0	17	21	6	14
Doing something nice/positive (ex. “spoiling oneself,” cooking good food)	0	0	17	17	11	12
Doing something else to earn money/working another job	0	0	8	8	0	4

in Ethiopia) and being involved at one's place of worship (e.g., 33% each in Hyderabad and Kenya). Approximately 20% of participants from both Hyderabad and Kenya named singing or listening to religious music. One of our research collaborators in Hyderabad commented on this finding, saying, “It is in our culture to listen to devotional music every day. It is a stress-buster and refreshes one's mood.” In addition, a few participants from Kenya (13%) and Ethiopia (8%) mentioned that it was helpful for their mental health for them to think about caregiving challenges in terms of their faith. Examples included, “having fear of God,” “being satisfied that they've served God well,” and “telling self [that] God doesn't give you burdens you can't carry.”

Meditating (e.g., “I often meditate”) was identified by 38% of participants from Kenya and 22% of participants from Hyderabad, but not by participants in the other three regions. Because there are many forms of meditation and motivations to meditate, the context of these data matters. In Kenya, meditation is a Christian practice in which one focuses on God for some time in silence, both to communicate with God and to relax the mind. Meditation is popular with Christians in Kenya because they believe that daily prayer is important and private, and that one should privately talk to God at the beginning and end of each day. In Hyderabad, meditation was not considered to be a religious practice, but rather a set of breathing exercises to improve concentration and mental relaxation.

3.2. Engaging in caregiving

A second overarching category was Engaging in Caregiving. As a strategy to sustain their mental health or stay positive during times of

challenge, participants from all regions named spending time with children, such as helping a child with a problem, watching children dance, and playing with children. Particularly high percentages of participants from Nagaland (67%) and Hyderabad (44%) mentioned this strategy.

Another strategy named by participants in four of the five regions was keeping busy at work. One participant from Cambodia, where 33% of participants named this strategy, said, "I just try to do the job as my best. Because when this institution cuts off the staff, they will not cut off caregivers who have good and high knowledge." During the data collection period, OVC institutions in Cambodia were undergoing pressure to downsize or close, and in Battambang, 5 out of 13 OVC institutions closed during 2016–2017. This fear of losing one's job came out in this interview. Keeping busy at work was also named by 33% of Ethiopian participants and 22% of participants from Hyderabad. In Cambodia only, two participants named as a mental health strategy involving children in tasks the caregivers did not like at the institution, such as cleaning and sending children to get water for the garden.

Another common strategy in the Engaging in Caregiver category was caregivers reminding themselves of how much they care about caregiving. For example, a participant in Hyderabad said, "Yes, I get mental stress but I feel happy that I am able to care for so many children."

3.3. Social support

The third overarching strategy was Social Support. The most commonly named strategy in this category was talking to friends and family members, which included getting support from them. This strategy was named by participants in all five regions, including 54% of participants in Kenya and 50% of participants in Nagaland. One participant from Nagaland stated, "I talk to my husband and then sometimes I talk and share all my feelings with my parents and like with our friends. I think that works a lot."

Talking to colleagues and other caregivers was also identified in all five regions, with 28% of Cambodian and 33% of Kenyan participants naming the strategy. A participant in Cambodia said, "I talk with other caregivers to find the solution to make us all happy." Elaborating on this point, our Cambodian research collaborator commented that having good relationships with other caregivers can make the work itself more enjoyable. Only one caregiver in Nagaland mentioned talking to other caregivers; this may be because the OVC institutions in Nagaland are smaller and often have only one person who acts as both the director and caregiver.

Another social strategy reported was distracting oneself by being around people, as exemplified by a participant in Hyderabad:

> I always spend [time], live with people. I don't want to be alone any time. When I am with children or with people, I forget every tension. I will be happy with spending time with people which gives me relief.

Less commonly named social strategies included doing good for others, such as this statement from an Ethiopian participant: "Yes, when I do good deeds for others to the best of my capacity and give as much as I can, that gives me a peace of mind." Another less common strategy named was talking to their guide or elders. In Nagaland, a participant commented:

> I think I talk with the elders, getting advice from them, and it is all contribute to mental health. Advice from the people who are more experienced, those are also one factor that contributes to our mental health.

Similarly, in Hyderabad, one participant said:

> I have an elderly person in [a Hindu religious institution]. I will be in touch with him talking about my personal and other issues. … I will follow his instructions.

