Unfolding Narratives: Care Leavers' Life Course and the Dynamics of Health and Well-being

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Table of contents

List of Figures

List of tables

Abstract

This thesis comprises three interconnected articles that examine the life course well-being of North American care leavers in mid- to late adulthood. **Article 1** is a case study exploring the life trajectories of two English-speaking adults over 50 who aged out of youth protection-based congregate care in Québec, Canada. It investigates their transition to adulthood, parenthood, and health. **Article 2** is a scoping review synthesizing existing literature on health and well-being outcomes for foster care alumni over age 30. It highlights the lack of research on the later life course of care leavers and underscores the need to explore the long-term implications of adversity faced by these individuals. **Article 3** is a mixed-method study that investigates sleep quality and well-being among North American group care leavers aged 30 and older. Through quantitative analysis of original survey data and qualitative interviews, this study reveals a significant association between sleep quality and the quality of youth protection experiences. It emphasizes the enduring impact of negative child welfare experiences on adult sleep patterns and of sleep quality's predictive association with care leaver health. The study highlights the complex interplay between child welfare experiences, sleep, social support networks, and health outcomes decades after placement. Collectively, these three articles serve as a call to action, identifying critical gaps in our understanding of the life course outcomes of foster care alumni. They underscore the need for continued research and targeted interventions to support the well-being of individuals who have experienced child welfare placement.

Resume

Cette thèse comprend trois articles interconnectés qui examinent le bien-être au cours de la vie des personnes ayant quitté les soins en Amérique du Nord à l'âge adulte moyen et avancé. **Article 1** est une étude de cas explorant les trajectoires de vie de deux adultes anglophones de plus de 50 ans qui ont quitté les soins en milieu de protection de la jeunesse au Québec, Canada. Il examine leur transition vers l'âge adulte, la parentalité et la santé. **Article 2** est une revue de la portée synthétisant la littérature existante sur les résultats de santé et de bien-être des anciens enfants placés de plus de 30 ans. Il met en évidence le manque de recherche sur le parcours de vie ultérieur des personnes ayant quitté les soins et souligne la nécessité d'explorer les implications à long terme des adversités rencontrées par ces individus. **Article 3** est une étude mixte qui examine la qualité du sommeil et le bien-être des personnes ayant quitté les soins en milieu de groupe en Amérique du Nord, âgées de 30 ans et plus. À travers une analyse quantitative des données d'enquête originales et des entretiens qualitatifs, cette étude révèle une association significative entre la qualité du sommeil et la qualité des expériences en protection de la jeunesse. Elle met en évidence l'impact durable des expériences négatives en protection de l'enfance sur les habitudes de sommeil des adultes et leurs répercussions sur la santé. L'étude souligne l'interaction complexe entre les expériences en protection de l'enfance, le sommeil, les réseaux de soutien social et les résultats de santé des décennies après le placement. Collectivement, ces trois articles constituent un appel à l'action, identifiant des lacunes critiques dans notre compréhension des résultats au cours de la vie des anciens enfants placés. Ils soulignent la nécessité de poursuivre la recherche et de cibler les interventions pour soutenir le bien-être des personnes ayant vécu un placement en protection de l'enfance.

Acknowledgements

Firstly, I dedicate this work to my late parents who died well before they got to see me reach this milestone. I like to think that I embody the best of them and that they are proud of what I have accomplished. Inspired by the challenges of my difficult childhood I also want to recognize all the mothers who came into my life after mine became ill- it truly took a village to raise me. In particular, I wish to acknowledge Michelle, Anne, Olivia, Ami, and my late grandmother Carole, and late mother-in-law Francine. To my siblings thank you for your enduring support over the years. I would be remis to not extend a special thank you to my spouse, Jocelyn Lessard, who tag-teamed caregiving duties during pivotal times through my journey.

To my esteemed thesis committee Professor Delphine Collin Vezina and Professor Varda Mann-Feder, went above and beyond their roles during my graduate studies. My gratitude also extends to Professor Jill Henley and Professor Tamara Sussman, the ever-supportive graduate program chairs who provided a guiding light when needed. A heartfelt thank you to the McGill Writing Centre, especially Dr. Marc Ducasin, whose guidance refined my writing to its zenith. Most importantly, to my supervisor, Professor Michael MacKenzie, whose unwavering vision, persistence, and support were the driving forces behind my success. I thank you for your support.

I'd like to express my gratitude to the Vanier Graduate Scholarship Fund for their invaluable financial support in making this journey possible. The School of Social Work at McGill University and the Centre for Research on Children and Families has been immensely supportive of my career. I wish to acknowledge Dr. Arthur McCaffrey who was a champion of mine, and who passed away in 2024, a couple of months before I could submit this work.

Acknowledgement is also due to the McNair's Scholars program and the Rotary Ambassadorial Scholarship Program which were transformative earlier in my educational journey and I am not sure without that support that I would have ever made it to graduate school. Likewise, I wish to acknowledge my former academic mentors Dr Julie Suhr at Ohio University and Dr. Lily Hechtman who played a critical role in my academic journey.

Finally, and foremost I am most grateful to the individuals who generously participated in my study, whether via survey or interview. Sharing your important stories greatly enriched this work and my own knowledge of child welfare practices across the decades and provinces. I will continue to advocate for a transformative and a just child welfare system. Thank you for sharing and engaging in this research project.

Statement of original knowledge

This thesis's primary focus is to examine the experiences and challenges faced by aging foster care alumni across their life course. Engaging in this analysis with a life course feminist framework, I assert that all people have strengths and stories to tell (Caine et al., 2018). Furthermore, I assert that foster care alumni's lives should continue to be a public policy consideration even as they age. Currently, there is a dearth of research on care leavers over the age of 30 in North America, and this thesis's three articles each cover vital aspects of the gaps in current knowledge.

In all three articles, I expose critical aspects of the life course of care leavers over the age of 30. In North America few studies have examined care leavers in middle- and later adulthood. Only two research groups, to my knowledge, examine this age range in the United States, and there are none in Canada. The largest, most comprehensive North American life course follow-up study is called the Casey Family cohort. This longitudinal study tracks children and adults who have left Casey Family foster care services, and it follows them well into their 40s. However, it does not examine care leavers in the classical sense of those who age out of the child welfare system; instead, it tracks children who spent at least a year in Casey's family-based foster care placement (Pecora et al., 2006). The second North American study is McKenzie's (McKenzie, 1999, 2003) study which is not a panel study; instead, they did two retrospective surveys with elderly American alumni of midwestern farm-based orphanages in the late 1990s. These two projects are the primary ones that can provide insights into the needs of foster care alumni over the age of 30 in North America, but Pecora does not report on congregate care outcomes, and McKenzie's study shares retrospective insights from an alumni convenience sample. While this sample is large and their findings novel, the farm-based orphanage system no longer exists in the US or Canada.

Thus, both studies offer insights into long-term outcomes, but both have important limitations.

Scholars have also studied specific subgroups of children severely neglected during out-of-home group care, but these cohorts are not typically considered foster care alumni because of both the severity of their institutional maltreatment and because these experiences are considered specific to time and place. For instance, in Quebec, the Duplessis Orphans (Stein, 2006) represent a group of children who were placed into religious-run institutions in the 1940s, 1950s, and early 1960s. On average, they experienced high levels of maltreatment in placement (Perry et al., 2006). As this group is considered qualitatively unique, it is typically excluded from foster care outcome research. International studies have similarly investigated other specific groups, such as Russian or Romanian orphans (Wilson, 2003) whose development is also considered compromised due to institutional neglect. The quality of modern group care is on a spectrum and rather than focusing on these extreme cases, this thesis examines outcomes more broadly and inclusively and does not attempt to report on specific institutional abuses or account for all forms of out-of-home placement. It does attempt to fill important gaps in the existing literature. What happens to child welfare alumni and more specifically group care leavers across the life course? What are the pathways to resilience? How can we begin to conceptualize life course well-being aftercare?

Each of the three articles within these broad, overarching questions, independently investigates the well-being of foster and group care alumni across the life course an area underexamined in the current research literature. They explore care leavers' experiences on the following topics: parenting, healing, health, well-being, and sleep.

Article 1: This published narrative case study was the pilot study for my dissertation. It highlights the realities of two Canadian group care alumni aged 50 and 74. It points out the largely invisible long-term struggles that alumni of congregate care face (Copeland et al., 2018). Few researchers examine alumni of care beyond the third decade of life. I was unable to locate a single qualitative study that interviewed care leavers over the age of 40 in North America, and so this project, while small, represents an important contribution to the care leaver literature.

Likewise, the stories that were shared about the parenting experiences of these two alumni of congregate care highlight yet another gap in the literature. We have extensive data about young care-experienced parents (Curnow, 2017; Harty & Ethier, 2022; Mauri, 2024; Roberts, 2017) but know comparatively less about those who become parents after the age of 25. The literature is equally sparse about the realities of parenthood after being raised in institutions (Artamonova, 2018). How might children not raised in a family system experience the transition to parenthood? The first article uses case study methodology to explore two life course accounts of adults who experienced childhood institutionalization

The first narrative we explore is of a man who was labelled as resilient, yet his narrative calls into question what resilience means if we measure it in snapshots of time. This largely resilient man found himself unable to parent his children due to his childhood losses and traumas triggered by his parenting journey. Given that he had children after completing his master's degree, was financially established, and was emotionally mature, his struggles with parenthood are unique in the current post-care parenting literature, offering a depth of insight that is more difficult to glean from younger and less established parents.

The second story in my case study is about the life trajectory of a person who experienced domestic violence throughout her life. In the Mid-West Study, Katz found that 20-21% of youth who age out of care in the Mid-West report involvement in IPV aftercare, identifying as either aggressors, victims, or victims of bidirectional violence (Katz et al., 2020; Katz et al., 2023). However, in Canada, the realities of IPV post-care are largely unstudied. Furthermore, this paper highlights another gap in the literature related to IPV-associated head trauma and its impact on health. An emerging body of work is starting to study the neurological functioning of women who experience head trauma in domestic violence situations (Karr et al., 2024). We know that football players who experience repeated head injuries are at risk of cognitive deficits (Andersen et al., 2004). It stands to reason that people exposed to repeated head injuries from both childhood trauma and domestic violence may also experience cognitive deficits (Karr et al., 2024). However, how people whose head trauma starts in childhood and continues across their lives experience cognitive decline may be important to document. Therefore, this article, while small in scope, identifies several areas for future public health research.

Article 2 was inspired by the health and healing insights of both care leavers from article 1. It is a scoping review that examines what is known about the health and mental health outcomes of care leavers over the age 30. It identifies clear health and mental health disparities experienced by adults who spent any time in child welfare as children. It also identifies some of the critical limitations in data collection that affect our ability to interpret these findings. As an example, few panel studies examine health outcomes in care leavers over the age of 30, so most of the information we do have on later life is coming from general population-based panel studies and the Casey Family cohort project. In their analysis, the general population studies do not account for placement length, type, quality, or aged-out status. In the literature, length of placement (Dregan & Gulliford, 2012; Vinnerljung & Hjern, 2014) and quality of placement (Anctil et al., 2007; Jackson et al., 2016) type of placement (Dregan & Gulliford, 2012) and aged-out status (Sulimani-Aidan et al., 2022) matter for long-term mental health outcomes. However, few studies can report on these factors in aging adults.

In the literature, it was clear that adults who spent any time in care as children had disproportionate rates of physical and mental disabilities as they aged. However, the literature review highlights that amongst the studies included, mental health is the predominant focus; moreover, the literature focuses on deficits and diagnoses as opposed to well-being. Thus, this scoping review serves as a call to action for researchers and clinicians alike as it points out that foster care alumni across countries experience disproportionate health and mental health challenges, but it also identifies critical areas for future discovery.

The second article identified a critical health gap where no studies have included sleep quality in foster care alumni over the age of 30. To begin filling this gap in the developmental health literature, the third article shines a light on sleep quality and the often-overlooked intersection of adverse childhood experiences from a life-course developmental perspective. The third article furthermore identifies that care leavers' child welfare experiences predict sleep quality decades after placement and that health is predicted by sleep quality. Since sleep is critical to all areas of functioning and is unexamined, the third article highlights several areas for future developmental research. Our findings indicate that unaddressed sleep challenges are likely to persist, and they can have significant health consequences. Thus, we end by highlighting the sleep-related challenges facing North American group care alumni.

In conclusion, this thesis sheds light on the often-overlooked experiences of aging foster care alumni, emphasizing the need for continued research and public policy consideration as these individuals age. By using a life-course feminist framework, this work highlights the unique challenges and strengths of group care alumni and fills gaps in several areas of literature. The three articles collectively contribute to a deeper understanding of the long-term health disparities and well-being of caretakers over the age of 30. This thesis is a call to action for researchers to examine these critical and interconnected issues, such as parenthood, sleep, and health, for longer and more holistically. The insights gained from this research have significant implications for public health and social policy, paving the way for an aging paradigm in child welfare research. Such a paradigm shift would first help identify aging care leavers in need of targeted social responses so that we may address them. Tracking alumni of care longer could also help to identify child welfare practices associated with long-term well-being, as well as those practices at greatest risk of long-term developmental harm, so that we can continue to improve our child welfare policy and practice.

Contributions of Authors

This thesis, organized over five chapters, comprises three complete manuscripts. The first, second, and fifth chapters are solely written by me, whereas the third and fourth chapters are co-authorships in which I am the first author. The first article, "Life after Residential Care," is a sole authorship currently published in *The Scottish Journal of Residential Childcare*. The research protocol was written and designed by me. Data was collected, analyzed, and written up during my qualitative methods course. My course instructor, Shari Brotman, the McGill Writing Centre tutors, and my supervisor, Michael MacKenzie, all provided critical editorial feedback.

The second manuscript is currently unpublished. It is a scoping review co-authored by Amanda Keller, Yunung Lee, Nikki Tummon, and Michael MacKenzie. In this article, I am the first author, I conceived the research question, designed the research protocol and wrote the literature review, discussion, and conclusion sections. Nikki Tummon, our department's librarian, supported the design of the search strategy, assisted in drafting the protocol, implemented the search strategy, and provided the articles. I subsequently uploaded these articles to Rayyan and invited Yunung Lee to be the second reviewer. Yunung Lee reviewed all articles for eligibility, and we resolved any disagreements by consensus. Nikki Tummon also drafted the initial PRISMA chart, which was modified as the scope of the article evolved. All co-authors reviewed and approved the final draft contained in this thesis.

The third manuscript is currently unpublished and is co-authored by Amanda Keller and Michael MacKenzie. I am the first author of this article. I designed the study, wrote the ethics proposal, recruited participants, collected and analysed the data, and wrote the literature review, methods, results, and conclusion. Michael MacKenzie supported the quantitative analysis, assisted in creating the tables, and provided substantive editorial feedback. He also used his funding to pay the research participants who completed interviews. He reviewed the final feedback for this article.

All co-authors reviewed the final version of these manuscripts and gave final feedback. Furthermore, it should be noted that I used ChatGPT to translate the English abstract into French. As a dyslexic scholar, I use several software to support formatting and for the readability of every professional manuscript. I use the free version of Grammarly and the paid version of pro-writing aid for editorial assistance. I use the paid version of Scribbr APA checker to verify the bibliographies in this dissertation. I also book several hours every semester at the McGill Writing Centre with the McGill writing tutors. Several of their writing tutors provided support and feedback throughout my dissertation writing process.

Glossary

Age out of care is defined as the period when supportive services are removed from adolescents in foster care due to reaching the age of majority in their locality.

Caregiver: One who provides for the physical, emotional, and social needs of a dependent person. The term most often applies to parents or parent surrogates, childcare and nursery workers, health-care specialists, and relatives caring for children, elderly, or ill family members.

Care Leavers: A person who was "looked after" by the government at some point since they were 14 years old, and they were in care on or after their 16th birthday. Typically, this is a term used in the European and Australian foster care literature.

Child protective services (CPS): The social services agency designated to receive reports, conduct investigations and assessments, and provide intervention and treatment services to children and families who are at risk or experiencing child maltreatment.

Child welfare services: A continuum of services designed to protect children, strengthen families to care for their children, and promote permanency when children cannot live with their families.

Chronosystem: in ecological systems theory, changes and continuities occurring over time that influence an individual's development.

Cohort: A group of people who have shared some critical experience during the same interval of time

Cohort effect: refers to a distinctive formative experience among members of a birth cohort.

Competence: is defined as the acquisition and development of knowledge and skills required for a functional life.

Congregate care: A placement setting of group home (a licensed or approved home providing 24-hour care in a small group setting of 7 to 12 children) or institution providing 24-hour care and/or treatment typically for 12 or more children. These settings may include childcare institutions, residential treatment facilities, or maternity homes.

Cultural competence: The ability of individuals and systems to respond respectfully and effectively to people of all cultures, classes, races, ethnic backgrounds, sexual orientations, and faiths or religions in a manner that recognizes, affirms, and values the worth of individuals.

Emerging adulthood: a developmental life stage proposed by Jeffrey Arnett, which falls between adolescence and young adulthood. It the literature typically this age range spanning the late teens through the twenties.

Emotional/psychological neglect: A pattern of behaviour that impairs a child's emotional development or sense of self-worth. This may include constant criticism, threats, or rejection, as well as withholding love, support, or guidance.

Ethnic: refers to or characterizes a group of people who share a common and distinct culture, religion, language, or other quality.

Foster care: is a temporary service provided by youth protection for children who cannot live with their families. Children in foster care are placed with other families to ensure their safety and development.

Foster Care Alumni: a term used to describe someone who experienced child welfare placement as a child. This term is used interchangeably with care leaver in this dissertation and alumni is more commonly used as a descriptor in North American foster care research.

Foster child: A child who has been placed in the state or county's legal custody because the child's custodial parents/guardians are unable to provide a safe family home due to abuse, neglect, or an inability to care for the child.

Foster parent Adults who provide a temporary home and everyday nurturing and support for children who have been removed from their homes. The individual(s) may be relatives or nonrelatives and are required to be licensed in order to provide care for foster children.

Generation: groups of people who share a distinctive culture and /or a self-conscious identity by their having experienced the same historical events

Group Care A foster care placement where a number of people with children are collectively given care within a single residence instead of individually in foster homes. This can include group homes, residential care, psychiatric care, young mother's homes, and shelters.

Group home: A residence intended to serve as an alternative to a family foster home. Homes normally house 4 to 12 children in a setting that offers the potential for the full use of community resources, including employment, health care, education, and recreational opportunities.

Independent living program A program that assists youth who are transitioning from an out-of-home care placement in receiving services necessary to become independent. Programs provide youth with services such as stable, safe living accommodations, basic life-skill and interpersonal skill-building techniques, educational opportunities, assistance in job preparation and attainment, trauma-informed mental health care, and physical health care.

Intergenerational relates to, involving, or affecting several generations of the same family.

Institutionalization: In child welfare the practice or concept of placing a child or youth in a congregate care setting for an extended period. Being institutionalized can impact an individual's future adjustment outside of a structured environment.

Jurisdiction: It is also used as a synonym for venue, meaning the geographic area over which the court has territorial jurisdiction to decide cases.

Juvenile delinquency A federal criminal violation committed prior to one's eighteenth birthday.

Life course (Elder): a sequence of socially defined events and roles that the individual enacts over time or the age-graded sequence of roles, opportunities, constraints, and events that shape the biography from birth to death.

Life Cycle: A series of stages, as birth childhood and middle-age and death which characterize the course of existence of an individual, group, or culture**.** Examinations of life cycle can include intergenerational examinations.

Life Events: Significant events occurring across the life span that mark the transition from one life cycle or stage to another that are accompanied by changes in roles, expectations or responsibilities and behaviors. Events signal transitions.

Life Trajectory: Sequence of roles and experiences defined by transitions or changes in statuses or roles (Elder et al., 2003 p. 8)

Life Span: the length of time from birth to death in which a person lives.

Outcome: The anticipated or actual effect of program activities and outputs.

Out-of-home care: Out-of-home care encompasses the placements and services provided to children and families when children must be removed from their homes.

Overrepresentation: Used interchangeably with the term "disproportionality" to refer to the proportion of ethnic or racial groups of children in child welfare compared to those groups in the general population.

Permanency: A legally permanent, nurturing family for every child and youth. As defined in the Child and Family Services Reviews, a child in foster care is determined to have achieved permanency when any of the following occurs: (1) The child is discharged from foster care to reunification with his or her family (2) the child is discharged from foster care to a legally finalized adoption; or (3) the child is discharged from foster care to the care of a legal guardian.

Physical abuse: Defined as "any nonaccidental physical injury to the child" and can include striking, kicking, burning, or biting the child, or any action that results in a physical impairment of the child.

Physical neglect: Failure to provide for a child's basic survival needs, such as nutrition, clothing, shelter, hygiene, and medical care. Physical neglect may also involve inadequate supervision of a child and other forms of reckless disregard of the child's safety and welfare.