The elders referred to in the quote from a participant in Nagaland referred to older people, such as relatives and community members, with life experiences who can offer wisdom in handling situations. In Hyderabad, the elderly person teaches about morality and character.

3.3.1. Pleasurable activities

The fourth category of strategies was Pleasurable Activities. Perhaps because there is such a wide range of pleasurable activities, no single kind of activity was indicated by more than about one-third of participants. Exercising and playing sports were commonly named in Hyderabad (22%) and Kenya (38%), but also named by participants in the other regions. One participant from Kenya said, "Morning and evening walks to clear my mind up." A Cambodian participant noted, "If I were so seriously stressed out, I would go to play football," and another Cambodian participant said:

> I exercise with other caregivers, play badminton, or football with the children. I do this almost every weekend. I always have a fun time with my children.

Listening to music was frequently named in Hyderabad (33%) and Kenya (33%), and dancing and singing were also named in Kenya (33%), where one participant said, "Sometimes I remember some good songs. That usually makes me happy. I sing them by myself." Dancing and singing with children was also mentioned, such as by this participant from Hyderabad: "[I] occasionally dance for cinema songs along with children. Listening to music to get stress relief."

Watching television and movies was identified in some regions, most notably in Kenya (29%), and producing work through one's hands was mentioned in both Ethiopia (17%) and Kenya (13%). An Ethiopian participant said, "What satisfies me the most is gardening. I have used my backyard efficiently. Moreover, I regularly encourage other mothers to use their space with gardening."

We created a general resting category of sleeping, napping, resting, and relaxing; 29% of participants in Kenya and 22% in Hyderabad gave responses in this category. One Kenyan participant said, "Sometimes I can just take a shower and rest."

Notably, few participants from Nagaland mentioned pleasurable activities. Just 17% named sleeping/resting (e.g., "I close my door and sleep," and "just sit quietly inside"), and 17% named exercising and playing sports (e.g., "I'm involved in other activities like games and sports, so I feel fresh."). Although we cannot be sure why fewer Nagaland participants named pleasurable activities, it could be the structure of their institutions; possibly in Nagaland there is even less time for rest and enjoyable activities.

3.4. Emotion regulation

We created a category of Emotion Regulation that includes numerous means of attending to one's emotions, such as using cognitive strategies, being alone, and avoiding stressful situations. The most common strategies in this category across regions were: 1) taking time alone and reflecting, which was mentioned by 33% of participants from Nagaland and by at least one participant per region, and 2) attempts to control one's emotions, which was mentioned by 58% of participants from Ethiopia and at least one participant in four of the five regions. One participant from Ethiopia said, "I calm myself down. I gather my thoughts and think over the difficult situation that happened. Instead of quickly looking at the problem and getting angry, I try to calm down."

In Nagaland, 33% of participants named taking time alone or reflecting. This strategy was also identified in the other four regions but with lower frequency. One Nagaland participant said:

> Sometimes at the end of the day, … after everything is over, I'll come back and then use [that time] to examine myself. Before I pray, I usually do that. How I spent the day, how far it has helped me to

become a better person. So, I think in that way I know myself.

A strategy named in Kenya only was participants reminding themselves that they have done a good job for the children. An example statement from the 21% of Kenyan participants who mentioned this strategy was:

> You can wake up and find that a child is sick and you take care of him. After taking care of the child and [he] has shown some improvement and seems happy, you also … feel good. You can even go and have tea because of that and you feel good.

Ethiopian participants were the only ones to indicate that they avoid stressful situations, and a full 42% of them indicated the strategy of avoidance. For instance, one participant stated, "I avoid loudness and chaos. If someone makes me feel bad, I take a break and sit in silence to calm myself down." In discussion with the Ethiopian team, staying calm and being forgiving were seen as consistent with the Christian religion that many of the participants there adhered to.

Emotion regulation strategies were notably absent from mention in Hyderabad, where just one participant indicated any such strategy and it was taking time alone. The data from Cambodia also included few emotion regulation strategies. Four strategies were reported, but they were reported by very few participants. Interestingly, however, Cambodia was essentially the only region where crying and releasing emotions was named (by three participants in Cambodia and one participant in Ethiopia).