Placement stability: Ensuring that children remain in stable out-of-home care, avoiding disruption, removal, and repeated placements that have harmful effects on child development and well-being.

Practice model: A conceptual map and articulated organizational ideology of how agency employees, families, and stake holder partner in an environment that focuses on the safety, permanency, and well-being of children and their families.

Privatization: The contracting out of the child welfare services, which results in contractors making the day-to-day decisions regarding a child and family’s case. Typically, such decisions are subject to public agency and court review and approval, either at periodic intervals or at key points during the case.

Trauma: broadly encompasses the experience and consequence of experiencing a severely distressing event for an individual.

Trauma informed care: A practice in which all parties involved recognize and respond to the impact of traumatic stress to maximize physical and psychological safety, facilitate the recovery of the child and family, and support their ability to thrive.

Trauma sleep disruption refers to disturbances in sleep patterns that arise as a result of experiencing a traumatic event or events. These disruptions can manifest in various ways, such as difficulty falling asleep, frequent waking during the night, nightmares, or restless sleep. Trauma-related sleep disruption is often a symptom of conditions like post-traumatic stress disorder (PTSD), but it can also occur in individuals who have experienced significant stress or adversity.

Race: A social and political construction, with no inherent genetic or biological basis, used by social institutions to arbitrarily categorize and divide groups of individuals based on physical appearance, ancestry, cultural history, and ethnic classification.

Racial disparity: Unequal outcome one racial group experiences as compared to the outcome for another racial group.

Residential care: are each a type of live-in, out-of-home care placement in which staff are trained to work with children and youth whose specific needs are best addressed in a highly structured environment. These placements are often time limited and offer a higher level of structure and supervision than what can be provided in the home.

Risk factors: Characteristics at the biological, psychological, family, community, or cultural level that precede and are associated with a higher likelihood of negative outcomes.

Risk factors: Characteristics at the biological, psychological, family, community, or cultural level that precede and are associated with a higher likelihood of negative outcomes.

Therapeutic foster care: Intensive care provided by foster parents who have received special training to care for a wide variety of children and adolescents, usually those with significant emotional, behavioural, or social problems or medical needs. Therapeutic foster parents typically receive additional support and services.

Well-being: When the educational, emotional, physical, and mental health needs of children and their families are being met.

Chapter 1: An Introduction

An Introduction to Foster Care

The foster care system is designed to support and house children who are facing critical developmental risk due to abuse, neglect or parental death. Although youth may be placed in care due to various hardships, studies illustrate that they have common experiences of developmental trauma (Briggs et al., 2012; Riebschleger et al., 2015; Takayama et al., 1998). Out-of-home placement most commonly occurs due to ongoing issues of abuse and/or neglect in the home, but it can also be due to the death of primary caregivers, abandonment, or child behavioural problems (Takayama et al., 1998; Trocmé et al., 2019). Furthermore, most families whose children must be placed in care can be supported enough that their children can return home within six months of placement (Trocmé et al., 2019). As a rule of ethical social work practice, every attempt must be made to support and reconnect children to their families of origin (Raz & Edwards, 2024). However, children can languish in the care system when their families are unable to follow children protective service (CPS) recommendations. These children may be forced to move multiple times between homes and/or group care facilities, increasing their risk of being abused and severing connections to formative relationships (Hager, 2020). Thus, foster children's early life hardships start before placement but can be compounded by maltreatment and placement disruptions in care itself (Tucker & MacKenzie, 2012).

While youth protection exists to save the lives of the most vulnerable children in society, unfortunately in some situations the system itself may developmentally harm already traumatized children. Only if a child is assigned to a well-matched, healthy family that treats the child like an equal member can they experience a relatively normal childhood. Unfortunately, due to the limited number of beds in quality foster homes, inadequate integration supports, unrealistic expectations, as well the complex needs of children in care, this ideal match rarely occurs. Critical foundational gaps can thus emerge for abused, abandoned, and orphaned children in foster care.

Different placement types, ranging from kinship care to residential care, offer varying intensities of treatment depending on the child's needs at admission. These diverse homes and facilities where vulnerable children reside vary in quality, structure, and approaches to care. Responsive placements can improve lives and protect children. However, poor matches or unresponsive caregiving environments may inadvertently hinder development, creating complex hardships for already traumatized children (Dubois-Comtois et al., 2016; Riebschleger et al., 2015; Smyke et al., 2010). Transition-aged adolescents and those from institutionalized congregate care settings are particularly vulnerable. Adolescents aging out of care often transition to adulthood with a variety of disadvantages and inadequate support, creating a precarious introduction to adulthood.

These transition-age hardships are compounded by the developmental adversities that many youths have experienced early in life. Many foster youths have experienced adversity in the womb such as having mothers who were stressed, abused, or abusing substances (Marcellus & Badry, 2023). Perhaps relatedly some children in care were born very prematurely (Vig et al., 2005), while others can experience severe preplacement abuse and/or neglect that likely affects their lives for extended periods (Dorsey et al., 2012; Hambrick et al., 2019). Finally, placement itself is not innocuous as some children are abused and neglected within the placements assigned to protect them (Benedict et al., 1994; Euser et al., 2014; Hobbs et al., 1999; Yoshioka-Maxwell, 2023) or moved often enough that it creates a traumatic experience (Konijn et al., 2019; Unrau et al., 2008) and difficulties trusting caregivers. Even in the best foster homes, children's lives and social support networks can be disrupted (Keller, 2021; Riebschleger et al., 2015) which can create important ecological harms. For all these reasons and likely others, young people with care experience have highly stressful childhoods and subsequently many suffer severe consequences in adulthood (Barboza et al., 2017). Furthermore, for those young people who age out of the system, the abrupt transition to adulthood can create economic, educational, and social hardships that also affect developmental trajectories. Childhood trauma histories and emerging adulthood precarities can affect the well-being of these foster youths in complex ways that warrant comprehensive research attention so that we can begin to mitigate these hardships and develop appropriate responses.

Summary of Placement Types

At the lower end of placement intensity, extended family members can provide housing, known as ‘kinship care’ (Cuddeback, 2004). Kinship care is typically preferred for children who must be placed, if there are family members who volunteer, and it can be arranged safely. Children whose extended families cannot provide housing support are most often placed in traditional foster family care (Takayama et al., 1998). When children cannot be housed in traditional foster families, they may be placed in treatment foster homes (Li et al., 2019), group homes, or residential care services, listed in order of increasing cost and increased child needs. Services referred to as residential care may be locked and highly structured institutions (Baker & Calderon, 2004; Briggs et al., 2012; de Valk et al., 2016). However, there is variation between the structures of these group facilities, such that some group homes can be run as total institutions and some residential care centres may be less restrictive. It depends a great deal on the nature of the children they are assigned to support and the culture of the institution (Ramaswamy & Seshadri, 2020).

This thesis focuses on congregate care alumni, colloquially referred to as group or residential care alumni. These terms will be used interchangeably throughout the five chapters, even though there are some important distinctions between these constructs that I will later address. I categorize group home care as facilities that house 15 or fewer children at a time, and residential care as facilities that typically host more than 15 children at one time. Congregate care is a catch-all term that encompasses both forms of group care placement. These facilities are often used in Canadian and US contexts as a last resort placement when other forms of child welfare placements have failed (Ramaswamy & Seshadri, 2020).

Placement failure, which is also called placement disruption, can occur for many reasons. Oftentimes, failure occurs when a child's needs are higher than a foster family expects or when there are important conflicts between a foster child and other members of the household (Leathers, 2006; Tunno, 2016). When a placement is disrupted due to behavioural or safety concerns, a child is typically moved to a higher-level and more structured placement.

Therefore, children with severe behavioural and mental health issues are more likely to be placed in residential and group home care (Briggs et al., 2012). These congregate care settings are typically run by staff that work in shifts, and each facility has its own mandate and institutional culture designed to respond to the needs of the children in their care. While often planned as a short-term housing and behavioural healthcare solution for high-needs children, these facilities sometimes must house children for much longer than anticipated, particularly those deemed to be less desirable such as older adolescents and those with disabilities, and severe emotional challenges. However, these facilities, markedly the most restrictive ones, are not designed to transition young people to independent adulthood. However, children still age out of these services and thus their challenges may be unique.

Thus, research on group care practices and corresponding outcomes is critical, as it may help inform practice and provide key insights about the most marginalized children in care.

Aging Out

Children who are both unable to safely return home and cannot be adopted “age out” of the system. Typically, these youth leave care at the age of majority, and many struggle across their transition to adulthood with inadequate resources and fragile support systems. In Canada, estimating the total number of youths aging out is difficult due to the lack of a federal database (Trocmé et al., 2019). We do know approximately 2,000 youth age out annually in Quebec (Goyette et al., 2020) and about 1,000 age out in Ontario (Kovarikova, 2017). Thus, thousands age out of services across Canada, while approximately 20,000 age out of foster care in the United States (Prettyman, 2024).

The sheer number of young people who age out of service and find themselves in hardship indicates a grave social issue with moral, health, and economic considerations. Children aging out of placement have multiple kinds of disadvantages. For example, they experience greater levels of disability (Anctil et al., 2007; Blakeslee et al., 2013; Harwick et al., 2020) and are much less likely to achieve high school or college graduation (Barnow et al., 2015; Pecora et al., 2006) than their same-age peers. Correspondingly, they have higher rates of economic instability and reduced rates of home ownership (Font et al., 2018; Villegas et al., 2018). These transition-age hardships can in turn affect other areas of functioning. Indeed, these young people are perhaps not surprisingly over-represented in every marginalized circumstance. For instance, care leavers have an outsized representation among the incarcerated (Appel, 2016; Bullock & Gaehl, 2012; DeGue & Widom, 2009) in populations facing housing and income insecurity (Berzin et al., 2011; Crawford et al., 2015), and within groups engaged in sex work or exposed to sex-trafficking (O’Brien et al., 2017;

Reid, 2018; Surratt & Kurtz, 2012). Thus, the vulnerabilities of care leavers represent a critical and complex public policy issue.

North American researchers, policymakers, and child welfare professionals agree on the need for drastic changes in transition-age support (Atkinson, 2008; Council on Foster Care, Adoption, and Kinship Care, 2012; Courtney & Heuring, 2005). In response, an increasing body of care leaver literature has striven to both document their needs and propose more responsive solutions to extend and improve transition-age knowledge and support programs (Okpych, 2012; Peters et al., 2009). However, sparse attention has been paid to the later life course of care leavers (Keller, 2021), and this thesis attempts to highlight and begin to fill the resulting knowledge gaps surrounding older adults beyond the transition to adulthood.

Statement of the Research Problem

To address these gaps, this three-article thesis examines the life course well-being of foster care alumni in middle- and late-adulthood. It specifically focuses on North American group care alumni due to the paucity of research on this population and evidence suggesting heightened risk and vulnerabilities compared to those who have aged out of foster family care (Akister et al., 2010; Barnow et al., 2015; Crawford et al., 2015; Dworsky & Courtney, 2009; Goyette et al., 2019; National Conference of State Legislatures, 2021). The North American care leaver literature illuminates two complementary systems that can both inform each other and provide international policy insights.

Both Canada and the United States are large, developed countries with differing health and social services that present unique opportunities for Canadian and American child welfare researchers to share knowledge and mutually inform policy and practice. The United States has federal funding for transition-age foster youth (Okpych, 2012) that requires reporting figures to a national database available to researchers, meaning that currently the US has superior federal databases for child welfare practice and policy and specifically for aging-out youth. They also offer certain niche social services that are unavailable in Canada, such as Section 8, subsidized housing (Zielenbach, 2006) and food stamps (Bailey et al., 2024) for individuals struggling with housing and food insecurity. While Canada lags behind the United States in rigorous data collection, the Canadian social safety net offers more egalitarian responses to the needs of people facing poverty, with more accessible public health services and although not fully operationalized, potentially more inclusive health data.

To provide insights into the needs of care leavers, there are primarily five-panel studies in North America that track the long-term outcomes of former foster youth: the Casey Family Cohort (Fanshel et al., 1989; Harris et al., 2009; Villegas & Pecora, 2012), the Northwest Cohort (Pecora et al., 2006; Salazar et al., 2011), the Midwest study (Courtney et al., 2007; Dworsky et al., 2010), the Cal Youth cohort (Courtney et al., 2018, 2020), and the EDJEP cohort (Goyette & Blanchet, 2022; Goyette et al., 2019; Goyette et al., 2020). However, it is very important to outline neither the Casey Family nor the Northwest cohort (Pecora et al., 2006) includes youth who have aged out of congregate care. This is particularly important because only the Casey Family studies alumni beyond their thirties. Moreover, the more comprehensive studies that include youths from all forms of placement, such as the Midwest, EDJEP (Goyette & Blanchet, 2022) and Cal Youth studies (Courtney et al., 2018, 2020) have only tracked young adults through ages 23-27. Consequently, there are no longitudinal panel projects in North America that report on outcomes for group care alumni beyond their mid-twenties, and therefore little is known about their needs and challenges later in the life course. Thus, my research aims to fill part of this gap by examining the holistic well-being of care leavers over age 30, specifically focusing on their physical, mental, and social well-being.

Theoretical Orientation

To study life course well-being holistically while considering the importance of environmental influences, this study employs Glen Elder Jr.'s life course theory with elements of Bronfenbrenner's ecological systems theory. Commonly used together in the social sciences (Biesta & Tedder, 2007; Bronfenbrenner, 1995; Pratt & Fiese, 2004), these two complementary theories offer a broadly encompassing lens to view developmental trajectories and influences.

Life Course Theory

Life course theory (Elder, 1998; Elder et al., 2003) examines developmental changes from birth until death (Hendricks, 2012), designating the life course as "a sequence of socially defined events and roles that the individual enacts over time" (Giele & Elder, 1998). Panel studies like the University of California Growth Studies, which followed children born in the 1920s and 1930s (Chopik et al., 2019; Jones & Bayley, 1941), and Berkley's Guidance Study (Chopik et al., 2019) also contributed to the development of this theory. These foundational research projects demonstrated critical developmental windows within specific generations. For example, children who were toddlers at the start of the Great Depression, experienced more life-long hardships (Elder et al., 1985) while children who were adolescents at the start of the era, fared better than their siblings. In most cases, adolescents developed more resilience in relation to the financial struggles their families experienced (Elder et al., 1985, 2003). Another example of the importance of developmental timing is studies which showed young men from low-income backgrounds who joined military service in early adulthood fared dramatically better economically over their life course than individuals who joined later in adulthood. It appears that people who joined the military in their 30s did not benefit as much from the opportunities the military afforded (Elder, 1998). This research demonstrates that the timing of both hardships and opportunities influences development sometimes in critically important ways. Examining which factors help or hinder development across the lifespan and identifying the critical junctures (Elder, 1998) and intervention windows could help inform child protection intervention strategies.

Elder's life course theory holds four key principles. Firstly, individuals are shaped by their *time and place* such that certain hardships may be time specific. Secondly, the developmental impact of life transitions is contingent on when they occur in a person's life. Thirdly, people have *linked lives* and therefore the people in one another's lives can support or disempower each other. Finally, individuals can construct their own path through the choices and actions they make, an ability that Elder designates as *human agency* (Elder, 1998).

Minor but critical points of consideration in life course theory include the importance of cultural expectations and how the timing of events can impact the entire life course. For example, a woman who gives birth prior to marriage or before high school graduation may experience social stigma and this may ultimately reduce social support, educational access, and employment opportunities (Elder, 1998). Therefore, the experience of becoming a parent five years earlier than culturally normative can have long-ranging impacts on the subsequent life course due to social influences such as stigma. Furthermore, accumulated hardships for parents lead to increased hardships for their children due to what Elder (1998) terms *linked lives*. Yet, the timing of certain events is not only related to hardships but can also present advantages. As was the case with men who entered the military early and were able to climb economically more so than their peers who join later (Elder, 1998), the timing of certain child welfare interventions is likely crucial for attachment, health and other well-being outcomes. Some child welfare interventions, facilities or post-care services may offer positive "turning points" in these young people's developmental trajectories, which could positively influence foster care alumni's biopsychosocial outcomes. Likewise, the assignment to abusive caregiving environments or simply non-responsive could negatively impact outcomes.

Ecological Systems Theory

In the 1970s, Bronfenbrenner introduced his ecological systems theory which fundamentally questioned the prevailing models of child development that focused cognitive development. He argued these models lacked ecological validity, famously describing developmental psychology as examining "strange behaviour, of children in strange situations with strange adults" (Bronfenbrenner, 1977). Instead, his theory highlights the importance of studying individuals within the contexts of their everyday environments or ecosystems—home, school, work -- rather than in an artificial laboratory. Bronfenbrenner's approach focuses on understanding people within their specific micro-, meso-, exo-, and macro-systems. Over decades, he refined his theory several times adding the impact of time (chronosystem) and biology, ultimately calling it the bioecological theory of human development (Bronfenbrenner, 1995; Bronfenbrenner & Morris, 1998).

Bronfenbrenner's and Elder's developmental theories both offer a broad lens to view child welfare outcome studies. Bronfenbrenner's theories of development articulate that development occurs over time, within stable relationships in a stable ecosystem. Elder's theories point to the impact of cumulative disadvantage, and how pivotal experiences along someone's development may have developmental consequences for the entire lifespan. If we accept that youth protection is an important stress during human development, it may very well be a turning point in the life course. Child welfare placement can improve lives (Chambers et al., 2016) or create lifelong or intergenerational hardships (Brannstrom et al., 2022; Foster et al., 2015). Understanding the critical developmental windows for intervention and biopsychosocial needs across the life course for people with care experience, as well as the ecological and institutional child welfare realities, could better inform child welfare practice and policy.

Ecological Life Course Knowledge Gaps

In general, child welfare researchers focus on children in care and the emerging adulthood period, leaving critical knowledge gaps surrounding the developmental trajectories in the later life course. Therefore, the focus of this dissertation is understanding the life course well-being of adults who aged out of the system. There is a relatively large body of literature on young people who "age out" of the child welfare system. Aging out of services is a somewhat controversial social service policy because children in care are more vulnerable and because their same-age peers are not forced through the economic and emotional hardship of cutting ties with the only support system they have known. The age at which child welfare services are terminated varies by local jurisdiction, but this typically occurs between 17-21 (Bengtsson et al., 2020; Cross et al., 2004; Greeson et al., 2015). The transition process is fraught with hardships because many of these young people are ill-equipped to manage independent life (Rutman, 2007), and they are cut off from housing, food, and emotional support, regardless of their maturity level or capacity for independence (Atkinson, 2008). These conditions predictably create critical hardships, explaining why we see increased homelessness (Dworsky & Courtney, 2009), economic insecurity (Zeira et al., 2022), substance use (Gypen et al., 2023; Moss et al., 2020), and sadly, death rates (Bullock & Gaehl, 2012) in care leavers. While we know that care leavers in their twenties experience disproportionate hardships compared to their same-age peers, we have little information about foster care alumni after age 30. Thus, this dissertation attempts to fill part of this gap and serves as a call to action for researchers.

Overview of the dissertation

This thesis comprises three articles spread over five chapters. Following the introductory chapter is the first article, which lies within chapter 2 of this dissertation. Chapter 2's article is a case study that examines the life course trajectories of two alumni of care age 50+ who spent more than three years in group child welfare placement and aged out of the system. Chapter 3 contains the second article, and it is a scoping review summarizing what is known about the health and mental health outcomes of alumni over age 30. Concluding with a critical analysis of the outcome literature, it presents key takeaways and future research directions. The fourth chapter supplies the 3rd and final article in this dissertation, and it offers a mixed method sleep study, using original data on sleep quality and its association with foster care alumni over the age of 30. The final chapter summarizes and integrates the collective takeaway lessons from each chapter.

Chapter 2: Case Study Summary

The first article in this dissertation is a published qualitative pilot study (Keller, 2021) using a narrative case study approach to analyze two alumni's life stories. It focuses on their transitions to adulthood and parenthood and their insights on emotional healing. It documents that healing occurs across the life span of these adults and that parenting for some group care alumni is challenging for reasons that may be under-documented in the current post-care literature. Currently, foster care research on parenting predominantly focuses on very young parents who are either in the system or have recently aged out (Chase et al., 2006; Harty & Ethier, 2022; Hook & Courtney, 2013; Refaeli et al., 2022). Given the housing and economic hardships that transition-age youths experience (Villegas et al., 2018; Zeira et al., 2022), their emotional experiences with parenting may be under-appreciated. Furthermore, this paper examines the life story of someone who experienced a lifetime of interpersonal violence (IPV) beginning in her childhood and continuing through her romantic relationships. The detrimental impact of her injuries on her health and cognitive abilities influenced the direction of the thesis.

Chapter 3: Scoping Review Summary

Chapter 3 presents the second article, a scoping review that examines what is known about health and wellness in care leavers in middle to late adulthood. To address the uncertainties around the health trajectories of older foster care alumni, we explore what is known about the health and mental health of care leavers and highlight the current gaps in the literature concerning foster care alumni aged 30+. This scoping review establishes that little is known about the life course of foster care alumni who have aged out of the system, due to the usage of data sets that merely report on any history of child welfare placement without documenting aging-out status. Surprisingly few studies can report on the length, type, or even perceived quality of placement, limiting our ability to understand which factors influence longitudinal hardships and resilience. Furthermore, while there are many critical gaps in care leaver health research, the dearth of studies on sleep quality in care leavers presents an area with broad life course implications amenable to cost-effective and short-term interventions.

Chapter 4: Mixed-Method Study Summary

Therefore, the third article in this thesis examines sleep and its relationship to child welfare experience. Sleep is of course critical for well-being and can be disrupted after trauma or overwhelming stress (Buckley & Schatzberg, 2005; van Dalfsen & Markus, 2018). It is well documented that sleep challenges are associated with poorer health and poorer functioning in the general population. Furthermore, in the literature , a few papers examine sleep quality in foster care alumni up to the age of 27 (Fusco, 2020; Fusco & Kulkarni, 2018; Lee & Fusco, 2022) but there were none that examined sleep after 30. Therefore, it is unclear whether these sleeping challenges continue, or perhaps more importantly, what factors are associated with increased sleeping difficulties across the life course. Therefore, our article uses original data to examine sleep quality and its association with both negative child welfare experiences and current health and social support in mid to late adulthood.

Chapter 5: The Conclusion Chapter

Chapter five integrates and synthesizes the takeaway lessons from the three articles, providing a comprehensive discussion of these findings, offering insights for practice and policy, and identifying directions for future research. Collectively, the dissertation establishes a need for more comprehensive data collection, more sensitive transition-age support, and ideally access to specialized care leaver support services beyond emerging adulthood. Across the three articles, the thesis demonstrates important health and well-being life course effects with implications for a variety of practitioners who encounter care leavers across the life course. Given the unnecessary hardships created by current transition-age practices and policies, addressing the limitations in policy, practice, and research may help improve the lives of foster youth by reducing poverty exposure, improving access to higher education, and limiting the deleterious effects of stress on developing bodies. Responding to the complex needs of diverse care leavers requires an intersectoral response, and given the lack of available attention and resources, I believe that researchers can lead the charge for transformative change in child welfare transition-age support and beyond.

Conclusion

In conclusion, this first chapter provides a comprehensive literature review about what is known about the well-being outcomes for child welfare alumni. It justifies this dissertation’s focus on the outcomes of group care leavers over age 30. It also summarizes the theoretical orientation that guides the thesis. In future chapters, this dissertation aims to address these gaps in the life course trajectories of older alumni to provide insights and understanding specific to their health and well-being. The following chapters will delve into specific case studies, a comprehensive scoping review and an original mixed-method study, each of which contributes unique insights and evidence to inform both future research and child welfare practice. The dissertation provides a holistic perspective on how we think differently about measuring outcomes and offers a call to action for researchers by identifying a critical gap in the developmental literature.

Chapter 2: Article 1

Life after Residential Care: A Narrative Analysis Examining the Lives of Older Adults who Age-out of Youth Protection Based Residential Care.

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Date *Jan 20th, 2024*

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Abstract

This exploratory narrative case study delves into the life trajectories of two English-speaking adults age 50+ who spent over three years in youth protection-based congregate care and aged out of these services in Quebec, Canada. It examines how residential foster care alumni describe their life history and what insights they can provide regarding their transitions to adulthood and parenthood, and their placement experiences. Policymakers, clinicians, and researchers should observe that insights from adults over age 40 are underexamined, and these data point to complex interpersonal difficulties that continue well beyond emerging adulthood. The research indicates intergenerational challenges as an important theme, with both individuals reporting relationship struggles with their families of origin, and healing during their fourth decade of life after crises related to their parental roles. Exploring care leavers' perspectives on healing across their life course may provide invaluable insights about resilience and youth protection practices. These narratives highlight several promising areas of future inquiry that may lead to restitution, healing, and transformative change in child welfare practices.

Keywords

Residential care, congregate care, life course, foster care, narrative analysis, case study, Canada

Introduction

Follow-up youth protection studies in North America tend to track children leaving care for three to nine years, roughly from the ages of 17-27 (Courtney et al., 2010; Goyette et al., 2019; Hook & Courtney, 2013; Pecora et al., 2006; Roller White et al., 2015). The exception to this rule is the Casey Family Alumni study, which follows a cohort including some individuals in their 40s who were placed in foster homes by Casey Family Services, a private American agency operating in several US states (Garcia et al., 2012; Pecora et al., 2006). However, the Casey Family longitudinal study does not report on congregate care outcomes at all, or specifically document youth who age out of the system. Instead, it reports on a subset of adults serviced in foster care placements by Casey Family Services at any point during their childhood, not necessarily those who age out of care. Therefore, scant attention has been paid to individuals over the age of 27, or towards those who spent many years in residential care. The well-documented challenges facing this population in early adulthood necessitate a closer examination of later adulthood. Despite the calls of other narrative researchers such as Refaeli (2017) to explore the experiences of alumni of care beyond their mid-twenties, the dominant research paradigm focuses on the transition to adulthood, missing large portions of the life course. Exploring the life history of older individuals may provide unforeseen insights into the transition to adulthood for this under-examined population and help to identify needs across the lifespan and areas to improve within clinical interventions, and to document the pathways to emerging and sustained resilience later in life.

Congregate care services are often considered last-resort placement, and children assigned to these facilities have significantly higher trauma exposure rates, behavioural, and mental health issues than children who reside in traditional foster care (Briggs et al., 2012; Collin-Vézina et al., 2011; Li et al., 2019). In North America, during the sensitive transition to adulthood, youth from congregate care demonstrate significantly higher rates of mental health and behavioural issues (Dregan & Gulliford, 2012), lower rates of high school graduation (Courtney & Hook, 2017; Goyette et al., 2019), increased rates of homelessness (Dworsky et al., 2013; Reilly, 2003), and higher criminal justice involvement (Shook et al., 2009) than youth in transitional family-based foster care placement. These disproportionalities suggest that the challenges faced by youth aging out of congregate care are more severe and persist well into adulthood.

To document the life course of this population, this narrative case study examines the life stories of two adults aged 50+ who spent over three years in residential and group care placements, 'aging out' of services between 17-18. Seeking to illuminate residential foster care alumni's own meaning-making of their life history, this exploratory study garners insights about how these individuals transition to adulthood and parenthood decades after their congregate care placement experiences. Using rich pilot data originating from English-speaking Quebec alumni, the study explores care leavers life course history in detail along with relevant research, policy, and practice recommendations.

Theoretical Framework

Residential care in this paper refers to youth-protection-based institutionalized-care, often rehabilitative or psychiatric in nature (Frensch et al., 2001; Sholevar, 1995). It is sometimes referred to as congregate care (Freundlich & Avery, 2006) and these terms will be used interchangeably throughout this paper. Mishler (1995) describes narrative as a problem-centred area of inquiry*,* an assumption this writer shares. It employs a social justice (Caine et al., 2018; Johnson & Parry, 2015) and feminist lens (Doucet & Mauthner, 2008) with strengths-based perspective (Saleebey, 2000) to examine the struggles surrounding the transition to adulthood for alumni of residential care. It postulates that simply telling untold stories is an act of social justice (Caine et al., 2018) and that all individuals, regardless of life condition, have strengths that can be examined and harvested (Saleebey, 2000). This research examines these stories with life course perspective (Elder, 1998).

Methodology

Approach

A narrative case study design was developed to engage a modest number of people to bring to light the longer-term life trajectories of individuals who spent several years in residential care services as children. This investigation uses elements of both peer research methodology (Lushey & Munro, 2015) and episodic interview approaches in the interview process (Flick, 1997). For example, the interviewer, who is an alumni of group care, employed self-disclosure at times during the recruitment and interview process. Given the focus on the transition to adulthood and parenthood, a four-question interview guide was developed to concentrate on these temporal periods, employing a modified episodic interview method.

Recruitment

Two adults over the age of 50 participated in my in-depth narrative case study. I recruited both participants directly from Quebec Province's public Laurent Commission hearings in January 2020. The Laurent commission was a yearlong public inquiry into youth protection challenges following the untimely death of a young child failed by the system. I individually approached these two adults at the commission after they gave testimonies on their congregate care placement history. I informed them about the study’s purposes, and both subjects provided their contact information. The participants were provided a consent form via email a few weeks later and subsequently agreed to schedule an in-person interview. There were no individuals who refused or dropped out of this pilot study.

Data Collection

Two semi-structured audio-taped interviews were scheduled in person with each participant in early March 2020. The interviews lasted roughly one hour each. I did not execute the second interview with participant one, referred to as Thomas, owing to research restrictions connected to the COVID-19 outbreak. However, I believe that participant one's first interview provided a "saturation of knowledge" (Bertaux, 1981, p. 37) such that the second interview was unnecessary.

The first interview had a predesigned interview guide which featured four broad questions pertaining to experiences in late adolescence, transitions from care, as well as perceived challenges and strengths across adulthood. The opening of the initial interview was largely unstructured. Participants were invited to direct the interview process and share their insights and concerns.

The second interview with participant two focused on themes pulled from the first interview of trauma within care and healing aftercare. Member-checking occurred with both parties over the phone after they had read their transcripts and again when a final report was written.

Analysis

Both participants' interviews were transcribed. The narratives were examined for holistic content to create their individual lifelines (Gramling & Carr, 2004). The turning points of their life course (Beal, 2013) were scrutinized for their episodic commonalities (Flick, 2000, p. 81).

Researcher Positionality Statement

I am personally and professionally connected to this research area. Professionally, I am the founder of CARE Jeunesse, a grassroots non-profit organization that provides support to youth and alumni of child protection services. Furthermore, I worked as a case manager for

10 years with youth leaving care in Montreal. Personally, I am an alumnus of residential and group home care. I spent 5 years in these placements between the ages of 13-18.

Ethical Considerations

Given the emotional quality of the content, I advised interviewees before starting the interview and reminded in the mid-point of the interviews, they could decline to respond to any query, take a break, or stop. Both participants received the contact information to an independent rapid response clinical service should they require clinical support related to the interview process.

The study used member-checking to ensure participants were comfortable with the material they shared. Participants viewed their full transcripts and lifelines. I invited them to adjust any content which they felt inaccurate or uncomfortable sharing prior to submission for publication. To ensure confidentiality, I refer to both individuals by aliases. Their residential care placements names, when mentioned, are also obscured, and referred by pseudonyms. I deliberately left information out such as identifiable descriptions of ethnicity, birthplaces, and residential districts. The study design was approved by McGill University Human Ethics Research Committee, approval # 20-09-043.

Results

A written summary of both individuals' profiles, including a pictorial display of the lifeline of both participants is summarized below.

Profiles.

Thomas.

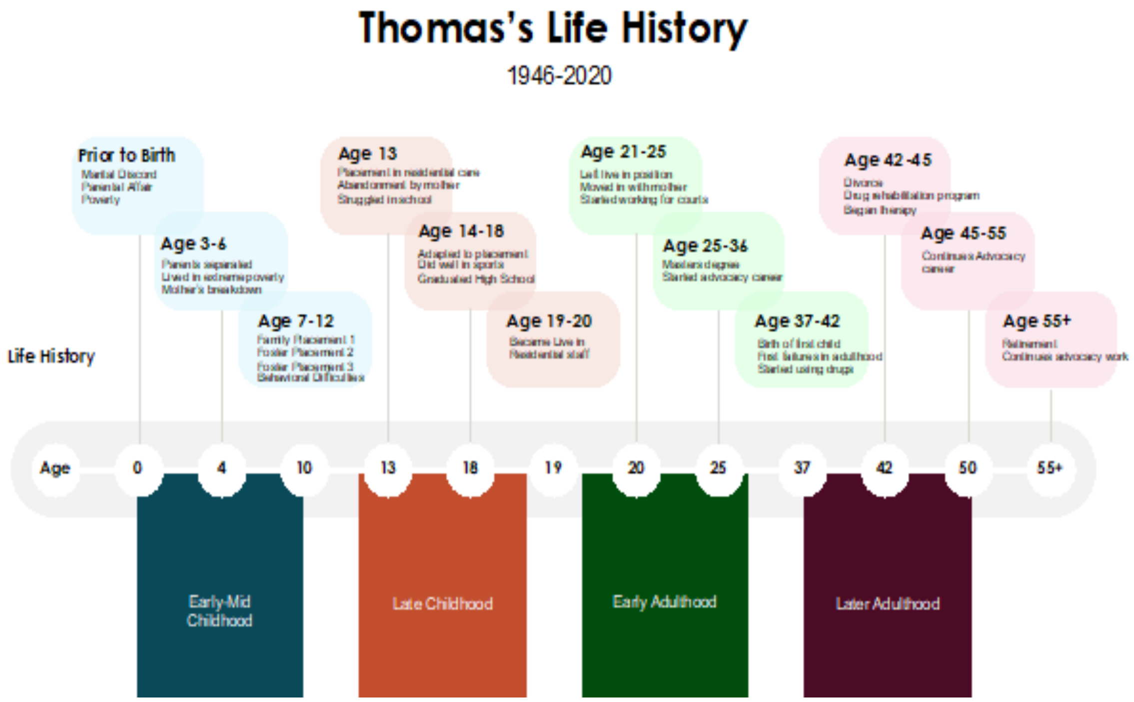
Thomas is a 74-year-old, self-identified biracial alumnus of care. Attributing his placement in care to poverty, he shared that his single mother became overwhelmed raising three boys during the 1940s-1950s, when little public assistance was provided to parents in need, and she suffered a breakdown. Thomas was unclear on the exact dates of his placements; however, he reports leaving his home around age 6, spending a certain amount of time with family friends, then spending roughly 4 years in foster care between two traditional family-based foster care placements and a subsequent 5-year placement in a cottage-based residential care facility campus in Montréal, Québec. Thomas shared he was fortunate to be placed in the same well-resourced public school district for much of his education, something his brother did not experience.

When Thomas aged out of services, he was invited to stay on as a live-in residential care staff. Unclear on dates, he reported becoming a staff for a couple of years after aging out of placement, mostly while he was in university which was funded in part by child welfare related scholarships. Thomas achieved his B.A. in his early twenties and worked for several years as a criminal justice professional. Going back to university to pursue his master's degree in social work in his late twenties resulted him becoming a well-known social justice advocate.

Thomas got married in his late thirties and became a father in early forties. Thomas reported although he always dreamed of being a father, he could not cope as a parent because of his unresolved childhood wounds which were triggered by parenting. Reporting that he became addicted to drugs, which ultimately cost him his marriage, intact family life, and career shortly after his children's births. He divorced his wife, and his children stayed with their mother. Undergoing substance abuse treatment and therapies in his 40s he recovered from drug addictions and regained a successful professional career. He has remained actively involved with his children across their lives. Thomas has developed a meaningful life maintaining an active mentoring relationship with other alumni of residential care, engaging in social justice advocacy, and playing an active role as a father of his two adult children. Thomas timeline is displayed in Figure 1.

Figure 1.

Life Course History of *Thomas*



Carmen

Carmen is a 50-year-old Caucasian woman who attributes her placement to childhood behavioural and mental health issues, including undiagnosed autism, post-traumatic stress disorder, and early hyper-sexualization. After becoming pregnant around age 13, she was forced against her will to have an abortion by her mother and medical professionals, irrevocably harming the maternal bond and her trust in authorities. She reported being placed shortly after her abortion and spending roughly 4 years alternating between 12 unlocked and locked facilities. She described frequent run-away episodes, unmet emotional needs in most of her placements, and the abusive use of restraint in some facilities. Victimized by peers and unprotected by residential care staff while in placement, she and her group home sisters were often approached by pimps and older men outside facilities. Carmen reports that staff actively encouraged the girls' involvement with older men, particularly when they bought gifts or picked girls up in cars. Furthermore, Carmen met her first serious boyfriend while in her group home, a man in his late twenties who tried on her life when she subsequently fell pregnant.

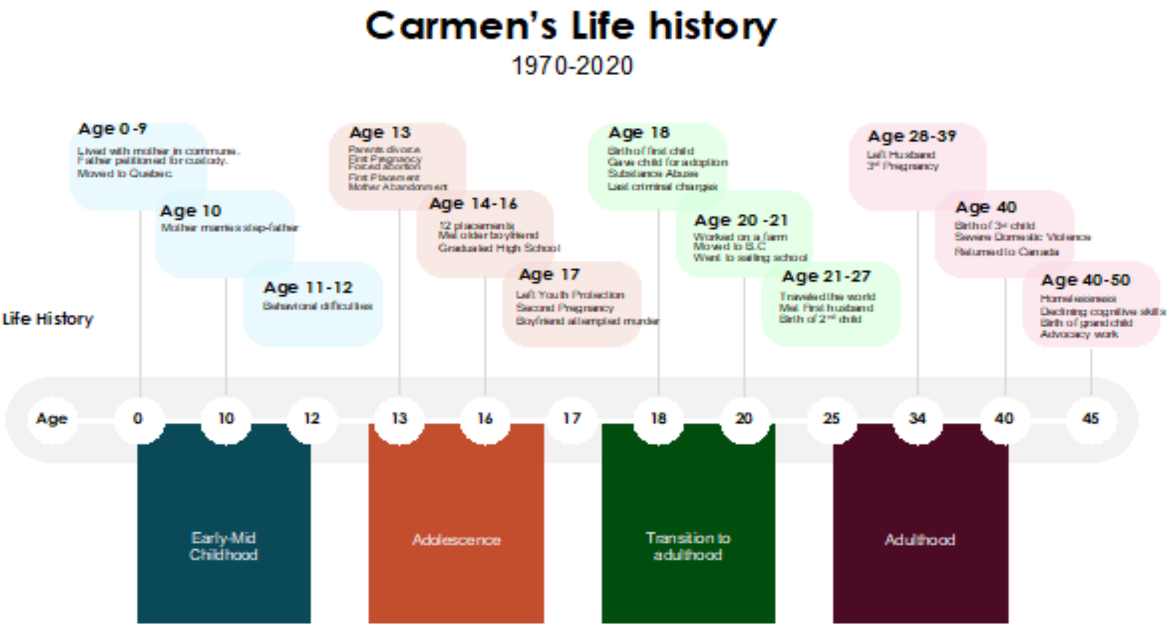
Around the age of 16, Carmen went on a youth protection outward-bound-type sailing adventure that altered her entire life trajectory. Rife with challenges and a near-death experience, this program reconnected her to nature and changed her perspective. Leaving care after completing high school at age 17, she reports she quickly became pregnant gave birth to her first daughter at age 18. Feeling unsafe in her romantic relationship and ill-prepared to protect or care for her child, she ultimately gave her first daughter up for adoption and struggled emotionally for the following year. Leaving Quebec to work on farms across Canada as a day labourer, she found her first well-paid job around age 19 on a sailboat and enrolled in sailing school in her early twenties. Her subsequent sailing career enabled her to travel the world and move abroad, ultimately developing multiple successful businesses with her now ex-husband in a foreign country.

However, her romantic life has not been one of safety, as she reports severe episodes of domestic violence by all three men who fathered her three children. Beyond the psychological trauma associated with domestic violence, Carmen fears that her lifetime of traumatic injuries, specifically her head traumas, has affected her cognitive capacities. She reports that she currently suffers from a progressive neurodegenerative condition which is affecting her balance, impulse control, and memory. She identified these issues became more pronounced following a severe domestic violence episode that occurred ten years ago, when she was forty years old. She reports she felt forced to flee the country she was living in and that her oldest daughter was taken from her at the border. She eventually regained custody of her 2nd daughter. She maintains her maternal role with all her children.

Carmen reports self-chosen celibacy as she recognizes an inability to choose romantic partners safely. She reports experiencing periods of homelessness and food insecurity over the past decade, because of her sudden inability to maintain employment. Carmen reports struggling with basic tasks such as adherence to the bureaucratic demands of maintaining welfare benefits. However, Carmen reports being proud of everything that she has accomplished despite struggling a great deal. She has recently become a grandmother, and she reconnected to her daughter that she gave up for adoption. Carmen finds meaning in life through parenthood and engaging with nature. She supports women experiencing domestic violence and continues to advocate for children in care. She is also currently working on a business plan offering educational services for children like her with special needs. The outline of her life story is available below in Figure 2.

Figure 2.

Life Course History of *Carmen*



Summary

This investigation highlights the complex life histories of two older alumni of residential care. It explores their cumulative losses and traumatic experiences. Seeking to provide a forum for these two adults to share their experiences, this research documents both their experiences and insights towards recovery from trauma. Notably, both participants experienced early losses and neglect prior to care, multiple moves, paternal and maternal abandonment, traumatic experiences in care, loss of their communities of origin, as well as difficulties adapting to both adulthood and parenthood. They both reported a lack of access to mental health services in placement. Furthermore, both found themselves faced in a state of personal crisis in their fourth decade of life related to their parental roles and this forced a period of post-traumatic growth. Admirably, both continue to advocate for reform, to serve others, despite extraordinary hardships. They both show significant resilience, but researchers and clinicians should nonetheless take note of important challenges over their lifespan.