3.5. Physically removing oneself from work

The final overarching strategy was Physically Removing Oneself from Work. This was not a very common strategy across regions, but a minority (e.g., 17%, 21%) of participants from Ethiopia and Kenya named such strategies. Some participants noted that they sustain their mental health by doing something nice for themselves at a place away from the institution. One participant from Kenya said, "Like going shopping. Maybe I go shop and look for the best cosmetic around. I look for the best hair style, I look for good clothes or a good material that, when I get money, I will buy and that makes me happy." Other participants named visiting places and getting away. A participant from Ethiopia said:

> I also take a break and walk around to renew my spirit. I took a lot of trainings on how to handle difficult situations at work by the way, so I learned that stepping away from the situation and getting some air helps. I go outside to the kitchen or my bedroom. This way, I calm myself down and get back to work.

Of note, this participant did not fully leave the setting, but did step away from the children. No participants from Nagaland named this strategy; possibly their staffing structures do not allow for the option of getting away.

4. Discussion

The absence of mental health problems in caregivers is important to the well-being of the children for whom they care (Goodman, 2011; O'Connor et al., 2016; Ramchandani & Murphy, 2013). Although most of the literature has focused on mental health problems in caregivers rather than caregiver positive mental health, the strategy of promoting positive mental health has great potential; numerous studies have linked positive mental health to lower depression prevalence in future years (Lamers, Westerhof, Glas, & Bohlmeijer, 2015; Keyes, Dinghra, & Simoes, 2010). Through directly asking OVC caregivers from across the world, we sought to identify specific strategies that caregivers use to sustain their positive mental health in the midst of challenging caregiving work. The strategies identified fit into six broad categories: Religious Practices; Engaging in Caregiving; Socializing; Emotion Regulation; Pleasurable Activities; and Removing Oneself from Work. Although some of these activities have been previously reported elsewhere, we are unaware of any single study reporting such breadth of activities.

Taken together, the six strategies found in the current study align with activities found in the literature that correlate with short-term positive emotions. For example, in a diary study of United States adults, the activities across a day that provided large boosts in positive emotions were: engaging in spiritual activities, helping, interacting, playing, and learning (Catalino & Fredrickson, 2011). These activities were identified by the caregivers in our study, with the exception of learning [Of note, learning has been identified in well-being studies of various other employee groups (Proost et al., 2012; Tregaskis et al., 2013)]. Thus, broadly speaking, the activities that promote positive emotions in life in general may be the same ones that promote positive emotions at work in general, especially for an occupation with the broad range of tasks conducted in OVC caregiving. At the same time, it is notable that the OVC caregivers mentioned this wide range of ways to bolster their short-term positive emotions and longer term well-being. Moreover, it is striking that, with few exceptions, all six strategies were named by caregivers at all five regions; the six strategies may be universal means of coping with challenges and promoting positive emotions that need only be tailored to the individual caregiving settings.

Religious practices emerged as the most frequently named strategy for sustaining caregiving. Religious beliefs have been found in other studies of OVC caregivers to be a motivator for caregiving (Darkwah, Daniel, & Asumeng, 2016); in the present study, we find it also to be a perceived way to sustain positive mental health. Although we did not select participants using religious criteria, overall, the caregivers were strongly religious, with 83% reporting that they visited a religious place or attended a religious service at least monthly and the other 17% reporting doing so a few times a year. It therefore is not surprising that they reported finding prayer helpful, although perhaps it is somewhat interesting that they referenced prayer in the context of their positive mental health and not just in terms of coping with difficulties. Further, we asked questions about religion early in the interview guide, which may have inadvertently encouraged religious responses. Nevertheless, the value of prayer and reading religious texts for individual caregivers should not be overlooked, even in caregiving settings that are not specifically religious. Participants reported that attending services and being involved in their places of worship supported their well-being. OVC residential care leaders may want to find ways to allow interested caregivers to participate in places of worship. For some rural group homes, they may have to be creative to make such involvement possible; at an Ethiopian group home where we conducted interviews, we noted a place of worship next to the home. Although few studies exist on what sustains OVC caregivers, a study of family members caring for orphans in Ethiopia likewise found a strong reliance on God (Biru et al., 2015). Looking to the literature on non-OVC caregivers, engaging in religious activities and drawing on spiritual resources have been reported for a variety of caregiving challenges. These caregivers include parental caregivers of hospitalized children (Kelly et al., 2016) and parental caregivers of children with physical and intellectual disabilities (O'Hanlon, 2013; Ylvén & Granlund, 2009; Sharak et al., 2017).