Discussion

This narrative case study shares compelling stories of trauma and resilience in two alumni of residential care over the age of fifty. These stories highlight the need to better understand the long-term impact of residential care and early childhood trauma on the life course. Both participants reported witnessing and experiencing multiple traumas while in placement. Their narratives are consistent with the literature, which documents greater rates of maltreatment and cumulative losses for children in placement (Greeson et al., 2011; Riebschleger et al., 2015), and trauma exposure is particularly elevated for children and adolescents in residential care (Euser et al., 2013; Euser et al., 2014; Hobbs et al., 1999). Studying transitions from care into adulthood is critical to inform policy discussions, but we must better recognize the evolution of strengths and needs across the life course as people enter different phases of life and assume new roles.

While the interviews focused on examining the transition to adulthood, both individuals demonstrated a preoccupation with the multiple losses and traumas accumulated prior to and during placement. In addition to discussing their lost relationships with their mothers, they both also reported the lack of a positive relationship with their fathers. While less prominent a preoccupation for both subjects, the absence of their fathers may nonetheless have played an important role in the breakdown of their families. Beyond experiencing critical parental losses, they each moved multiple times, losing personal and communal connections, which ultimately created a gap in their support system. Major separations and traumatic experiences have cumulative effects for youth in congregate care and can create a lifetime of vulnerabilities if unattended (Euser et al., 2014; Hobbs et al., 1999; Hyde & Kammerer, 2009). It is important to consider the impact of cumulative losses across the life course, and potential harms to future relationships and other developmental domains. Clinicians should thus consider developing programming geared at maintaining relationships with parents, extended family members, or their broader community.

Carmen’s story illustrates a poignant example of how young women from congregate care are vulnerable to increased victimization and exploitation (Coy, 2009; Giordano, 2021). Carmen’s reports of being groomed by older men for relationships and sex work reflect the issue of sex trafficking minors in care across jurisdictions, which researchers have acknowledged since the mid-2000s (Badawy, 2010; Gragg et al., 2007; Kotrla, 2010). However, Carmen’s experiences during the early 1980s reveal a longer history of abuses, with decades of governmental failure to protect children from sexual exploitation and trafficking. The fact she was routinely approached by pimps indicates coordinated victimization of vulnerable minors in care. Unfortunately, Canada continues to lack the coordination between agencies to monitor and prevent sex trafficking of this young population (Kimber & Ferdossifard, 2020). Carmen’s story also highlights that domestic violence may continue across the lifespan for vulnerable women — an issue with dire health and child safety consequences. While I was unable to locate post-care literature on domestic violence, one study confirmed that seventeen-year-old youths in care have significantly higher rates of intimate partner violence, particularly young women (Jonson-Reid et al., 2007). If women from foster care experience higher rates of intimate partner violence while simultaneously having fewer resources and limited support systems, interventions that support care leavers experiencing domestic violence may be warranted. I would argue that this is a moral obligation of society, who served as their 'corporate parent,' but I would also point out that a contextually sensitive response could prevent intergenerational child welfare involvement, thereby mitigating societal expenses.

Thomas showed remarkable resilience and expediently achieved life's milestones in early adulthood, showing great academic and sporting capacity for which social workers touted him as a success. Employable at a young age, he was the first young adult from his large residential care facility known to pursue a graduate education. However, even with his clear resilience, his unresolved trauma and grief ultimately resulted in the breakdown of his growing family, thus showing that we may lack clear insights about the developmental trajectories of "resilient" individuals if we examine them in snapshots in time. Thomas's later life experiences with parenting add to Mark Courtney's concerning findings that 67% of 21-year-old men who age out of foster care do not live with their own children (Courtney et al., 2007). However, Thomas was over age 40, with an established career and a graduate-level education when he first had children, demonstrating that it is not merely immaturity or economic instability that hinder a healthy transition to parenthood. Indeed, parenting itself may trigger memories of traumatic experiences from childhood. Parenting from individuals on the full spectrum of profiles should be better examined in future, ensuring that researchers include mature and resilient alumni in their participant pools, as those studies of very young care leavers may miss nuances that can only be understood by examining individuals with diverse placement histories, capacities, and outcomes.

Despite significant hardships, these two individuals have shown tremendous resilience and post-traumatic growth. They both have raised healthy children and continue to contribute to their communities. Furthermore, both individuals had insights about what supported their strengths. Thomas is thankful for the sense of community he received from his high school while in placement. His flourishing in high school set him up for a lifetime of career success, while Carmen's lack of placement and educational stability prevented her from following an academic path after graduating high school. However, she was thankful that the sailing program not only helped her emotionally but also redirected her career path in a rewarding way. While life-course flashpoints are hard to predict, Thomas and Carmen's narratives show that offering youth placement stability, educational stability, and traditional and alternative therapies can provide greater opportunities for future success.

Finally, these stories point to the importance of understanding and documenting historical trauma in childcare institutions (Karim, 2017). Thomas and Carmen's stories are but two of many, as the province of Quebec has an ongoing class action litigation in process for abused alumni of residential care (Feith, 2019). Examining these stories between regions, placement types, and decades may yield valuable insights about both positive and negative childcare practices that may affect children currently in placement, while equally helping identify paths to restitution and healing.

Limitations

This research selected subjects from a public forum that included politically active alumni of care, and therefore the sample is not representative. It did not aim to develop generalizable conclusions. Since they were reporting on experiences that took place decades ago, it is challenging to use their life stories to shape current policies and programs, which have transformed over the decades. However, while the details of their histories are period-specific, the overarching theme of loss and trauma continues to be pertinent to the youth protection system today, and this study further underscores the importance of life course developmental perspectives (Elder, 1998) in child welfare research to better inform care-leaving practice and policy.

Finally, while the peer interview process has tremendous merits, it also involved unanticipated challenges. One participant took on a mentor-like role during the interview process, which is common in the alumni movement but altered the content of the interview, possibly due to the age differences between the interviewer and both participants. Peer interviews are an appropriate way to approach marginalized individuals or those with traumatic life histories. Yet the content of each interview may qualitatively differ depending on discrepancies between the ethnicities, cultures, ages, and life conditions of the interviewer and participants, even if they have important commonalities.

Implications for future research

This paper highlights the long-term struggles that alumni of congregate care face (Copeland et al., 2018). These findings suggest that healing is a lengthy process (Fahs, 2011) occurring well into the forties of both individuals. This research extends the findings of Dregan and Gulliford (2012), who found life course impacts up to age 30. Few researchers examine alumnae of care beyond the third decade of life. I was unable to locate a single peer-reviewed Canadian child welfare outcome study focused on emancipatory youth. I was additionally unable to locate a single qualitative study that interviewed care leavers over the age of 40 in North America.

Therefore, this article identifies several important gaps. Canadian outcomes need to be better documented in the peer-reviewed literature, while longitudinal research needs to follow alumni of all forms of care longer to understand life course outcomes. Research focusing on domestic violence and parenting experiences for alumni of congregate care should likewise be better developed. Researchers may want to examine resilience less from a snapshot in time of care leaver deficits, and more through the progressive and frequent documentation of development, possibly with a typographical approach scrutinizing more holistic areas of functioning. Given the intergenerational impact of trauma (Bar-On et al., 1998; Bombay et al., 2009), future research could delve into the intergenerational impact of congregate care, as both participants verbalized some challenges in family life. Working to understand how social networks and family relationships evolve for care leavers from various types of placements would also be beneficial. Developing community-based responses for this population with a research-based framework may help to build the case for appropriate and sensitive community responses while simultaneously helping to expand the available life course data.

Conclusion

This case history analysis captures the life stories of two adults over age fifty who spent more than three years in residential care, to share their stories and highlight the need for an expanded research agenda that incorporates life course developmental perspectives. It highlights important and complex histories of loss and trauma, which suggests that recovery is a lifelong process, and that healing can emerge later in adulthood than that the period on which researchers currently focus. In sharing these life stories of hardship and resilience, I hope that understanding and awareness can be gained about the plight of youth from residential care across the lifespan. Future research protocols must be advanced to better understand the developmental, ecological, and intergenerational trajectories of these individuals to help guide more holistic and responsive interventions and to improve upon transition age supports.

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Interchapter 1:

Bridging Narratives to what is known more broadly about health across the life course in care leaver populations.

The preceding narrative case study presents the poignant experiences of *Carmen* and *Thomas,* offering a rich tapestry of their lives which were marked by trauma, resilience, and an enduring struggle to heal. Transitioning from these deeply personal narratives to a broader scoping review, we traverse a continuum of understanding, from the intimate details of these two alumni's lives to seeking to understand what is known in international research on care leaver's physical and mental health outcomes after the age 30.

Carmen and *Thomas*'s stories serve as powerful testimonies, encapsulating the complexities and challenges faced by individuals who spent many of their formative years in institutions. Their narratives underscore the profound impact of early trauma and caregiver instability. Yet their stories, while deeply personal, also echo the broader themes and patterns documented in the research literature.

It is well established that adverse childhood experiences (ACEs) such as child abuse and neglect can have a profound and lasting effect on health and well-being across the life span (Avent et al., 2021; Claypool & Moore de Peralta, 2021; Herzog & Schmahl, 2018). Research suggests that individuals who experience ACEs are at increased risk for a range of health problems in adulthood including many chronic diseases and mental illness. Given the stories of abuse and neglect in the interviews as well as what we know about the risk factors associated with ACES in the general population, (Hughes et al., 2017; Kappel et al., 2021) it seems crucial to examine what is known about the health of care leavers later in life.

The care leaver literature has documented that both substance use, and domestic violence are prevalent in foster care alumni (Blake et al., 2018; Moss et al., 2020). and these two issues have critical public health consequences. We documented these issues in my case study as we saw that *Thomas* suffered and recovered from addictions in the middle of adulthood. His addiction started when he became a parent and found himself emotionally triggered by parenthood, because he hadn't been parented himself. He reported he did not have the coping mechanisms to respond to his parenting challenges. *Carmen's* post-care-related health challenges, on the other hand, are starkly different. She is currently experiencing a cognitive decline that she associated with repeated child abuse and domestic violence-related head injuries, We know that women from foster care are at increased risk of IPV. We also know that victims of IPV who experience repeated head traumas are at increased risk of cognitive challenges (Karr et al., 2024). However, in Carmen's case, her physical traumas and head injuries started in childhood and very little is known about the cumulative impacts for people who experience IPV this early. These individual accounts offered insights into the diverse and complex health challenges that can be faced by care leavers across their life spans.

Substance use and cognitive decline have important health and intergenerational repercussions. Therefore, the following scoping review manuscript expands beyond the confines of individual narratives, casting a wide net to synthesize existing knowledge about the physical and psychological health related outcomes of care leavers (Gypen et al., 2023). Through a systematic examination of empirical studies that document outcomes in care experienced by people over age 30, I am seeking to learn collectively what is known about the later life outcomes of care leavers and what gaps might exist within the literature. By elucidating the existing knowledge base and highlighting the areas in need of attention, this work is aimed at helping to identify pathways for improved data collection, and to harness information that could be used for advocacy.

Chapter 3: Article 2

Unveiling the Life Course Well-Being of Care Leavers
A Comprehensive Scoping Review on the Health and
The mental health of care leavers age 30 and beyond

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July 1, 2024

Abstract

Foster care outcome research provides critical insights into the impact and efficacy of child welfare interventions as well as the developmental needs of those who experience placement. As the outcome literature to date has predominantly focused on children and transition-age youth, the later life course of care leavers has not been thoroughly explored. Using Arksey and O'Malley's (2005)scoping review framework, we examined 29 articles addressing health and mental health outcomes among care leavers. Across the life course, individuals with care experience exhibit a higher prevalence of both mental (28/29 articles) and physical health issues (12/29 articles). However, most of the studies conflate care-experienced individuals with care leavers, limiting our understanding of those who age out of the system. This review identifies key gaps- particularly in physical health research and how we conceptualize wellness. It offers directions for future exploration.

Keywords: Care leavers, Foster Care, Institutionalization, Life Course, Youth Protection

Trajectories of Life Course Well-Being of Care Leavers Age 30 and Beyond: A Scoping Review

Researchers have documented significant challenges facing youth who have experienced child welfare placement, and these issues affect a significant percentage of young adults across the transition into early adulthood (Courtney et al., 2007; Dworsky, 2009; Refaeli et al., 2013; Scannapieco et al., 2007). There are clear challenges facing transition-age foster youth and consistent evidence holding across scoping reviews that span the transition to adulthood, from late adolescence through the early adulthood periods. The challenges highlighted in previous studies cut across domains of development to include difficulty achieving basic academic qualifications (Refaeli et al., 2013; Reilly, 2003; Rosenberg & Kim, 2018; Schelbe et al., 2022), high rates of unemployment and lower quality employment (Cameron et al., 2018; Ibrahim & Howe, 2011; Lee & Yoon, 2009; Zeira et al., 2014), reduced financial stability (Courtney et al., 2007; Rosenberg & Kim, 2018; Zeira et al., 2023), and limited social integration (Curry & Abrams, 2015; Jones, 2014).

These psychosocial and economic challenges facing transition-age foster youth have been examined and documented in several previous systematic and scoping reviews (Gypen et al., 2017; Häggman-Laitila et al., 2018, 2019; Phillips et al., 2023). Notable among these reviews is one systematic review focused on documenting the needs of youths aging out of the system with mental health disorders (Kang-Yi & Adams, 2017) and one which focused on youth's mental health after care (Phillips et al., 2023). Resilience factors among youth aging out of the system have also been reviewed (Nuñez et al., 2022). While several review studies have examined the health of children in care (Lee & Yoon, 2009; Leloux-Opmeer et al., 2016; Vasconcelos et al., 2021), only one that we could locate examined the physical health of care leavers (Power & Hardy, 2024). Finally, and alarmingly, one systematic review found alumni of care have elevated rates of early mortality, a trend that held true globally (Batty et al., 2022). Across these studies they highlight complex psychosocial and health related adversities.

Despite the valuable insights provided by previous systematic and scoping review articles to inform policy to better support care leavers across the transition to adulthood, the research has predominantly concentrated on the experiences and outcomes of transition-age youth and young adults under the age of 30. This has left an important knowledge gap in the literature when it comes to understanding the needs of alumni of foster care who have reached or surpassed early adulthood (Keller, 2021; Refaeli, 2017). Consequently, the life course and intergenerational impacts of childhood trauma, family separation, and early life instability on a person's later development – factors affecting many foster youths – remain less elucidated in terms of their implications for later life outcomes and barriers or promoters of healthy aging. Our scoping review seeks to build on the important contributions of the literature to understanding the transition to adulthood through aiming to home in on the experiences and challenges faced by care leavers moving into and through middle and later adulthood. By concentrating specifically on adults who have surpassed the age of 30 and were placed out-of-home as children, our aim is to capture what is known about the later trajectory of their lives. Through this investigation, we seek to provide a more comprehensive understanding of the life course outcomes and recovery, shedding light on their long-term life course health and mental health outcomes and recovery factors.

Method

Search Strategy

The search strategy primarily focuses on understanding the mid- and late-adulthood outcomes of those who have aged out of foster care. A secondary objective involves exploring variations in research approaches that contribute to our knowledge of outcomes. An initial article sort indicated three broad domains; health and mental health, life course relationship trajectories; and mid- and later-life economic and educational outcomes. This initial review focuses on health and mental health.

To find relevant studies, the following bibliographic databases were searched: PsycINFO (Ovid, 1806 – present), Social Services Abstracts (ProQuest), and Scopus. All three database searches were limited to publications from 2000 to June 2023 and to peer-reviewed publication types. PsycINFO was limited to journal articles, peer-reviewed journal articles, and journal articles where the peer-reviewed status was unknown; ProQuest Social Services Abstracts was limited to peer-reviewed publications; Scopus was limited to document type article or review. A two-step article search strategy was collaboratively developed with the support of the McGill Social Work Librarian, Nikki Tummon, and further refined through discussion with the principal investigator. The database searches were all run on June 12, 2023. The search combined terms related to aging out of foster care and long-term outcomes. See Appendix for the PsycINFO search strategy. The final search results were exported into Rayyan, a free web-based tool commonly used to de-duplicating, screen, and select articles for scoping reviews.

Initially, the OVID and ProQuest Social Service databases were queried using specific keywords, abstracts, and titles. We did so over two searches. The first search used six Boolean search terms: (1) “foster care” OR (2) “care leavers” OR (3) “foster care alumni” AND (4) “outcome*” OR (5) “longitudinal” OR (6) “long-term prospective.” The second search employed seven Boolean search terms: (1) “foster care” OR (2) care leavers" OR (3) “foster care alumni” AND (5) “qualitative” OR (6) “narrative” OR (7) “ethnography.

Inclusion and Exclusion Criteria

Inclusion Criteria:

Studies were included if they fulfilled seven requirements: (1) The study sample interviewed adults aged 30 or older, who had been placed in out-of-home care (foster care, group home care, or kinship care) during their childhood. (2) The sample substantially represented participants aged 30 and above at the time of data collection, with a minimum of five participants in qualitative studies or at least 10% of the sample size in quantitative studies. (3) The studies were published in English between 2000 and 2023. (4) The research addressed aspects of life after the age of 30 for care leavers. (5) The researchers used qualitative, quantitative, or mixed-method approaches. (6) The studies incorporated data directly obtained from alumni for at least 30% of their outcomes, minimizing reliance on staff or foster parent perspectives. (7) The research reported on outcomes about health, mental health, or social relationships.

Exclusion Criteria:

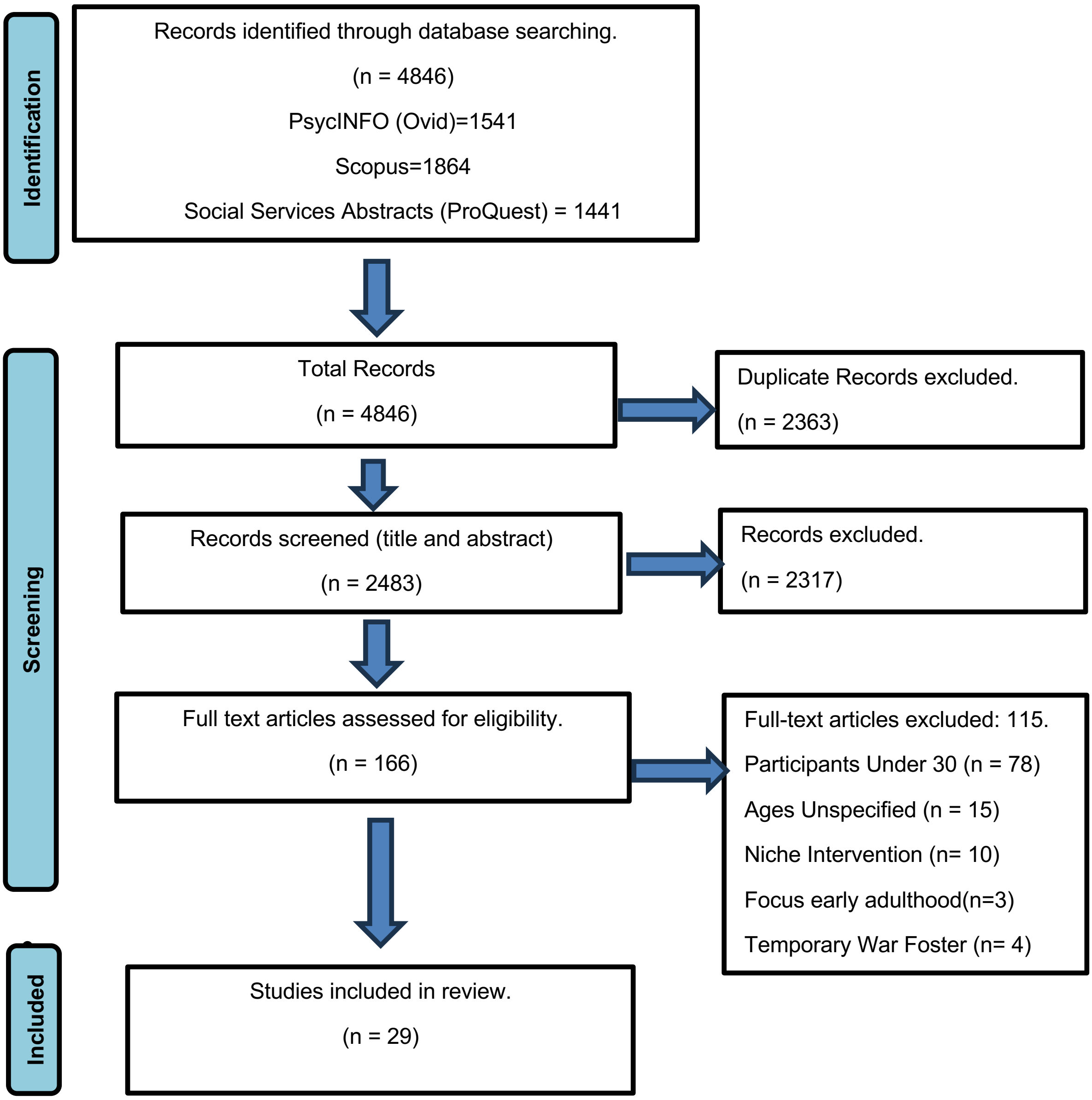
Studies were excluded if the research exhibited any of the following nine characteristics: (1) The research exclusively focused on outcomes of minor children in foster care. (2) The studies concentrated on adults under age 30. (3) The findings lacked clarity regarding the age of the interview or data collection. (4) The studies primarily examined outcomes or opinions of foster parents or other caregivers. (5) The researchers investigated primarily foster youth who were adopted while in care. (6) The researchers interviewed individuals over age 30 but primarily focused on gathering insights into their childhoods or early adulthood. (7) The studies were not published in English between January 2000 and June 2023. (8) The research focused exclusively on niche populations such as undocumented migrant children or those placed out-of-home for short terms due to war. (9) The studies focused on relationships, income, or education. Articles meeting this last criterion will be included in follow-up scoping reviews.

Data Extraction:

The following data were extracted from the studies: (1) cohort name or administrative data, (2) study design, (3) country, (4) sample size and characteristics (e.g., placement history type), (5) health and mental health outcome measures, and (6) age of participants. We were primarily interested in documenting the needs of those who aged out of the youth protection system. We hypothesized that these adults who aged out of placement, on average, maybe more vulnerable than those who could be safely reunified with their families of origin or who were adopted during placement. However, due to analytic and data collection challenges, it is often not possible to separate the articles examining those who aged out of the system versus those who did not therefore we examined all papers that tracked people with care experience after age 30.

We were also interested in documenting the type of care leaver that each study followed such as documenting which studies reported on outcomes from those placed in family-based care or congregate care facilities (e.g., group homes and residential treatment centers) and which articles could not report on the type of placement history. Likewise, we were interested in which studies reported on and controlled for differences between placement experiences and trajectories. We further wanted to understand if any studies reported on preplacement factors, quality of care, and length of placement, and if any of these factors were controlled in their analysis and reporting.

Prisma Flow Diagram



Results

Twenty-nine articles were included in this scoping review. The largest number of peer reviewed articles came out of the USA, which included 14 studies while Sweden produced 5 articles. There was also representation from the UK (4), Australia (1), Belgium [Flanders] (1), Canada (1), and Israel (2). One article performed a cross-country comparison of England, Germany, and Finland. Please refer to Table 1 for a list of all included countries. These twenty-nine studies were predominantly quantitative with one study being qualitative and one study being mixed method (Fernandez et al., 2017). Only one dataset shows a critically outsized representation in this review: the US-based Casey family cohort study. This study provided the data for 8 articles. Table 2 outlines the various data sets that are named and labelled in the methods sections of the articles. Unnamed studies were referred to by the author's name and year in table 2.

We were interested in examining which studies accounted for placement type and whether these studies controlled for those who aged out of the system or were placed at any time in their childhoods. The study thus categorizes placement history types by family-based foster care, and congregate care which broadly encompasses group homes, residential care, child welfare based residential schools, mother and baby centers, and orphanages. Studies with unclear or unreported placement history data are labeled as unknown. Within these papers, three included studies focused solely on congregate care alumni, seven were focused specifically on those placed in foster families, and 12 studies did not specify which types of placement histories were included. Finally, only two studies included and reported on child welfare placement histories, while controlling for differences in long-term outcomes between distinct placement history types (Dregan & Gulliford, 2012; Okpych & Courtney, 2021)

In terms of aging out within these articles most summarize outcomes with adults who spent any time in care before the age of 18. There were only 2 studies that explicitly state they focus on adults who aged out of the system (Achdut et al., 2022; Okpych & Courtney, 2021). A handful of other studies report on what percentage aged out, or state that most aged out (Fernandez et al., 2017; McKenzie, 2003). Most of the studies either do not include, mention, or control for aging-out in their analysis. Therefore, care leavers in this literature review mostly reference people who spent any amount of time in out-of-home care as children. In terms of study design, quantitative analysis (27) is the most frequently, and one study was qualitative (Nuytiens et al., 2018) and employed mixed methods (Fernandez et al., 2017).

This narrative review summarizes the known outcomes in two subsections: the first on physical health, and the second on mental well-being. Each subsection first provides a broad overview of the topic and then summarizes specific or niche findings that may have public health research implications. The results section concludes with a brief analysis of disproportionality for each subsection, followed by the discussion and conclusion.

Health

Overall health findings

Studies over the past two decades have consistently reported worse health outcomes for people placed in out-of-home care than those in the community or matched samples (Cameron et al., 2018; Schneider et al., 2009). Twelve studies included in this scoping review dealt with physical health or well-being (Anctil et al., 2007a; Anctil et al., 2007b; Cameron et al., 2018; Fernandez et al., 2017; Jackson Foster et al., 2015; Parsons & Schoon, 2022; Schneider et al., 2009; Villegas et al., 2011; Zlotnick et al., 2012) but only three delved into specific physical health diagnoses (Cooley et al., 2018; Schneider et al., 2009; Zlotnick et al., 2012), while three reported on early mortality rates (Bullock & Gaehl, 2012; Cameron et al., 2018; Vinnerljung & Hjern, 2014).

In a longitudinal panel study of women's health in California, women who experienced out-of-home placement self-rated fair or poor health at a rate two times higher than those who were never placed (Schneider et al., 2009). In the UK, Parsons and Schoon (2022) similarly found higher rates of poor general health in the out-of-home care group than in the sample never placed, while Cameron et al. (2018) generally found lower rates of subjective wellness across the UK, Finland, and Germany. Bullock and Gaehl (2012) reported that those with a history of child welfare placement had lower overall physical health before the pandemic than their same-age peers. The only study that conversely reported better health outcomes for those in out-of-home care had one critical limitation in that the control group was not matched and was, unfortunately, significantly older than the subgroup that experienced foster care (Cooley et al., 2018). While the mean age of participants is missing, the age gap is at least a decade, making it difficult to draw accurate conclusions about the differences between low-income foster care alumni and the low-income general population.

Specific diagnostic and symptom-related health findings

In the one study that addressed specific medical diagnoses, Zlotnick and colleagues reported that midlife rates of diabetes, hypertension, asthma, or epilepsy were higher for alumni of care (Zlotnick et al., 2012) suggesting that these self-evaluations of poorer health likely have diagnostic validity and should be explored in additional research.

The literature also confirms higher premature death rates for the out-of-home care populations in several European countries. Two longitudinal studies reported a higher mortality rate for care leavers than their matched controls. Bullock and Gaehl's (2012) UK sample compared care leavers to their non-placed biological siblings, finding a 50% higher death rate in the former group. A tri-country comparisons yielded similar findings in England, Germany, and Finland (Cameron et al., 2018). Of these three European studies, Bullock and Gaehl (2012) have the strongest matched control, while the tri-country cross comparison study helps to confirm their findings throughout developed European countries. Notably, the included studies based outside of Europe have yet to report premature death rates.

Etiology

Additionally, an Australian sample reported qualitative findings that many adults were struggling with health conditions related to their childhood trauma, including sequelae related to physical abuse such as unset fractures (Fernandez et al., 2017). These unique insights add nuance to the complex literature on post-foster care health.

Disproportionality and Other Analytic Control Factors

In terms of health-related disproportionality, the US-based Casey family cohort found that differences between white alumni were not statistically significant in comparison to racialized alumni. However, while race was not a statistically significant factor, both women and older alumni of care on average reported worse health outcomes than male and younger alumni (Villegas et al., 2011).

Mental Health

Overall mental health findings

Previous studies have reported high rates of mental health challenges for youth in the transition from care (Phillips et al., 2023). Their findings are confirmed by twenty-eight of the twenty-nine included studies that reported on some form of mental health outcomes in adults over age 30 (Anctil, et al., 2007a). Please see Table 3 for a full summary of the articles included and their extracted data. There is great variability in how studies measure and report on mental health outcomes. Some relied on measures of broad constructs such as happiness (McKenzie, 2003), life satisfaction (Achdut et al., 2022; Dregan & Gulliford, 2012) quality of life (Anctil et al., 2007b) and psychological distress (Fernandez et al., 2017; Sulimani-Aidan et al., 2022), self-esteem (Anctil, et al., 2007b), perspectives on resilience (NuytIen et al., 2018) and optimism (Sulimani-Aidan et al., 2022). While other studies reported on factor such as psychiatric medication (Brännström et al., 2020; Cameron et al., 2018; Vinnerljung &

Hjern, 2014), psychiatric hospitalization (Brännström et al., 2017; Vinnerljung & Hjern, 2014) or conducted interviews that identified rates recent mental illness (Anctil et al., 2007b; Cameron et al., 2018; Cooley et al., 2018; Fechter-Leggett & O'Brien, 2010; Jackson Foster et al., 2015; Roberts, 2017; Villegas & Pecora, 2012). Collectively, these studies all seem to point toward long-term challenges facing alumni of care across the life course.

Studies examining mental health more broadly report that those with care experience have worse mental health. In an Australian sample, researchers found chronic mental health issues to be much higher than in the general population (Fernandez et al., 2017). A study using the California women's health survey data found that 22.8 % of the female sample of care leavers experienced frequent mental distress compared to 14.6 in the general population (Schneider, et al., 2009). Likewise, researchers examining the British cohort study found that any experience with out-of-home care in childhood was associated with poorer mental health in adulthood when compared to their same age peers (Parsons & Schoon, 2022).

The Casey family cohort study, because of its routine screening for mental health diagnoses, is over-represented in the mental health literature in this review. A broad Casey family cohort study found that 46% of children placed in Casey foster homes as adults met the criteria in later life for mental health diagnoses, with PTSD, panic disorders, and depression being the most common (Fechter-Leggett & O'Brien, 2010). Another Casey family study reported that 20% had symptoms of a diagnosable condition in the last 12 months, and that 10% had three or more mental health diagnoses in the last 12 months (Jackson Foster et al., 2015). These findings suggest that foster care experiences are associated with important mental health vulnerabilities across the life course. A handful of studies examined specific diagnostic outcomes. Here we will report on depression, suicidal ideation and completion, anxiety, and substance abuse.

Specific diagnostic findings

Depression

All studies that specifically examined depression symptoms reported higher rates among care leavers. This finding was true in low-income medical clinics in the United States, where adults with childhood foster care experience reported higher rates of depression than their non-placed peers (Cooley et al., 2018). In Canada, Métis foster-care alumni experienced depression symptoms at a rate nearly 50% higher than found among Métis adults without a history of childhood placement (Kaspar, 2014). The Casey Family cohort has also consistently reported on mental health conditions with depression being the second most prevalent after PTSD. Casey Family researchers further found that 75% of care leavers with depression had comorbid conditions (Jackson Foster et al., 2015), suggesting a unique vulnerability to co-occurrence of a constellation of mental health conditions.

Suicidal behavior

Sadly, suicidal ideation and suicide completion are higher in the foster care alumni group, as evidenced by a handful of studies. Brännström et al., (2020) found that suicidal behaviour was more common later in life amongst those placed out of home when comparing care leavers to their biological siblings who remained at home. There were four times the number of deaths by suicide in foster care alumni than among their non-placed siblings. Hospitalization rates were also elevated for these siblings, but 1/6 of women who were placed in care as children were hospitalized from a suicide attempt versus 1/15 of their siblings. Increased rates of suicidal ideation were corroborated by a Canadian sample that indicated twice the rate in Métis care leavers than in a matched non-fostered Métis comparison sample (Kaspar, 2014).

Anxiety

Anxiety-related disorders are infrequently reported in the literature. PTSD was consistently the most common diagnosis noted in the Casey family cohort (Jackson Foster et al., 2015; Schneider et al., 2009). Schneider et al. (2009) found that 18.3% of the out-of-home placement group versus 6.3 % of the comparison group had symptoms of active PTSD diagnosis, while in an additional subset Casey family cohort, 21.6% of alumni had symptoms of PTSD (Jackson Foster et al., 2015). In terms of anxiety-related diagnoses within the Casey family dataset, social phobia, panic disorder, and generalized anxiety were all common, with a range of 9-12% of alumni experiencing these symptoms into their 40s (Anctil et al., 2007a; Fechter-Leggett & O'Brien, 2010; Jackson Foster et al., 2015; Schneider et al., 2009).

Substance use

Six included studies report on some aspect of substance use in care leavers over age 30. A Swedish study found a seven-fold increase in substance abuse problems among care-experienced individuals aged 17-35 when compared to peers in the same age range among the general population (von Borczyskowski et al., 2013). This sample compared adults with child welfare placement experience to adoptees, both of whom saw some elevated risks, which were higher for foster children. The authors posited that the elevated substance use for children placed in out-of-home care is an important intergenerational challenge. They confirmed that 37% of Swedish care alumni have two parents with a history of substance use disorder (von Borczyskowski, 2013). Examining kinship care's impact on substance use disorder, Fechter-Leggett and O'Brien (2010) found that kinship care placement as opposed to regular foster care placement appears to be associated with higher adult rates of substance use disorders, but the overlapping placement histories and related covariable of placement moves are challenging to disentangle. Three studies reported that those who had experienced foster care are more likely to be smokers (Dregan & Gulliford, 2012; Schneider et al., 2009;

Zlotnick et al., 2012). This finding of elevated substance uses in care leavers contrasts with the Cooley et al. (2018) study, which did not find statistically significant differences in alcohol use disorder between foster care alumni and their comparison group of slightly older low-income adults. Finally, and curiously, Okpych and Courtney (2021) found double the rate of substance use disorders after foster care alumni leave college. Collectively, these papers establish substance use as an important public health concern for care leavers, warranting exploration in future research.

A handful of studies examined post-care justice system involvement. We included this outcome while acknowledging that involvement with the criminal justice system is not a mental health disorder but rather interrelated to economic, housing, and behavioral health factors. Several studies report that alumni of care are at increased risk of adult justice system involvement (Bullock & Gaehl, 2012; DeGue & Widom, 2009; Lindquist & Santavirta, 2014). However, these increased rates primarily impacted youth from congregate care (Dregan & Gulliford, 2012), and boys placed later in childhood (Dregan & Gulliford, 2012; Lindquist & Santavirta, 2014) and boys with more placement instability (DeGue & Widom, 2009). These studies highlight a critical criminal justice disparity for young men who are transitioning from the system and for children who age-out of congregate care.

Mental health risk factors and etiology

A host of factors were broadly associated with poorer mental health functioning in foster care alumni. Several placement-related factors were correlated with long-term mental functioning, including placement type, age of first placement, number of moves, and history of abuse. For instance, higher rates of childhood placement disruptions and moves were associated with lower levels of reported well-being in adulthood (Anctil, et al., 2007a; Garcia et al., 2015). Those placed after age 12 (Dregan & Gulliford, 2012), as well as those placed in group care (Dregan & Gulliford, 2012) also fared worse in mental health outcomes.

Experiencing more chronic abuse before placement (Garcia et al., 2015) and having a history of childhood sexual abuse was also associated with worse mental health functioning in later adulthood (Anctil, et al., 2007a).

Disproportionality and Other Analytic Control Factors

Several identity characteristics were associated with increased vulnerabilities later in life, including gender, disability, socioeconomic background, and immigration status. Two studies reported that female care leavers are more likely than their male counterparts to have mental illness (Jackson Foster et al., 2015; Sulimani-Aidan et al., 2022), while another study associated childhood mental or physical disability with poorer mental health in adulthood (Garcia et al., 2015). Reporting on economic-related variables, Kaspar's (2014) findings linked community-level adversity in childhood with poorer functioning later in life, while an Israeli study correlated transition-age material deprivation (e.g., inability to afford food or other essential items) with increased psychological distress over time (Sulimani-Aidan et al., 2022). The Israeli group further reported greater psychological distress in children born outside of Israel, those born to immigrant families, and those whose parents had also experienced child welfare placement (Sulimani-Aidan et al., 2022). The US-based Casey Family cohort study were the only ones to examine ethnicity in relation to well-being, yielding no significant evidence linking ethnic identity to mid-life mental health functioning (Harris et al., 2010; Villegas & Pecora, 2012; Villegas et al., 2011).

In population cohort studies, researchers also found that care leavers were more vulnerable to mental health conditions. However, one study found that their model capturing childhood and current socioeconomic disadvantage was able to fully explain the higher rates of mental illness in this population (Parsons & Schoon, 2022). These findings suggest that early pre-placements exposures may be equally important to foster care experiences in terms of affecting long term outcomes. However, few data sets can control for preplacement experiences within foster care alumni's family of origin, particularly not at this age range. Factors such as early SES, utero substance exposures, and early physical and psychological traumas are largely undocumented in this literature and could be better controlled in future.

In an Israeli sample, psychological distress was higher among alumni who were in care of welfare services at age 18 than among those who had returned home at the age of majority (Sulimani-Aidan et al., 2022). This is one of the few studies that controlled for differences between those who age out of the system versus those who spent time during childhood in placement. Indeed, the researchers found that those who aged out of the system fared worse on mental health outcomes than those who left care earlier than the age of majority. Most of these studies were unable to distinguish participants who age out of the system from those who can return to their families of origin, or those who are adopted.

Positive Mental health outcome and protective factors

Across the twenty-nine studies, several factors were associated with improved mental well-being in mid-to-late adulthood, such as receiving mental health services in placement and believing that foster parents were helpful (Anctil et al., 2007a; Jackson Foster et al., 2015). Improved long-term mental health outcomes were also more likely in those who reported feeling loved by their foster families (Jackson Foster et al., 2015). In other studies, earlier admission to care was associated with improved mental health outcomes (Dregan & Gulliford, 2012; Vinnerljung & Hjern, 2014). The sole study that contradicted findings of reduced well-being was McKenzie (2003), which found relatively higher rates of happiness in care alumni, highlighting that some cohorts or placements may be associated with improved outcomes. The next section delves deeper into the interplay of the elements that affect physical and mental well-being in the post-foster-care context.

Discussion

The current scoping review provides a comprehensive examination of the literature on health and mental health outcomes for adults in middle- and later-adulthood who have experienced out-of-home placement as children. The current literature is limited in both breadth and depth for care leavers over the age of thirty. The most critical limitation is the lack of child welfare follow-up studies that track these adults from diverse placement settings in the long run, and control for factors such as preplacement exposures and the length, type, quality, and match of placement. Furthermore, few studies were able to report what percentage of adults had aged out of the system. Without these critical details, we are limited in our ability to extrapolate how to improve the child-welfare system or even use such information to supply adequate community-based services.

Yet, despite these limitations, these findings indicate that individuals who spent any time in foster care as children experience greater health and mental health disparities than the general population, and that these vulnerabilities weave across the life course. The care leaver literature currently focuses on emerging adulthood, which is a natural period to survey, aligning with efforts across jurisdictions to expand supports past age 18 through the transition to adulthood. By focusing on this highly stressful transition period, we may miss key challenges and hardships that are hard to see through the economic and housing-related crises in which many alumni find themselves in early adulthood. Furthermore, certain challenges or therapeutic gains might be seen longitudinally emerging at key later developmental transitions, from entry into long-term relationships to parenting, etc. Our current approaches to intervention and outcome measurement are often too shortsighted, and frankly the meaning-making is limited by the dire financial realities faced by care leavers in early adulthood. Thus, expanding longitudinal projects and surveying older alumni of care could provide deeper and additional insights.

European foster care alumni experience higher rates of premature death than the general population (Boddy et al., 2020; Bullock & Gaehl, 2012; Cameron et al., 2018), but the researchers curiously fail to report on the causes of premature death, perhaps due to limitations within current data sets. Premature death rates are wholly absent from the included outcome studies conducted on other continents, making it difficult to compare death rates between countries or establish causation. Although the three studies that report on cause of death did not delve into causes, there was an additional Swedish study found higher rates of both suicidal thoughts and deaths by suicide in its sample (Brännström et al., 2020). Thus, these findings raise the question of what percentage of care leavers die early around the world and how many of these premature deaths are preventable.

Additionally, in the California panel study on women's health they found women with any care experience have higher rates of certain health conditions such as obesity, asthma, and heart disease (Zlotnick et al., 2012). Understanding the etiology of illness would thus aid in the design of effective public health responses. For example, one study found that care leavers experience higher rates of asthma than the general population (Zlotnick et al., 2012), a curious but important finding. It is unclear if these asthma rates are due to premature birth, unsanitary pre-placement housing, second-hand smoke exposure, or even participants' own later smoking habits, or alternatively due to current stress or lower air quality. If we collected fuller longitudinal data from across service sectors, we could be positioned to better elucidate these complex developmental processes. This matters because if children are aging out into neighbourhoods with higher particulate matter in the air, which is associated with a worsening of health outcomes, we could analyze the cost and work to address it. Of course, in the long term, we should build affordable housing in neighbourhoods with better air quality and work towards cleaner air quality for all members of society. But the government could also issue air purifiers to alumni in the interim. The cost of an air filter for a young adult with asthma would be covered if they visited the emergency room one less time per year. If smoking is an issue, initiatives to help alumni of foster care quit could be prioritized. However, without this information, no public health priorities can be created to address these disparities.