Across all regions, engaging in the caregiving work itself emerged as a frequently named strategy. This finding was somewhat of a surprise, because common sense suggests that too much work may lead to burnout. However, as participants gave us a picture of typical caregiving days, we learned that many hours each day are devoted to cleaning and cooking and not to the kinds of caregiving tasks that attracted participants to the profession. Participants reported enjoying time spent with children and finding great meaning in children's growth and success. Consequently, a key way that they identified to sustain themselves in their caregiving work was to spend more time engaging in enjoyable activities with the children or reminding themselves of the significance of their work. This finding aligns with Roth et al. (2015),

who states, “Indeed, the positive experiences of caregiving could potentially buffer against some of the possible stress related health consequences. … We assert that the “caregiving-is-stressful” assumption is an overly narrow, simplified, and limited view on these types of human relationships” (p. 311). Supporting that idea, a study of 34 Kenyan NGOs for OVCs found that many NGOs had highly committed staff who engaged in positive actions, such as going out of their way to serve the children. These positive actions encouraged the staff to do yet more good work, creating an ongoing positive workplace (Ferguson & Heidemann, 2009). On the individual caregiver level, we, too, found that engaging in caregiving and doing well by the children, even if the work involved attending to the children's difficulties, was perceived by caregivers as meaningful and as playing an important role in sustaining their positive mental health. This finding may be of great interest to institution directors and supervisors, who may be able to act on it readily and affordably. If not already in place, perhaps playful interactions between caregivers and children can be incorporated into daily or weekly routines. These interactions may take many forms, including singing, playing sports, and telling stories.

Spending more time on caregiving may lead to positive emotions in ways other than meaning and connection to the children. In the employee satisfaction literature, employee well-being is associated with “daily uplifts,” which come in the form of regular, positive feedback at work, such as receiving praise, or positive experiences at work, such as receiving support (Junça-Silva et al., 2017). Working with children may give caregivers positive feedback on their work in pleasant ways, perhaps in the form of laughter and hugs, which are also positive experiences. In addition, keeping busy at work may distract caregivers from stressors and result in less pressure when more work is accomplished.

Social support is well-documented to be generally beneficial to mental health and a useful coping strategy (Chronister et al., 2013; Perreault et al., 2017). In studies specifically with OVC caregivers, longer caregiving tenures were related to participation in activities (Pinquart & Sörensen, 2006) and social support (Kikuzawa, 2016; Shieh et al., 2012). Also, in well-being studies of caregivers (often parents) who are caring for children who are not OVC, social support has been commonly identified. Studies of caregivers of children with autism and spina bifida have reported the importance of social support on everything from caregivers' self-efficacy, to quality of life, to lower emotional and physical health burdens of caregiving (Bishop et al., 2007; Ji et al. 2014; Mak & Kwok, 2010; Malm-Buatsi et al., 2015). In the current study, participants discussed drawing on other caregivers, friends, and family, and generally being around people as a positive activity or to distract them from concerns. While not a surprise, these findings are a reminder of the key role social interactions play for caregivers, and notably, caregivers having social support is also associated with better well-being for the children in their care (Rajendran, Smith, & Videka, 2015).

Although not reported here, the study participants reported many challenges that they and the children they cared for faced. These challenges included food scarcity, illness, and exposure to traumatic situations. In addition, participants repeatedly noted troubles in dealing with difficult behaviors from the children. It therefore makes sense that being able to regulate your emotions is a particularly important skill for caregivers, and the participants named several strategies to control their emotions, remain calm, rejuvenate, and encourage themselves to keep going. Over half of the Ethiopian participants named staying calm and patient as a key strategy to sustaining caregiving work, and this strategy was likely informed for several caregivers by their religious beliefs as Christians, emphasizing that it is not possible to separate one's caregiving from one's religion. In contrast, few participants from Hyderabad and Cambodia named emotion regulation strategies.

Of the six categories, strategies aligning with Pleasurable Activities and Removing Oneself from Work were present but less frequently named. In fact, of the six strategies, these two were also absent from more regions, with Pleasurable Activities mostly absent from the Nagaland data and Removing Oneself from Work mostly absent from the Nagaland and Cambodia data. It is possible that caregivers – people who have self-selected into difficult work imbued with great meaning – are sustained more by immersing themselves in their work and talking through those challenges with loved ones than they are by taking breaks. Alternatively, the structures for OVC caregiving in Nagaland often rely on a single caregiver per institution and simply may not allow for much time away or pleasurable activities. In studies in other contexts, long vacations – a kind of break – have been associated with positive effects on the health and well-being of workers during the vacation, but the effects are short-lived (De Bloom et al., 2013). Relaxation has also been identified as a protective factor against work-related exhaustion under high time demands (Siltaloppi et al., 2009). Thus, breaks and pleasurable activities may play an important role in long-term maintenance of caregiving and, possibly at many regions, they can be incorporated alongside reminders of the work's meaning.