An Australian mixed-method study shared some qualitative findings that many adults were struggling with health conditions related to their childhood trauma, including sequelae related to physical abuse such as unset fractures (Fernandez et al., 2017). These findings suggest that health issues impacting care leavers are not simply a question of physical or emotional stress reactions. Instead, this data suggests a more complex etiology, including an array of physical injuries, stress, and trauma leading to increased rates of illness evidenced in the current health literature. Yet no other included studies examined if or how childhood physical abuse could still be affecting participants' physical health. Therapeutic services could be better positioned to support care leavers with long-term effects from childhood physical trauma if we understood it. Moreover, physicians could be trained to be sensitive and responsive to these needs. However, this finding may be specific to Australia or specific to certain cohorts of care leavers. It should be examined in future research.

At present, the mental health literature is far better developed than the long-term health outcome literature. It is clear from all but one study that individuals who spent any time in care have increased risk of mental and physical illness as well as criminal justice involvement. Certain childhood experiences were associated with worsened mental health outcomes later in life, such as being moved frequently (Anctil et al., 2007a; Garcia et al., 2015) and aging out of the system (Sulimani-Aidan et al., 2022). Furthermore, criminality was more common for those placed in group care and those placed after age 12 (Dregan & Gulliford, 2012). These factors are critically important to understand as perhaps we are failing these children and setting them up for a lifetime of hardship. If we recognize that group care creates a path towards criminal justice involvement, judges could be trained in trauma-informed judicial practice, and therapeutic responses to criminal actions could be offered to adults that we failed as children. Similar programming could be developed for physicians' psychologists, and social workers who support adults who have aged out the system.

Additionally worth consideration one study suggested that the increased prevalence of mental illness could be fully explained in its statistical models not by placement experiences but by both preplacement and ongoing socioeconomic factors (Parsons & Schoon, 2022). The critical influence of poverty on post care functioning is supported by an Israeli study that found worse mental health outcomes for alumni who experience material deprivation during their transition period (Sulimani-Aidan et al., 2022). The idea that poverty exposure both preplacement and after care influences longer-term vulnerabilities suggests that financial support for care leavers and family-based child tax credits should be prioritized in public expenditures. As these expenses while right and just in the immediate term, likely also prevent long term health and mental health costs to society.

Current data sets and data collection efforts have many limitations. Most studies are secondary analyses of panel studies reporting on the outcomes of adults who spent any time in out-of-home care as children. A handful of studies report on the outcomes of adults who spent at least one year in placement (Brännström et al., 2017; Brännström et al., 2020; Kaspar, 2014; Lindquist & Santavirta, 2014; Nuytiens et al., 2018; von Borczyskowski et al., 2013; Zlotnick et al., 2012). Fernandez et al. (2017) reported that roughly half of their participants had aged out of the system, but they did not control for that factor in their analysis. Within these articles only Sulimani-Aidan et al. (2022) was able to do the analysis and reported that those who aged out of the system fared worse on average than youth who left residential care services earlier. Consequently, we cannot effectively examine the later-life outcomes of care leavers who age out of the system, but we can state that adults who spent any time in care as children have increased hardships when compared to their same age peers. Furthermore, while we are unable to determine causality for the increased life course vulnerabilities it is important to note that they exist. However, it must be restated that the causality for these hardships is likely influenced by preplacement exposures, family separation, difficult placement experiences, and/or their abrupt and often inadequately resourced transitions to adulthood. Despite these clear limitations, this data draws attention to the need for improved and expanded longitudinal designs and increased access to services.

Despite the disproportionate negative health outcomes associated with out-of-home placement histories, it is well known that not everyone is negatively affected by child welfare placement and understanding the differences between placement experiences, individual and community-based resilience factors, and their associations on long-term outcomes is critical to improving upon our child welfare practices. The McKenzie (2003) study found higher rates of happiness in their care alumni, but their study of mid-western US farm-based orphanage alumni isn’t indicative of group care realities anymore. His sample experienced on average 8 years in the same placement, and 90% of alumni reported that they were placed with siblings. They also learned increasingly complex tasks over time as the children worked on the farms. These practices are no longer common in group care in the developed world but perhaps if we sampled care leavers globally about resilience factors, we could learn critical policy and practice lessons from healthier care leaver samples and cohorts.

Limitations

This scoping review offers valuable insights into the later life course of care leavers. However, there are several limitations worth articulating as they can inform future study designs. These samples are heterogeneous and comprise diverse samples, from various countries, decades, and cultural backgrounds making it hard to generalize these findings to all care leavers within the current child welfare policy and practice context. Moreover, since many of these studies just included people with any time in care and not specifically youth who age out of the system it is unknown how much well-being differs between youth who age out the system versus those who spent short periods in placement. The same could be said in understanding health disparities between group care leavers and those from foster homes. We don't know how institutionalized children are faring compared to children who were matched to families in these papers.

The included studies were furthermore limited in their abilities to establish causal inference or even track outcomes over time. While most studies do not have designs that allow for firm conclusions of what proportion of poor health outcomes could be accounted for by their experience in out-of-home care as opposed to the conditions that led them to care in the first place, for highlighting the needs of this population resolving that question fully is not necessary. It is enough to know that this is a population of young adults who struggle at high levels in their transitions into and through middle and later adulthood, to know that increased public services are required.

There was an overrepresentation of US and European data within these samples, and it would be prudent to track health and mental health outcomes from countries spanning the income gradient. Many studies were reliant on broader panel studies that were not designed to measure the needs or life course of care leavers. There is relatedly a lack of standardization across studies, concerns, and measures. This lack of standardization complicates data synthesis and interpretation. Despite these limitations, this scoping review serves as a resource for understanding what is documented about the later life course well-being of care leavers and underscores the need for future health equity research on this population.

Future research directions

These findings just touch the surface of the developmental impact of childhood stress, trauma, and instability on the later health functioning of adults who experienced childhood placement. It remains important to look at physical health more holistically and keep in mind the potential stress-based physiological reactions because there was a notable lack of health studies in this literature that examine the stress axis and stress hormone functioning, sleep quality, chronic pain, or cellular aging. There are only two studies that report on specific disease risks and only three that report on early mortality rates. In addition, there were limited studies that controlled for variables such as poverty exposure in childhood, or income in adulthood. There were also no physical health-related studies that covered the type, length, or quality of placement and its relationship to current well-being. Fernandez's qualitative finding that care leavers are continuing to struggle later in life with physical injuries from child abuse and childhood injuries should be examined in future research as well. How many adults who leave care have experienced unset and/or compound fractures? Do these injuries cause later life pain or conditions? Are there other failures to intervene medically during childhood that are detected later in life of care leavers? This could be elucidated in future health research.

There are more specific and nuanced questions that these findings stimulate. As an example, the substance abuse study in Sweden reported that 38% of care leavers had both parents with documented substance abuse histories (von Borczyskowski et al., 2013). They reported this may be genetic, yet little attention is paid to the possibility these adults may have been exposed to substances in the womb and may have reduced access to healthier stimulating activities in their developing environment. It is important when researchers acknowledge biological risk or epigenetics, to not use pathologizing language for people from marginalized populations. Instead, we could better interrogate the various social and environmental influences, factors we can influence through policy and practice. This is not to say there is not value in creating studies that examine epigenetic risk factors for both illness and addiction, but these sorts of studies must be done with sensitivity and compassion and written up in such way to not appear or be misinterpreted as deterministic (Keller, 2024).

Speaking of substance use, concerningly Okpych and Courtney (2021) reported that in longitudinal sample of college-bound American alumni, that substance use disorders doubled after alumni leave the university. Unfortunately, they did not have a comparison group, nor could they control for college graduation in their analysis, due to the low rates of college completion in their cohort. Substance use is common in US college populations and therefore it is unclear if foster youth's uptick in substance use is a significant deviation from the general population. It is also unclear how this might differ between countries and cultures. Furthermore, it would also be helpful in future studies to examine if there are factors such as course failure, social isolation, economic hardship or indeed college dropout which is associated with increased substance use as these young adults leave college.

Research could delve deeper into how protective and intervention-based factors impact long-term outcomes. Examples of such factors that could benefit from more in-depth consideration include both childhood and adult-based mental health intervention, the quality of foster care experiences, and the timing of placement or therapies, as well as whether certain practices such as placement with siblings or family-based or cultural interventions impact long-term physical and mental well-being. Disproportionality could be more thoroughly examined by not only considering ethnicity or cultural identity but intersectional examinations of disability, aging out status, and immigration status, as well as the influence of gender, ethnicity, placement type, and socioeconomic factors on these outcomes. Therefore, longitudinal future well-being research could be expanded to better understand the health-related implications and trajectories for care leavers who age out of the foster-care system as well as control for differences based on length, quality or type of placement, and variations between economic indicators. Additionally, community-based interventions to address ongoing care leaver needs could be further explored through community-university partnerships.

Conclusion

This scoping review broadly finds that any experience of child welfare placement exerts a profound and enduring impact on various aspects of an individual's health and mental health-related outcomes for a significant number of foster care alumni well after their thirties. Currently, there are clear limitations to study designs that survey care leavers after age 30. Mostly researchers are working with secondary analyses of population-based longitudinal studies that are unable to control for critical factors such as time spent in care, identify who aged out of care or even identify why someone was placed. Or they are working with niche cohorts that examine one type of care leaver in one country, such as the Casey foster family cohort study which only studies those from Casey's private and family-based service or the Israeli residential school studies, both studies add much insight to this literature, but both have significant limitations towards meaning making in other countries. These limitations represent barriers to using this data to inform practice, and policy, and create meaningful programmatic responses. In documenting these health and mental health outcomes and assessing the impacts and efficacy of government interventions on individuals' lives, we pave the way for a more comprehensive understanding of improved child welfare interventions, and transition age support and provide key evidence to support the development of equitable, restorative justice measures. In summary there remains much work that could be done to understand the life course health and mental health needs of care leavers.

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Table 1

Psych Info Search Strategy

Number	*Search Term*	*Results*
1	*foster care/*	*6497*
2	*Foster care alumni.mp.[mp=title, abstract, heading word, table of contents, key concepts, original texts, tests & measures, mesh word]*	*125*
3	*care leaver*mp. [mp=title, abstract, heading word, table of contents, key concepts, original texts, tests & measures, mesh word]*	*306*
4	*1 or 2 or 3*	*6713*
5	*Health Outcomes/*	*5283*
6	*Psychosocial Outcomes/*	*603*
7	*Student Learning Outcomes/*	*380*
8	*outcome*[mp=title, abstract, heading word, table of contents, key concepts, original texts, tests & measures, mesh word]*	*522920*
9	*Longitudinal Studies/*	*12721*
10	*Follow up Studies/*	*8949*
11	*Prospective Studies*	*1303*
12	*Longitudinal.mp.[mp=title, abstract, heading word, table of contents, key concepts, original texts, tests & measures, mesh word]*	*156484*
13	*Prospective.mp.[mp=title, abstract, heading word, table of contents, key concepts, original texts, tests & measures, mesh word]*	*82328*
14	*followup.mp. [mp=title, abstract, heading word, table of contents, key concepts, original texts, tests & measures, mesh word]*	*14741*
15	*5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14*	*697268*
16	*4 and 15*	*2154*
17	*Limit 16 to ((“0100 journal” or” 0110 peer-reviewed journal” or “1030 peer-reviewed status unknown”)and yr=”2000-current”)*	*1541*

Table 2

Global Distribution of Articles Country Frequency

Country	Article Count
USA	14
Sweden	5
UK	3
UK (WALES)	1
Belgium (Flanders)	1
Canada	1
Australia	1
England, Germany, Finland	1
Israel	2
Total Number of Included Articles	29

Table 3

Charting Contributions: Data Set Article Counts

Data Set	Count of Data Set
Casey National Alumni Study (CNAS)	8
Stockholm Birth Cohort (SBC) study	3
Swedish national cohort study	2
British Cohort Study	2
Israeli youth villages alumni	2
Nuytiens (2018) Qualitative	1
Swedish National Board of Health and Welfare	1
Cooley Low Income medical clinic	1
2006 Aboriginal Peoples Survey (APS) and Métis Supplement survey form (APS-M)	1
DeGue (2009) Administrative data	1
California Health Interview Survey (CHIS).	1
Wales Adoption Study	1
Stolen Generations study	1
British (BCS70) & (LSYPE); 1987 Finnish (FBC); German: (SOEP, Version 32)	1
California Women's Health Survey	1
McKenzie US Orphanage Alumni	1
Midwest Study and National Student Clearinghouse	1
Lost in Care study	1
Total number of articles	29

Interchapter 2:

Broad Health Perspectives to Sleep Insights: An Interchapter Shift

Following the scoping review, the logical next step is to begin to fill the gaps in available post-care health research. A particular need, apparent in article two is to increase our understanding of sleep challenges, none of the studies included in my scoping review, delved into the intricacies of sleep quality or its correlates. This stood out as an important gap, given all we are learning about the critical downstream and upstream role of sleep-in trauma and loss and mental health and well-being research in community and clinical samples. In response to this critical gap in the literature, I embarked on the design of a small mixed-method study aimed at unravelling the complexities of sleep quality and its interplay with health and other well-being measures among older group care leavers. Recognizing the need for a comprehensive approach, I endeavored to incorporate both quantitative survey data and qualitative insights to capture the multifaceted nature of sleep experiences within this population.

In the wake of my scoping review, I became increasingly intrigued by several of the glaring gaps in our understanding the health and well-being in older care leavers. Notably, none of the studies included in my scoping delved into the intricacies of sleep quality or its correlates. This absence struck me as particularly odd given the well-established link between trauma and sleep in the general population (Chattu et al., 2019; Driscoll et al., 2008). Sleep is often disrupted in people who have experiencing significant trauma (Brindle et al., 2018; Fusco et al., 2021). Furthermore, sleep plays such a pivotal role in overall well-being that it could be a pivotal covariable in many of the other outcome studies.

Motivated by this critical gap in the literature I set out to design of a small mixed-method study aimed at unravelling the complexities of sleep quality and its interplay with health and other well-being measures among older group care leavers. Recognizing the need for a comprehensive approach, I endeavored to incorporate both quantitative survey data and qualitative insights to capture the multifaceted nature of sleep experiences within this population.

The decision to employ a mixed-method design stemmed from the recognition that quantitative data alone may not suffice to capture the nuances of sleep patterns and their impact on overall well-being. The sleep quality survey, while well normed with community samples, is short. By complementing quantitative surveys with qualitative interviews. I sought to gain a deeper understanding of the subjective experiences, perceptions, and challenges surrounding sleep among care leavers.

Central to the design of my broader dissertation data collection was the development of a comprehensive survey instrument tailored to the unique needs and experiences of older group care leavers. Drawing upon existing validated measures where applicable, I meticulously crafted survey items that encompassed details about placement history as well as various dimensions of sleep quality, health, and social relationships.

In parallel, and informed by my qualitative work in chapter 2, I designed a semi-structured interview protocol aimed at hearing the alumni of care life course narratives of alumni of care. Through open-ended questions and probing inquiries, I sought to elicit rich narratives and insights into the subjective realities within this population. Emphasizing participant autonomy and agency, I strove to create a safe and welcoming space for care leavers to share their lived experiences and perspectives on sleep and its implications for their overall well-being.

Drawing on the few studies that document sleep quality in foster care alumni (Fusco & Kulkarni, 2018; Lee & Fusco, 2022). I hoped to add depth to the developmental literature by focusing on older care leavers. In essence, the design of this study represents a concerted effort to fill a critical gap in the literature and shed light on an often-overlooked aspect of the life course well-being of care leavers. Through the thoughtful integration of quantitative and qualitative methodologies, I endeavor to capture the richness and complexity of sleep experiences within this population. Ultimately, I hope this data can be used by sleep health professionals and developmentalists alike to justify the expansion of current panel studies and the development of targeted interventions and support mechanisms aimed at promoting better sleep and overall health outcomes among older group care leavers.

Chapter 4 (Article 3)

Examining Sleep Quality in Adult Foster Care alumni: Implications for later life health and well-being.

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April 2, 2024

Abstract

Background: Foster care alumni face increased health challenges, across domains of mental and physical health, yet there is a paucity of research examining the associations of care experiences, health, and sleep quality in alumni aged 30 and above. **Objective:** Our exploratory mixed-method study examined the sleep quality of North American group care leavers aged 30+ to understand if sleep quality in adulthood is associated with child welfare care experiences. Secondly, we examined the association of sleep quality with health. **Method:** ***Participant and setting*** Using a convenience sample of 41 alumni aged 30-85 and 16 qualitative interviews, we explored the intricate connections between group care leavers' developmental trauma, sleep quality, and health. ***Analysis*** We used linear regression and qualitative content analysis to understand how sleep is related to well-being in aging care alumni. **Result:** Adult sleep was significantly associated with the perceived quality of youth protection experiences ($\beta = 0.421$, $p < 0.01$), controlling for friendship support networks and demographic variables. Adult sleep quality was a significant predictor of overall health ($\beta = -.328$, < 0.05). Qualitative interviews elucidated insights into the importance and linkages of sleep, child welfare care experiences, and well-being. **Conclusion** Our research emphasizes the enduring impact of negative child welfare experiences on sleep extending well into adulthood. Our findings highlight how sleep is associated with health even when accounting for contemporaneous social support and other demographic indicators. Practitioners should be inquiring directly about sleep, and future research should delve deeper into the nature of sleep difficulties and their association with health and well-being.

Keywords: Sleep quality, foster care alumni, care leavers, well-being

Examining Sleep Quality in Adult Foster Care Alumni

Introduction

The association between unresolved trauma experiences and elevated rates of sleeping difficulties is well established for the general population (Breslau et al., 2004; Brindle et al., 2018; Ohayon & Shapiro, 2000). Parallel literature is increasingly making the case that sleep challenges play a critical role in shaping health trajectories, with links to obesity (Hasler et al., 2004; Ogilvie & Patel, 2017), diabetes (Gottlieb et al., 2005; Khalil et al., 2020; Spiegel et al., 1999), and cardiovascular disease (Eaker et al., 1992; Hoevenaar-Blom et al., 2011; Yaggi et al., 2005), amongst other conditions. Given this cutting-edge work on the importance of sleep to developmental well-being, a surprising paucity of research exists examining the connections between lived experience in child welfare placement and sleep, and its potential implications for lifespan health and well-being.

A small, but growing body of literature documents that youth in foster care may evince increased difficulties sleeping and these sleeping difficulties are associated with both trauma exposure and mental health (Dubois-Comtois et al., 2016; Lehmann et al., 2021). A higher incidence of sleeping challenges appears to hold during the emerging adulthood period (Fusco, 2020). Sleep has the potential to impact across multiple domains of well-being including health (Luyster et al., 2012), mental health (Milojevich & Lukowski, 2016), and social relationships (Gordon et al., 2017), in an amplifying bidirectional, or transactional manner (Sameroff & Mackenzie, 2003). Sleep challenges can serve as both upstream predictors of challenges, as well as a downstream effect of mental health difficulties (Quach et al., 2018), and greater attention to sleep functioning may help inform developmentally informed interventions.

Literature Review

Sleep has been established as a critical component of global health and well-being (Chattu et al., 2019), with good sleep quality associated with better health, mental health, and social relationships (Driscoll et al., 2008; Zee & Turek, 2006). It is also established that people who have unresolved trauma or loss, sleep less well than the general population (Breslau et al., 2004; Brindle et al., 2018; Rachakonda et al., 2018). A nascent body of literature demonstrates that foster children currently in placement do not sleep as well as their same-aged peers (Cifre et al., 2024; Dubois-Comtois et al., 2016; Tininenko et al., 2010). Female foster children and those with more interpersonal trauma exposure appear to experience disproportionately worse sleep (Langevin et al., 2019; Lehmann et al., 2021), and some evidence suggests that certain foster care placement conditions may be associated with better sleep (Tininenko et al., 2010).

Sleep and foster care alumni.

As foster children transition to adulthood sleep challenges appear to continue. One Flemish study reported insomnia symptoms in 40% of foster care alumni, compared to 26.4% of the general population (Gypen et al., 2023). Sleep appears to be influenced by anxiety in this population as those with higher post-care anxiety levels also report higher rates of sleep disturbances (Lee & Fusco, 2022). This anxiety-related finding is supported by another study of care leavers which found that those who reported more intrusive traumatic memories experienced greater difficulties sleeping (Fusco & Kulkarni, 2018b). These three studies are among the first that have studied care leaver sleep quality. They focused, however, exclusively on transition-age up to age 27. Understanding these trajectories better in older adult care leavers may help inform interventions and supports for care leavers' needs as these adults age.