Although the caregivers in the present study occasionally included sports when talking about pleasurable activities, not one caregiver mentioned exercise as a positive mental health strategy. In US contexts, exercise is frequently named by caregivers for frail older adults. For example, 80% of spouses caring for frail partners (Connell, 1994), and 42% of spouses caring for partners with Alzheimer's reported exercising as a well-being strategy (McDonald, 1999). It may be that the physical demands of cooking, cleaning, and carrying water in our study regions make exercise, although not thought of that way, an inherent part of the job.

Overall, participants focused more on how caring for children brings great meaning to them than they did on short-term pleasurable activities, although those were named in most regions, too. In some examples, caregivers combined these two facets (e.g., playing with children was named as both meaningful and pleasurable). OVC institutions and caregivers may want to intentionally incorporate this study's strategies into their routines in the form of regular, meaningful time with children or time for religious practices, both of which emerged as strong themes in this study; spending more meaningful time with children is relatively missing in the larger caregiving literature and may be practical to institute.

This study was limited in a number of ways, including having a fairly small sample size in some regions (e.g., 6 participants in Nagaland) and a highly religious sample. In addition, we asked broad questions about ways to improve or maintain one's mental health and keep one's spirits up at work, including during challenging times. In this way, we likely prompted answers on coping with negative emotions, and not just on how to keep things going well. Coping with negative emotions is on a different continuum from promoting positive emotions (Keyes, 2005), but in this study, we collapsed findings from these interview questions because we did not think participants could provide separate coping versus positive engagement responses without tying each to specific events. Nevertheless, unlike many studies we sought to identify strategies perceived by caregivers to promote well-being and not just those perceived to mitigate distress.

Perhaps the most notable strength of this study was the geographic diversity of OVC caregivers, spanning two continents, four countries, at least five different cultures, and six faiths or religious backgrounds (Buddhist, Hindu, Muslim, Protestant Christian, Orthodox Christian, and Catholic). Interviews were conducted by research staff from the same countries and who were knowledgeable about local culture, and the data were also interpreted by those staff. To promote the trustworthiness of findings, we had at least two researchers conduct analysis at each stage and provide quoted text for discussion among the larger team. In hindsight, we wish we had asked participants what structures in place in their institutions help promote their positive mental health, as the responses to our questions overwhelmingly pointed to individual activities or social support; understanding the organizational structures of the institutions and their impact on caregiver well-being is an area for future research.

4.1. Conclusion

In conclusion, in other studies, promoting positive mental health has been linked to the prevention of future depression cases (Keyes, Dinghra, & Simoes, 2010; Schotanus-Dijkstra, ten Have, Lamers, de Graaf, & Bohlmeijer, 2017). Preventing depression is particularly important for caregivers because caregiver well-being is good for both the caregivers and the children in their care. OVC caregivers of multiple faiths working in diverse global contexts named six practical strategies experienced as promoting positive mental health in the challenging settings of OVC institutions. Caregivers described how they incorporated five of these strategies (not Removing Oneself from Work) into their caregiving days; small daily activities, including focusing on the more meaningful and enjoyable times with children, appear to help sustain positive mental health under real-world conditions.

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Conflict of interest

The authors declare that they have no conflict of interest.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consent was obtained from all individual participants included in the study.

Declarations of interest

None.

References

Atkins-Burnett, S., Monahan, S., Tarullo, L., Xue, Y., Cavadel, E., Malone, L., & Akers, L. (2015). Measuring the quality of caregiver-child interactions for infants and toddlers (Q-CCIIT) (appendices). *Mathematica Policy Research*. .

Biru, M., Lundqvist, P., Molla, M., Jerene, D., & Hallström, I. (2015). Surviving overwhelming challenges: Family caregivers' lived experience of caring for a child diagnosed with HIV and enrolled in antiretroviral treatment in Ethiopia. *Issues in Comprehensive Pediatric Nursing, 38*(4), 282–299.

Bishop, S. L., Richler, J., Cain, A. C., & Lord, C. (2007). Predictors of perceived negative impact in mothers of children with autism spectrum disorder. *American Journal on Mental Retardation, 112*(6), 450–461.

Catalino, L. I., & Fredrickson, B. L. (2011). A Tuesday in the life of a flourisher: The role of positive emotional reactivity in optimal mental health. *Emotion, 11*(4), 938–950.

Chronister, J., Chou, C. C., & Liao, H. Y. (2013). The role of stigma coping and social support in mediating the effect of societal stigma on internalized stigma, mental health recovery, and quality of life among people with serious mental illness. *Journal of Community Psychology, 41*(5), 582–600.

Connell, C. (1994). Impact of spouse caregiving on health behaviors and physical and mental health status. *American Journal of Alzheimer's Care and Related Disorders and Research, 9*(1), 26–36.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches.* Thousand Oaks, CA: Sage Publications.

Darkwah, E., Daniel, M., & Asumeng, M. (2016). Caregiver perceptions of children in their care and motivations for the care work in children's homes in Ghana: Children of God or children of white men? *Children and Youth Services Review, 66*(2016), 161–169.

De Bloom, J., Geurts, S. A., & Kompier, M. A. (2013). Vacation (after-) effects on employee health and well-being, and the role of vacation activities, experiences and sleep. *Journal of Happiness Studies, 14*(2), 613–633.

Elgar, F. J., Mills, R. S., McGrath, P. J., Waschbusch, D. A., & Brownridge, D. A. (2007). Maternal and paternal depressive symptoms and child maladjustment: The mediating role of parental behavior. *Journal of Abnormal Child Psychology, 35*(6), 943–955.

Ferguson, K. M., & Heidemann, G. (2009). Organizational strengths and challenges of Kenyan NGOs serving orphans and vulnerable children: A template analysis. *International Journal of Social Welfare, 18*(4), 354–364.

Goodman, S. H. (2007). Depression in mothers. *Annual Review of Clinical Psychology, 3*, 107–135.

Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward, D. (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical Child and Family Psychology Review, 14*(1), 1–27.

Grant, F., Guille, C., & Sen, S. (2013, July 1). Well-being and the risk of depression under stress. *PLoS One, 8*(7), e67395. https://doi.org/10.1371/journal.pone.0067395.

Halbesleben, J. R. B., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work and Stress, 19*(3), 208–220.

Ji, B., Sun, M., Yi, R., & Tang, S. (2014). Multidisciplinary parent education for caregivers of children with autism spectrum disorders. *Archives of Psychiatric Nursing, 28*(5), 319–326.

Kelly, J. A., May, C. S., & Maurer, S. H. (2016). Assessment of the spiritual needs of primary caregivers of children with life-limiting illnesses is valuable yet inconsistently performed in the hospital. *Journal of Palliative Medicine, 19*(7), 763–766.

Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior, 43*(2), 207–222.

Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology, 73*(3), 539–548.

Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist, 62*(2), 95–108.

Keyes, C. L. M., Dhingra, S. S., & Simoes, E. J. (2010). Change in level of positive mental health as a predictor of future risk of mental illness. *American Journal of Public Health, 100*(12), 2366–2371.

Kikuzawa, S. (2016). Social support and the mental health of family caregivers: Sons and daughters caring for aging parents in Japan. *International Journal of Japanese Sociology, 25*(1), 131–149.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606–613.

Lamers, S. M., Westerhof, G. J., Glas, C. A., & Bohlmeijer, E. T. (2015). The bidirectional relation between positive mental health and psychopathology in a longitudinal representative panel study. *The Journal of Positive Psychology, 10*(6), 553–560.

Mak, W. W., & Kwok, Y. T. (2010). Internalization of stigma for parents of children with autism spectrum disorder in Hong Kong. *Social Science & Medicine, 70*(12), 2045–2051.

Malm-Buatsi, E., Aston, C. E., Ryan, J., Tao, Y., Palmer, B. W., Kropp, B. P., ... Frimberger, D. (2015). Mental health and parenting characteristics of caregivers of children with spina bifida. *Journal of Pediatric Urology, 11*(2), 65.e1–65.e7.

McDonald, P. E., Fink, S. V., & Wykle, M. L. (1999). Self-reported health-promoting behaviors of Black and White caregivers. *Western Journal of Nursing Research, 21*(4), 538–548.