The purpose of this exploratory mixed-method study with North American group care leavers is to explore the connections between developmental trauma, sleep, and psychosocial function. We will interrogate: 1) How sleep quality for this population is predicted by the perceived quality of youth placement experiences and 2) The associations between sleep quality and health in middle and later adulthood.

Method

Participants

Participants were recruited via convenience sampling. Flyers for the study were posted on online Facebook groups of foster care alumni networks, and they were sent out via newsletters to current and retired child welfare staff. Between June 1st, 2022, and December 26th, 2023, fifty-five people clicked on the link for the survey. A handful did not complete any questions. We excluded individuals who did not complete at least 70% of the survey's questions, we were left with forty-one survey participants, 16 of whom participated in an hour-long semi-structured narrative interview. Participants were aged 30-85. The participants were 85% Canadian and 15% American. The life course narrative interview had no questions specific to sleep, yet sleep-related themes did emerge during the interview process as some participants reported unprompted that their sleep affected their lives.

Assessments and Measures

Participants consented online in Qualtrics to complete a demographics survey that included questions about youth protection experiences. They were given the following normed survey measures: Sleep-quality scale (Snyder et al., 2018), the Lubben Social Network Scale Revised-6 (Lubben et al., 2006), and six questions from the Short Form Health Survey SF-8 (Bayard et al., 2008). These measures were selected for both their brevity and normed reliability. The sleep quality scale is a well-established single-question 10-point item which was used to measure sleep quality (Snyder et al., 2018).

Demographic variables and frequencies

Descriptive data were analyzed via SPSS, and we report on frequencies of age, gender, race, ethnicity, placement length, and placement location in Table 1.

Statistical Analysis

Linear regression was used to examine the association between youth protection placement quality and current sleep quality. We then examined sleep, placement quality, and health and control for their current friendship support network, age, gender, race, ethnicity, education, and income. To interrogate why sleep is important, linear regression was used to predict care leavers' health using sleep, and social networks and controlling for age, gender, race, ethnicity, education, and income.

Qualitative Interview

Of the 41 people who completed the screening survey, 25 consented to be contacted for part two of the study a qualitative interview. Out of the 25 who consented 4 were excluded before making contact, because they reported less than two years in group care settings. One person's email was not valid. Two people declined to participate. Eighteen people in total were interviewed. Three interviews took place in person. The remaining 15 participated over Zoom. All interviews were recorded. Of the 18 completed interviews, two Zoom files were lost to file corruption at file conversion before transcription had taken place. As a result, we had 16 interviews that could be used for research purposes.

There was a second consent form for part 2 of the study and all subjects consented before the interview started. We asked participants to share their care story, to share their story about their transition to adulthood and parenthood. We designed these questions with a feminist intersectional (Ferrer et al., 2017) and ecological life course (Biesta & Tedder, 2016) framework. We did not inquire directly about sleep. Interviews took between 45 minutes to two hours. Most interviews were completed in one day. Two people had interviews spread over two days due to childcare obligations. No one withdrew before or during the interview.

Analysis

Based on the significant statistically findings related to sleep quality we employed content analysis and reviewed the transcript for any mention of sleep in the qualitative interviews. We specifically searched all transcripts for any mention of 'dream', 'nightmare', 'sleep', 'fatigue', 'rest', and 'tired'. There were eight interviews which mentioned one of these words and of those, four were selected to share here in this article. All names or locations mentioned in these quotes are pseudonyms, which were often selected by participants during member checking.

Ethical Considerations

This research protocol was ethically approved by the McGill Ethics Research Board REB File number 22-02-002. The initial screening survey focused on documenting demographics, health, social relationships, and sleep. It did not ask any probing questions about trauma or loss. The qualitative interviews were open-ended. During the consent process we specifically told participants that we were not collecting trauma stories, that they were welcome to share any details of their stories including traumatic events but that we were most interested in their lives now and insights for improving child welfare in the future. Participants were reassured that they could refrain from engaging in any uncomfortable conversations by stopping or pausing the interview or simply changing the topic. The interviewer and primary researcher used a peer interview approach (Lushey & Munro, 2015), as she is a lived experienced researcher. Most participants reported a positive experience with the interview process during member-checking.

Results

Demographics

The study involved a diverse group of participants. In terms of gender16 participants identified as men, 23 as women, and 2 as non-binary or third gender. Regarding racial identity, 30 identified as white, 10 identified as racialized or Indigenous. Seven reported some high school, four had received a high school diploma or GED, nine had received a post-secondary certificate or diploma, and 21 had attained a bachelor's degree or higher. Detailed participant demographics are available in Table 1.

Sleep Predictors

Table 2 presents a series of linear regression analyses, with model 1 demonstrating a significant positive relationship between adult sleep and perceived quality of youth protection experiences ($\beta = 0.505, p < 0.01$). Model 2 demonstrated a significant positive relationship between the quality of sleep and the Lubben friendship support network subscale ($\beta = 0.360$, $p < 0.05$). In model 3 of Table 2, we found the quality of youth protection remained significant ($\beta = 0.421, p < 0.01$) predictor of sleep, even when considering the contemporaneous friendship support network. In model 4, after controlling for friendship support network, age, gender, race, ethnicity, education, and income only the quality of youth protection experiences remained significant ($\beta = 0.549$, p 0.004) with the full model accounting for 23% of the variance in sleep quality. This suggests that perceived quality of placement experiences predicted sleep quality decades after placement, with effects that could not be buffered by more temporally proximal markers such as the size and quality of the current social relationship network.

Health Predictors

To assess health, we employed six questions from the short-form health survey covering dimensions of both physical and mental health. This abbreviated subscale showed strong internal reliability with a Cronbach's Alpha coefficient of .89. Table 3 presents the results of a series of regression analyses, with Model 1 demonstrating that sleep was a significant predictor of overall health ($\beta = -0.451$, $p < 0.01$), with better sleep being associated with lower health problems. In Model 2, we next examined the association between friendship support networks and health, finding higher support associated with better health ($\beta = -0.579$, $p < 0.001$). In Model 3, we found sleep ($\beta = -0.279$, $p = 0.06$) significantly predicted health problems, even after considering friendship support ($\beta = -.477$, $p < 0.01$*)*. Finally, in Model 4, we found sleep ($\beta = -.328$, - < 0.05) remained a significant predictor of health, even after controlling for friendship network, age, gender, race, ethnicity, marital status, and income, with the full model accounting for 54% of the variance in reported health problems.

Qualitative Findings

The interview did not probe specifically for questions on sleep, however, the following unprompted testimonials elicited from questions about care stories, transitions from care and to parenthood, and their life now, emphasize the intricate connection between sleep, health, and child welfare experiences.

Stormy, age 40, reflected on her persistent sleep struggles that haunted her for years after leaving group homes. She articulated a restless state marked by chronic sleep deprivation.

> After group homes, I barely slept. There were years of a few hours of sleep a night. And it wasn't necessarily because I couldn't sleep like I was having a bad dream. Well, yeah, it was because I couldn't sleep, but it wasn't like I was

> having bad dreams or anything like that. It was just more along the lines of I just couldn't get my body to rest.

Brooke, age 50, in contrast, reflected on the enduring impact of her time in group homes as she still struggles with group home nightmares.

> I would say that it's so weird because I'm 50 now and I still have group home dreams. If I do something to make a co-worker mad, or if I have an argument with my husband, I'll have a nightmare that night that I'm being sent back to a group home.

Leanne, age 40, delving into her insomnia and its repercussions, narrated how her struggle with fatigue during her early twenties culminated in a life-altering event.

> I wasn't on Concerta, and I really believe that my ADHD and being tired all the time, like, my whole BSW is falling asleep in my books. And I fell asleep driving [and was] in a car crash that year. So that was like 2014. So, I have some physical stuff from that.

Conversely *Tony*, age 69, revealed a more unique intersection of grief, insomnia and substance use or self-medication, highlighting how sleep disturbances can become intertwined with coping mechanisms.

> When *Elanor* died, my wife ended up getting a brain tumour, it was very sudden, and we thought she had an earache…. I started to have morphine in the house. I started to do more things, to try to sleep and didn't realize that I was getting addicted to it. Because as a person, I never really had any experience with opiates.

These narratives shared by care leavers aged 40-69, underscore the intricate relationship between the tumultuous experiences within the child welfare system and enduring sleep challenges faced by some care leavers across adulthood. As we navigate through these personal accounts, with unprompted interview reflections on the importance of sleep, it is apparent that consequences of disrupted sleep extend beyond the immediate post-care period into later life.

Discussion

The results of this study are consistent with what is known developmentally about trauma history and its impact on sleep across the life course in the general population (Brindle et al., 2018; Mishra et al., 2020). However, this paper is the first to our knowledge that examines sleep quality in care leavers over age 30. Furthermore, this paper illuminates a crucial aspect of well-being that is under-examined in foster care alumni, insofar as negative perceptions of child welfare experiences are associated with lower sleep quality decades after placement. While it is not possible to report on causality, or direction of effects, in what are likely complex bidirectional processes, this exploratory study provides valuable insights into the intersection of adverse childhood experiences and adult well-being in care leaver adults in middle age. Children with acute or chronic adversity in out-of-home placement may experience long-term consequences to their lives. Thus, attunement to sleep (Dubois-Comtois et al., 2016; Tininenko et al., 2010), social support networks, and quality of placement matches (Sinclair & Wilson, 2003) should be prioritized for children in care and tracked in aging care leavers.

In the qualitative component of this article, the last two participants mentioned critical health consequences related to their sleeping difficulties. We can't be sure if *Tony* or *Leanne's* later life challenges were influenced by their childhood stresses. However, both challenges appear preventable. Leanne reported falling asleep in class and her car often before her accident in her 20s. If a clinician had asked her about fatigue and supported, her in getting help she could have potentially avoided this accident. Similarly, Tony's addictions began only later in life when he was offering palliative care to his wife and found himself unable to sleep. Had physicians or nurses offering end-of-life care to his wife, inquired about how he was doing, things might have turned out differently for Tony. Whether unprocessed grief over the loss of his family of origin was triggered by his wife's illness and subsequent loss is unknown but it is reasonable to consider that cumulative losses may have contributed in myriad ways to his challenges later in the life course. Therefore, when working with people undergoing pivotal transitions clinicians need to ask about sleep, particularly if those adults have extensive developmental trauma and loss.

Consideration in future longitudinal studies must be paid to more holistic measures of functioning, and we are pointing out the importance of assessing sleep. Sleep quality could play critical mediating and moderating roles for the subgroup of young adults who age out of care and struggle to adapt to adulthood (Courtney, et al., 2009; Kushel et al., 2007). It is also a condition that is less stigmatizing to discuss for some adults, than a direct conversation about mental health. Therefore, this article also highlights that identifying that sleep challenges presents an important potential port of entry to connecting adults with care experiences to clinical services.

Life course well-being in foster care alumni is largely unexplored, and this gap in knowledge limits our understanding of developmental trajectories, reducing our ability to think through the developmental implications of our interventions. Therefore, this paper is a call to arms for health practitioners and researchers to track sleep more routinely in points of contact with foster youth and care leavers alike. We could track these adults' well-being beyond their transition to adulthood.

Clinical Implication.

An implication of this work is that sleep quality should be more routinely screened or asked about in clinical settings with populations who have child welfare exposure. Sleep is one area that is amenable to intervention, and identification of sleep problems could also present a port of entry into gaining therapeutic insights about unresolved loss or trauma.

Therefore, routine screening for sleeping difficulties with child welfare-experienced people could be helpful (Mastin et al., 2006). Psychoeducation around sleep hygiene could be offered by many front-line professionals.

Sleep hygiene broadly encompasses practices and habits that contribute to a healthy sleep routine (CDC, 2022). For example, a fundamental recommendation for sleep hygiene is to encourage those with sleeping challenges to go to bed and wake up around the same time every day (Kushida, 2006; Pandi-Perumal et al., 2022). Creating a conducive sleep environment by helping to make a cool space, with lower light, and turning off screens early, can also be helpful (CDC, 2022). Discussing the use of common stimulants during the day such as caffeine and nicotine and working with adults experiencing sleeping challenge to reduce the usage of these or other substances could also help improve sleep (CDC, 2022; Irish et al., 2015). While it is beyond the scope of this article to highlight every aspect of sleep hygiene these are skills that front line intervention workers could pick up to improve their practice.

For people experiencing trauma-related nightmares, or hyperarousal, therapeutic integrations such as trauma-informed cognitive behavioural therapy (Chung et al., 2018; Nash & Watson, 2012), EMDR (Raboni et al., 2006) or music relaxation may help to alleviate distressing sleeping experiences (Blanaru et al., 2012). For adults who adopt healthy sleeping routines and still struggle significantly with their sleep, a medical consultation with a sleep specialist may be warranted. Many short and long-term interventions are available to support those with sleeping difficulties, but which interventions are most effective for care leavers needs to be explored in future research.

Limitations

This study carries certain limitations that warrant consideration. The sample is a convenience sample comprising participants who were sourced from online care leaver networks. This non-representative sampling approach does not capture the full spectrum of experiences and identities within the broader population of North American care leavers. Our sample, active in the care leaver network community, appears to have higher education than is typical for a care leaver population. While we suspect our sample tilts toward higher functioning care leavers, if that assumption holds true our findings represent a conservative estimate of sleep quality on the broader care leaver population. The retrospective nature of the study limits our ability to address causality or explore the direction of effects in more nuanced ways. While associations between youth protection experiences and sleep quality were identified, temporal sequencing remains unclear. Longitudinal research designs would provide more robust findings allowing us to explore potential amplifying reciprocal transactions between sleep and well-being over time. Lastly, the study's qualitative component, while offering valuable insights into individual experiences, was not designed to investigate sleep directly. As a result, the narratives shared by participants do not comprehensively capture the intricacies of sleep challenges faced by all participants in this study. They merely point out that sleep challenges are complex for care leavers and should be investigated in more representative sample in the future.

Conclusion

This study represents the first exploration, to our knowledge, into the sleep quality of child welfare alumni age 30+, shedding light on the often-overlooked intersection of adverse childhood experiences and adult sleep. Our findings underscore the enduring impact of negative care experiences on sleep across the lifespan. Our study suggests that incorporating routine inquiries about sleep into health and social service settings, particularly with care leavers could provide a valuable entry point for intervention. By recognizing, documenting, and addressing the enduring consequences of disrupted sleep among care leavers, we pave the way for more effective and targeted interventions, thereby enhancing the well-being and life trajectories of this vulnerable population.

Table 1

Demographics

Category	Subcategory	Count (%)
Age Distribution	31-40	16 (39%)
	41-50	9 (22%)
	51-60	6 (15%)
	61-70	5 (12%)
	71 or older	5 (12%)
Gender	Men	16 (39%)
	Women	23 (56%)
	Non-binary or Third Gender	2 (5%)
Racial Identities	White	30 (73%)
	Racialized or Indigenous	10 (24%)
	Not Specified	1
Parental Status	Not parents	8 (20%)
	Parents	29 (70%)
	Not disclosed	4 (10%)
Marital Status	Married	17 (41%)
	Widowed	2 (5%)
	Divorced	6 (15%)
	Separated	2 (5%)
	Never Married	14 (34%)
Education	Some high school	7 (17%)
	High school diploma	3 (7%)
	GED	1 (2%)
	Some college or trade school	4 (10%)
	Community college or Associate	5 (12%)

Category	Subcategory	Count (%)
	Bachelor’s degree	10(25%)
	Master’s degree	11(27%)
	PhD or MD	0 (0%)
Intergenerational Placement	First generation	26 (63%)
	Parent/grandparent history	9 (22 %)
	Third generation	4 (10%)
	Unreported	2 (5%)
Time in Out-of-Home Care	1-2 years	6 (15%)
	3-4 years	8 (20%)
	5-7 years	12 (29%)
	7-10 years	5 (12%)
	10-15 years	7 (17%)
	15+ years	3 (7%)

Table 2

Predictors of Current Sleep Quality in Group Care Alumni.

	Models			
Variables	(1)	(2)	(3)	(4)
Quality of Placement	.505**		.421**	.549**
	(.219)		(.221)	(.284)
Friendship Support Network		.360*	.274 $^{\pm}$	.233
		(.088)	(083)	(.104)
Age				-.104
				(.428)
Gender				.186
				(.849)
Race				.116
				(.956)
Hispanic				-.077
				(2.33)
Education				-.027
				(.222)
Annual income				-.001
				(.211)
Constant	2.901***	3.152**	1.775**	1.188
Adjusted R square	.24	.11	.26	.23

$^{\pm}$ $p < .07$, * $p <.05$, ** $p <.01$, *** $p < .001$

Table 3

Predictors of Current Overall Health Problems in Group Care Alumni

	Models			
Variables	(1)	(2)	(3)	4
Sleep	-.451** (.345)		-.279 ± (.325)	-.328* (.286)
Friendship Support Network		-.579*** (.181)	-.477** (.187)	-.599*** (.188)
Age				-.268 (.691)
Gender				.141 (1.518)
Race				.058 (1.676)
Hispanic				.168 (4.110)
Education				.159 (.375)
Annual income				-.065 (.365)
Constant	22.37***	24.18***	26.23***	20.67**
Adjusted R square	.18	.32	.37	.54

± $p < .06$, * $p < .05$, ** $p < .01$, *** $p < .001$

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Chapter 5 Conclusion

Introduction

This chapter examines the breadth of findings from this three-article dissertation summarizing and integrating the results of these three original studies to provide a preliminary glimpse into the life course well-being of older North American group care leavers. This chapter synthesizes the key insights from the narrative case study, the scoping review, and the mixed method project to highlight the broader implications for theory, practice, and policy. By reflecting on the interconnectedness of these studies, this chapter emphasizes the collective meaning of this body of work with both actionable and creative recommendations for research, policy and practice.

The life course trajectories of individuals who have experienced group care systems in North America have long been understudied and likewise, their later life needs are underappreciated. While existing literature often focuses on the challenges faced during adolescence and the transition into adulthood, there is a need to consider the long-term implications of child welfare-associated stressors and interventions for individuals' well-being in later stages of life. This thesis explored the life course well-being of care leavers, by extending the scope of analysis beyond traditional age boundaries into middle and later adulthood. Our aim was to provide insights into the ongoing health and well-being challenges of care leavers as they navigate through middle-and late- adulthood. These interconnected, independent studies weave together an account of under-explored resilience and ongoing hardships using complementary methodologies.

Summary and Synthesis of Findings

The first study examined well-being using a narrative case study approach to explore the poignant stories of care leavers over 30 struggling through health, parenthood, and relationship challenges while showing important facets of resilience (Keller, 2021). Their captivating narratives of health and healing prompted the design of the second study, which was a scoping review covering what is known about the mental and physical health of care leavers over age 30. The scoping review revealed important health-related knowledge gaps in the aging-out literature, only one of which we explored in the 3rd manuscript. I found it surprising and compelling that there were a limited number of studies that examine sleep and its association with trauma and well-being in foster care alumni. We thus applied mixed methods to explore the potential association of sleep quality with well-being in adult care leavers.

Article one, a narrative case study, explored in-depth the life course trajectory of two alumni of care age 50+. This manuscript captured critically important insights about the transition to parenthood, emotional healing, and health. It also suggests that we may be wrong about how we conceptualize resilience (Bonanno & Mancini, 2012). In foster care alumni studies, resilience is often focused on employment or educational outcomes or not having a mental health diagnosis. However, “resilience” is multifaceted and can shift throughout the life cycle (Bonanno & Mancini, 2012; Cahill & Leccardi, 2020). Someone can be a resilient student and employee and simultaneously experience critical challenges managing romantic relationships (Cooper et al., 2024; Marshall & Kuijer, 2017) or parenting one’s children (Appleyard & Osofsky, 2003). Furthermore, resilience can shift over time. Someone could manage to work well while married but become unemployed while struggling through a divorce (De Vaus et al., 2017; Kalmijn, 2005); thus, identifying youth as either resilient or not resilient by one or two indicators in a snapshot in time ignores the complexity of the human condition. Most adults have resilience in one form or another and many will experience weaknesses or hardships that overwhelm them at certain life junctures. Thus, our narrative case study, while small in scope, reaped insights into resilience and well-being that are under-documented in the current literature.

The two case studies showed that even in highly resilient care leavers, parenting children brought up crippling emotional wounds. We know that young men who age out of the system are far less likely to raise their children than men without care experience (Hook & Courtney, 2013) and that a certain percentage of care leavers give their children up for adoption (Roberts et al., 2017) or lose their children to the system (Brännström et al., 2022; Foster et al., 2015). Younger parents in care or those who have recently aged out often face critical economic and housing insecurity that can obscure other important challenges. For example, in one case study, *Thomas,* who was economically secure with advanced degrees, found himself reminded of childhood losses simply by being around his children (Keller, 2021; Roberts, 2017). He had never received therapy, and he never learned how to cope with these emotional hardships within the institutions where he was raised. He associates the transition to parenthood and its related emotional triggers with the start of a drug addiction. Unfortunately, his addiction resulted in the breakdown of his family. Even though he desperately wanted to have children, he was emotionally unable to cope with his parental role when they were younger, so his ex-wife retained full custody. This highlights one reason that even very resilient alumni can still experience intergenerational difficulties. It is raising the question if preventative interventions and community-based support could help prevent these hardships.