O'Connor, T. G., Monk, C., & Burke, A. S. (2016). Maternal affective illness in the perinatal period and child development: Findings on developmental timing, mechanisms, and intervention. *Current Psychiatry Reports, 18*(3), 1–5.

O'Hanlon, E. E. (2013). Religion and disability: The experiences of families of children with special needs. *Journal of Religion, Disability & Health, 17*(1), 42–61.

Perreault, M., Touré, E. H., Perreault, N., & Caron, J. (2017). Employment status and mental health: Mediating roles of social support and coping strategies. *Psychiatric Quarterly, 88*(3), 501–514.

Pinquart, M., & Sörensen, S. (2006). Helping caregivers of persons with dementia: Which interventions work and how large are their effects? *International Psychogeriatrics, 18*(4), 577–595.

Plummer, F., Manea, L., Trepel, D., & McMillan, D. (2016). Screening for anxiety

disorders with the GAD-7 and GAD-2: A systematic review and diagnostic metaanalysis. *General Hospital Psychiatry, 39*, 24–31.
Proost, K., Van Ruysseveldt, J., & van Dijke, M. (2012). Coping with unmet expectations: Learning opportunities as a buffer against emotional exhaustion and turnover intentions. *European Journal of Work and Organizational Psychology, 21*(1), 7–27.
QSR International Pty Ltd (2017). *NVivo qualitative data analysis software; Version 11*.
Quinn, A., Briggs, H. E., Miller, K. M., & Orellana, R. (2014). Social and familial determinants of health: Mediating effects of caregiver mental and physical health on children's mental health. *Children and Youth Services Review, 36*(2014), 163–169.
R Core Team (2017). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from http://www.R-project.org/.
Rajendran, K., Smith, B. D., & Videka, L. (2015). Association of caregiver social support with the safety, permanency, and well-being of children in child welfare. *Children and Youth Services Review, 48*(2015), 150–158.
Ramchandani, P. G., & Murphy, S. E. (2013). Parental depression and the challenge of preventing mental illness in children. *The British Journal of Psychiatry: the Journal of Mental Science, 202*(2), 84–85.
Schotanus-Dijkstra, M., Ten Have, M., Lamers, S. M. A., de Graaf, R., & Bohlmeijer, E. T. (2017). The longitudinal relationship between flourishing mental health and incident mood, anxiety, and substance use disorders. *European Journal of Public Health, 27*(3), 563–568.
Sharak, F. M., Bonab, B. G., & Jahed, M. (2017). Relationship between stress and religious coping and mental health in mothers with normal and intellectually disabled children. *International Journal of Educational and Psychological Researches, 3*(3), 198–204.
Shieh, S. C., Tung, H. S., & Liang, S. Y. (2012). Social support as influencing primary family caregiver burden in Taiwanese patients with colorectal cancer. *Journal of Nursing Scholarship, 44*(3), 223–231.
Siltaloppi, M., Kinnunen, U., & Feldt, T. (2009). Recovery experiences as moderators between psychosocial work characteristics and occupational well-being. *Work and Stress, 23*(4), 330–348.
Spitzer, R. L., Kroenke, K., Williams, J. B., & the Patient Health Questionnaire Primary Care Study Group (1999). Validation and utility of a self-report version of PRIME-MD: The PHQ primary care study. *Journal of the American Medical Association, 282*(18), 1737–1744.
Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Lowe, B. (2006). A brief measure for generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine, 166*(10), 1092–1097.
Tregaskis, O., Daniels, K., Glover, L., Butler, P., & Meyer, M. (2013). High performance work practices and firm performance: A longitudinal case study. *British Journal of Management, 24*(2), 225–244.
UNICEF (2009). Progress for children: A report card on child protection, Number 8. September 2009 https://www.unicef.org/publications/files/Progress_for_Children-No.8_EN_081309.pdf, Accessed date: 7 March 2018.
UNICEF. Orphans. (2017). https://www.unicef.org/media/media_45279.html (Accessed March, 7 2018).
Whetten, K., Ostermann, J., Pence, B. W., Whetten, R. A., Messer, L. C., Ariely, S., ... The Positive Outcomes for Orphans (POFO) Research Team (2014). Three-year change in the wellbeing of orphaned and separated children in institutional and family-based care settings in five low-and middle-income countries. *PLoS One, 9*(8), e104872.
Ylvén, R., & Granlund, M. (2009). Identifying and building on family strength: A thematic analysis. *Infants & Young Children, 22*(4), 253–263.