In *Carmen's* case study, we covered the life course of a 50-year-old woman who had experienced IPV throughout her life beginning in childhood and continuing across her adulthood. Following an injury that happened when she was 40, which had been preceded by both childhood and adulthood injuries, she was left with debilitating cognitive deficits. There is room to think that individuals who have experienced extreme physical maltreatment in childhood may struggle with chronic and degenerative health issues across their lifespan (Fernandez et al., 2017). Similarly, chronic victims of IPV in adulthood could experience important health-related impacts (Roberts et al., 1998; Schei et al., 2006). Given that foster care alumni are at increased risk of IPV (Katz et al., 2020), this phenomenon could be studied with older alumni of care to explore how and why family violence is sometimes perpetuated. Insights from survivors like Carmen could help researchers understand what they need both internally and externally to leave these situations. Finally, the cumulative health-related consequences of physical assaults and head injuries could also be better studied in those foster care alumni who experience physical abuse in both childhood and adulthood.

As the case studies exemplify, parenting challenges in foster care alumni are likely on a continuum ranging from an incapacity to safely house and care for a child to a more short-term hardship that can be addressed with modest support. Although we did not study it here, there are many alumni who raise healthy children and do not need any form of support. Studying older alumni and their parenting experiences could help to clarify the proportion of foster care alumni's parental challenges we see in studies like Hook and Courtney's (2013) are circumstantial or economic and may be alleviated by short-term financial aid. We could also attempt to decipher which challenges stem from social or emotional issues which may be supported through community-based interventions or therapy. Although there is an increasing effort to examine parenting experiences for care-experienced adults (Brännström et al., 2022; Budd et al., 2006; Foster et al., 2015), studying very young parents may miss the scope of challenges and potential areas for short-term intervention. Study one shows that even in the most resilient alumni, parenting journeys may prove challenging due to the unanticipated triggering of childhood wounds, but also due to the lack of healthy intergenerational support. Therefore, some therapeutic services could be offered across adulthood.

While Thomas would have been categorized as resilient by child welfare workers in his early twenties due to his academic excellence and steady employment history, his emotional challenges began in his 40s. Likewise, our other participant Carmen would have likely been labelled as not resilient, as she struggled through teen parenthood, housing insecurity, and under-employment in her early adulthood. However, Carmen found her path and has maintained relatively healthy relationships with all her children. She has raised two of her three children despite great physical disability. Carmen is a very resilient parent and for part of her life, she was a very resilient entrepreneur. She also continues to strive to help women like her who've been through domestic violence and children who like her have developmental disabilities. However, Carmen's adaptation to adulthood happened in her late twenties and Thomas's expedient achievements in his 20s and 30s were followed by critical hardships in his early 40s, suggesting that key turning points happen after we stop tracking foster care alumni. In fact, both alumni reported starting on their healing journey in their forties. These two unique stories both challenge the current resilience paradigm and support the idea that we should be tracking care leavers for longer.

In article two, we integrated what is known in the academic literature about foster care alumni's later life well-being through a carefully designed scoping review focusing on the mental and physical health of care leavers over age 30. Due to limitations in available studies, the review article predominantly draws insights from population panel studies. The benefit of these studies is that they included large numbers of people with care experience, but unfortunately due to the design of these studies, most could not account for the length or quality of placement. The length and quality of care affect well-being, which is well established in younger foster care literature (Courtney & Hook, 2017; Garcia et al., 2012; Hunter et al., 2014). However, in older alumni of care, we have less data to draw upon to understand how the facets of care experience impact adults decades later.

Furthermore, two of the included panel studies, the Casey family cohort (Villegas & Pecora, 2012; Villegas et al., 2011) and the Israeli residential care alumni (Achdut et al., 2022; Sulimani-Aidan et al., 2022) cohort can offer insights into the quality and length of placement. Unfortunately, despite their superior data strengths, these two studies are niche cohorts making it difficult to draw meaningful interpretations for the general system-involved population. For example, in Israeli residential care services, youth age out into 2-3 years of military service where housing and stipends are provided. Thus, transition-age Israeli youth have a qualitatively different experience as they are aging out of care. Casey's family cohort, while large, is also unique in that it does not report on outcomes from public placement or group care. Nor do they share how many of their young people aged out of the system. They report on young people who spent at least one year of their lives in Casey Family's private foster care service. They purport that this service is superior to public services (Zerbe et al., 2009), suggesting that their findings may not be representative of general foster care outcomes. Furthermore, they can't report on the outcomes of children from group care as they do not offer group care services, whereas Israeli family foster care services are rare, and their residential care cohorts are exclusively from group care. Thus, while these two cohort studies are foundational as they have the most thorough life course data available, they cannot represent the outcomes of all forms of care leavers. Integrating insights from both projects and expanding public cohorts from other countries could be the path forward to creating more representative and inclusive foster care alumni panel projects in future.

In all the scoping review's included articles, we found that mental health outcomes were examined in 28/29 studies, suggesting that researchers are more interested in mental health, whereas researchers reported on some aspects of care leavers physical health in only 12/29 articles. This distribution suggests that mental health is the predominant focus of the current later-life well-being literature. However, since mental health is strongly associated with one's physical condition (Karcher & Barch, 2021; Koban et al., 2021; Mahindru et al., 2023) and because many children in care were severely abused in ways that can affect the physical body (Zerbe et al., 2009), focusing largely on mental health outcomes limits our breadth of knowledge into their later life health outcomes and needs.

Across all but one health study included in the scoping review, we found that care leavers had worse health outcomes than their peers and that the only study that did not show worse health for care leavers was seriously limited because its controls were significantly older than their foster care population. In addition, some evidence suggests that care leavers have higher death rates than the general population (Bullock & Gaehl, 2012; Cameron et al., 2018), which is a very concerning finding that was only reported on in the European data sets in this review, and unfortunately these articles did not report on the cause of death, so it is unclear whether the disproportionate death rates were from disease, accidents or suicides. However, one article did report that there were higher rates of suicide attempts amongst care leavers (Brannstrom et al., 2020), suggesting that some of these deaths may be preventable. Reporting on care leavers' causes of death should be a public health priority as such information could be used to create preventative interventions and inform public policy. Furthermore, more effort should be made in North America to report on mortality rates in foster care alumni. We do not have enough information about why young people are dying at higher rates.

In the third and final article, we chose to focus on sleep, one area of health that is amenable to intervention and understudied in the care leaver literature (Fusco & Kulkarni, 2018; Javakhishvili et al., 2021). Using a mixed-method approach, we examined sleep quality and its association with child welfare experiences and global care leaver health. We found that decades later, negative child welfare experiences strongly predicted poorer sleep quality even after controlling for age, race, ethnicity, social support network, and economic indicators. Furthermore, we found that alumni who were not sleeping well had greater health challenges. This finding is consistent with what we know about how sleep is disrupted for children in care (Alfano et al., 2022; Hambrick et al., 2018; Lehmann et al., 2021), and for young adults with care experience (Fusco, 2020; Fusco & Kulkarni, 2018). It is also consistent with what is known broadly about how sleep is affected by stress (Breslau et al., 2004; Kobayashi et al., 2012; Ohlmann et al., 2018) and how important sleep is for health (Chattu et al., 2019; Luyster et al., 2012). Our findings suggest that sleep challenges remain elevated for some alumni across their life course, particularly for those with negative experiences in child welfare, while the comments from participants contained in their life stories helped to shed light on the nature of sleeping challenges and some of the potential health consequences that could be interrogated in more detail in future studies.

Across the three studies, we observed that child welfare experiences leave a lasting impact on care leavers' lives. In article one, both participants in the case study were divorced and struggled with their parenting journeys for different reasons. Both participants were preoccupied with their own emotional healing, which continued to age 74 for Thomas. In Carmen's case, her physical and cognitive functioning suffered from a lifetime of assaults and injuries, suggesting that for alumni who are physically abused, the sequelae may extend across their life due to both the original injuries (Fernandez et al., 2017) and their choice of romantic partner (Kimber et al., 2015). It's devastating to imagine that many of Carmen's injuries and certainly her last one could have been preventable if she had access to therapy, intergenerational support and/or tailored domestic violence support. Women like Carmen who experience IPV after placement should be prioritized as their suffering has a downstream impact on the next generation.

Limitations and Implications:

While the findings of this thesis offer valuable insights into the life course well-being of care leavers, several limitations must be acknowledged. The convenience sample utilized in articles one and three consists predominantly of higher-functioning and educated individuals recruited through alumni of care networks, limiting the generalizability of the findings. Additionally, the absence of a comparison group hinders the ability to contextualize the results within broader community norms. Moreover, the overrepresentation of white participants in the third study (75%) underscores the need for more inclusive sampling strategies to capture the diverse experiences of care leavers. Finally, the scoping review is limited by the design of the literature search. It is possible we may have missed certain articles or that articles could have been published after the search strategy was implemented. The third and final study of this dissertation has no data regarding what percentage of sleep-challenged alumni were severely injured in childhood. This was a question that in hindsight I wish I had asked. However, we know that reduced sleep quality predicted poor health outcomes, suggesting that some alumni with health conditions may also be struggling with sleep, and this connection could be better interrogated in the future. Despite these limitations, this study did reach a diverse and largely invisible population. It was 80% Canadian, and the current Canadian care leaver literature stops data collection at 25; therefore, the third study, while retrospective and relatively small ($n = 41$), fills a critical gap in available life course knowledge and justifies ongoing work in this demographic.

Future Research Directions

As researchers, we spend both time and money documenting the hardships affecting foster children up to age 25. We see that a disproportionate amount of emergency and health services (Harman et al., 2000; Peters et al., 2009), homeless services (Crawford et al., 2015; Rosenberg & Kim, 2018), and social services (Peters et al., 2009) are spent serving these people who are seemingly set up for these hardships by poor government policies. Then, we largely stop documenting their lives at age 26. This thesis points out that for some adults, their hardships continue for decades after we stop collecting information. Their childhood hardships continue to affect their sleep, their health, and their relationships.

Furthermore, this data highlights a weakness in child welfare resilience literature. Resilience being defined as the successful adaption to life in the context of adversity (Rutter, 2012). Child welfare literature for the most part relies largely upon crude measures of resilience such as the ability to maintain housing, find and maintain employment (Furey & Harris-Evans, 2012), or not be diagnosed with psychiatric illness. While some child welfare literature acknowledges the community-level environment that can impact resilience (Furey & Harris-Evans). However, the theoretical resilience literature has a more nuanced understanding in one realm of life does not equate to resilience in all areas of life. Thus, researchers could work towards documenting their hardships and resilience more broadly and for longer so that care leavers who need it can be better supported. Future research should prioritize extending the duration of data collection within existing panel studies, initiating new longitudinal projects aimed at tracking alumni of care for longer periods, and being more inclusive towards all care leavers and more dynamic conceptualizations of resilience across the life course (Rutter, 2012).

Researchers could also investigate sleep quality in some of the larger panel studies. The Midwest study run out of the University of Chicago has data available within a PTSD measure that includes a question about sleep quality (Courtney et al., 2011) pg. 56. While they shared their findings in a report which documented that roughly half had sleeping difficulties, they did not yet, to my knowledge, specifically report on sleep specifically and its correlates. It would be important to establish if sleep is a moderator of other outcomes such as if a certain percentage of young people who struggle with their education, health or employment are reporting on average more sleeping challenges. Researchers could also examine sleep in larger samples with older alumni of care. Furthermore, it would be helpful to examine sleep not only through self-report surveys but also using less subjective measures of sleep such as, but not limited to polysomnography, actigraphy, heart rate variability, EEG, or daily cortisol levels. Likewise, sleep intervention studies with youth in care and sleep hygiene education training with alumni of care could be studied in future foster care research projects. Thus, sleep is a key area that could be expanded upon in future research.

In chapter two's case study, we highlighted relational challenges that centred around domestic violence. *Carmen* reported that she had been a victim of violence throughout her life and that this has had a life-altering impact on her health and specifically her cognitive function. Since chapter two was published, the Midwest study has started to report that an important percentage of young care leavers experience domestic violence (Katz et al., 2020). However, they have yet to tie this information to health outcomes in peer-reviewed literature which I think would be a critical next step. Researchers are just beginning to document cognitive dysfunction in survivors of IPV in the general population (Esopenko et al., 2021; Karr et al., 2024). It is also consistent with what is known about cognitive function after childhood trauma (Avent et al., 2021; Cowell et al., 2015). To obtain an accurate diagnosis and prognosis, it could be important to study cognitive function and other health consequences within care leaver populations that experience extensive domestic violence across their lives. The diagnosis may be categorically different for a woman who experiences domestic violence only in adulthood due to the cumulative impact of head trauma, which has been well documented in football players (Andersen et al., 2004). For women exposed to IPV-related head injuries, we are just starting to document and understand their health consequences (Esopenko et al., 2021; Karr et al., 2024). Even less is known about other complex injuries that occur in childhood for some care leavers and leave a lasting impact such as compound and unset fractures. Understanding the legacy of these injuries could lead towards preventative interventions.

The original data collected for this thesis has a wealth of information that has yet to be analysed and written up. I have more interviews with men like *Thomas* in Chapter 2, who for complex reasons did not raise their children to adulthood. I plan to delve into parenthood with an exploration of gender issues. I further intend to write a paper about sex work recruitment from group homes, which was a theme mentioned in Chapter 2 of my thesis, and which reverberated throughout my interviews with women across Canada. Finally, I foresee a mixed-method paper focused on financial wellness in care leavers. These are some of the directions that I will examine in the future using my thesis data.

Policy and Practice Recommendations

The practical aspects of this thesis for current youth protection interventions are as follows. First and foremost, routine inquiry about the health of children in care should be more comprehensive. It is not enough to note in children’s files if have diagnosable conditions, fractures, or surgeries, but to inquire and respond to how children in care sleep, how their bodies feel, and if any therapeutic interventions have been made to address injuries or overactive stress response systems. For example, trauma-informed exercise classes, CBT-based sleep intervention, massage, physiotherapy, and psychotherapy would be better if given early. Likewise, during these holistic inquiries, could children with clear trauma-related physical disabilities like *Carmen* have been referred to professionals who annually monitor cognitive function and support management of trauma related injuries.

These findings that poor placement experiences have long-term consequences signify to me that placement match between children and their caregivers is critical (Rip et al., 2020; Sinclair & Wilson, 2003; Tucker & MacKenzie, 2012). Children who are chronically unhappy in placement, such as those alumni who rated their child welfare experiences as globally negative, deserve adequate attention to address their familial and interpersonal conflicts. This research implies not only that placement quality and by extension match affect placement retention (Gibbs & Wildfire, 2007) and childhood attachment, (Dozier et al., 2001; Tucker & MacKenzie, 2012) but also that placement quality and match are associated with both sleep and well-being decades later. Therefore, more efforts could be given towards supporting the transition of foster children to new homes and moving them when they are chronically unhappy.

Likewise, for practitioners who are commonly working with alumni of care, several areas could be inquired about or addressed. There could be more inquiries about sleep and global physical health. Efforts could be made to offer basic psychoeducation around sleep quality so that alumni know this hardship is common, and the associated challenges that accompany sleeping difficulties such as fatigue, or lack of concentration etc. do not need to be a source of shame (He et al., 2021; Kim et al., 2021; Vanek et al., 2020). Furthermore, efforts could be made to offer short-term sleep hygiene or CBT training (Chung et al., 2018; Irish et al., 2015; Swift et al., 2022). We can also ask parents who were in care as children how their parenting journey is going and try to create responsive community-based interventions for those struggling intergenerationally. It occurred to me towards the end of my thesis that a handful of alumni I interviewed had lost custody of their children to care. This made me curious about the sleep quality of parents with children in placement, I did a brief scan of the literature and found no articles on the topic. Sleep is commonly disrupted in traumatized (Brindle et al., 2018; John-Henderson, 2020; Kajeepeta et al., 2015) and impoverished communities (Fatima et al., 2020). I also wondered about parents who have lost their children to placement. What if parents fail to show up or do not adhere to clinical plans and are critically challenged by poor sleep? Asking parents whose children are in care how they are sleeping or simply coping with the stress of separation may build pathways towards clinical alliance, particularly for those with intergenerational placement histories.

This thesis supports the idea that policy-wise foster care alumni should be given ample consideration in the planning of public health and social services. Community-based support for this population is sparse in North America, and many of the alumni I interviewed have unmet psychosocial needs. It makes sense that people traumatized in their childhoods may struggle at different points in their life course, and cutting off service eligibility in these young people's teens or early twenties means we lose track of how they are doing and lose the opportunity to offer support and interventions. While I could argue for the ethics of society supporting care leavers that the state raised to adulthood, there is an economic factor to consider as well. If offering therapy or scholarship funding to an alumnus could prevent the placement of their children into care systems (Brännström et al., 2022; Foster et al., 2015), the societal costs would more than pay for itself. Likewise offering short-term emergency housing for care leavers experiencing domestic violence may reduce victim related societal costs such as injuries, IPV-related child welfare placements, and the need for shelter (Cohen, 2020). As an example, if society offered alumni with sleeping difficulties effective and brief CBT-based sleep interventions and even a minority responded, there would likely be a long-term health improvement, which could decrease public health expenditures, and perhaps result in raised wages for alumni who were under-employed due to sleeping difficulties (Chaput et al., 2023). Exploring alumni's needs and developing responsive programming to those who are suffering could potentially both decrease social costs and increase tax revenue in addition to these types of supports being a moral consideration for society.

Conclusion

This paper outlines the life course gaps in the literature, showing that after age 30 little is known about the lives of child welfare alumni. The first article identifies that parenthood is poorly examined in older care leavers and that healing occurs across the life course (Keller, 2021). The second article identifies that researchers' focus on care leavers' mental health overshadows the importance of physical health, but that both physical and mental health issues disproportionately affect adults who spend any time in care systems. However, it also highlights the important gaps in the available literature for the later life of children who have aged out of child welfare. The truth is that we have very limited knowledge about their needs. Finally, the third article in this study points out that sleep is underexamined amongst care leavers of all ages, particularly in those aged 30+. It also shows that negative child welfare experiences are associated with poor sleep quality decades after these experiences happen, and that sleep quality is important in part because it predicts health outcomes in care leavers. By exploring these gaps in existing literature through a scoping review and reporting on original data, this thesis sheds light on the ongoing health and well-being-related challenges faced by care leavers as they transition into middle- and later adulthood.

Moving forward, there is a pressing need for more holistic and comprehensive data collection efforts that continue to track care leavers as they age and transition to parenthood or retire, even including elders who are transitioning to old-age homes. The experience of being raised in an institution and returning to one in old age may bring with it hardships that researchers in aging do not fully appreciate. Furthermore, there remains much potential to create targeted interventions to address the multifaceted needs of foster care alumni across their lifespans (Sanders, 2020). Researchers could have a role to play in creating community-based solutions for a host of challenges from parenting to sleep hygiene. This thesis merely touches the surface of the life course needs, challenges, and resilience of aging care leavers. Much work can be done in the future to continue examining this population holistically and across the life course. The stories and lived realities of these vulnerable people should also be documented so that their needs are attended to, and the systemic and institutional challenges they experienced can be prevented in future generations.

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Appendix 1: [Online Survey]

Appendix A

Demographics Questionnaire and Normed Measures (Distributed Online Via Qualtrics)

1. **What is your Age?**
   A. 18-30
   B. 31-40
   C. 41-50
   D. 51-60
   E. 61-70
   F. 70-80
   G. 80+
2. **How do you identify your gender?**
   A. Female
   B. Male
   C. Non-binary/third gender
   D. Transgender
   E. Prefer to self-describe _____________
   F. Prefer not to say
3. **With what Sexual Identity do you identify?**
   A. Straight/Heterosexual
   B. Gay or Lesbian
   C. Bisexual
   D. Queer
   E. Asexual
   F. Prefer to self-describe _____________
   G. Prefer not to say
4. **Ethnicity (check all that apply)**
   A. First Nation, Inuit, or Métis
   B. Asian
   C. Black or African Canadian
   D. White Caucasian
   E. Biracial
   F. Some other race, ethnicity, or origin ____________
   G. Prefer to self-describe ____________
   H. Prefer not to say
5. **Are you of Hispanic, Latino/a/x, or of Spanish origin? (one or more categories may be selected)**
   A. No, not of Hispanic, Latino/a/x, or Spanish origin
   B. Yes, Hispanic, Latino/a/x, or Spanish, Mexican, Mexican American, Chicano
6. **Where is your primary area of residence today?**
   A. Quebec
   B. Ontario
   C. British Columbia
   D. Prince Edward Island

E. Saskatchewan
F. Alberta
G. New Brunswick
H. Newfoundland / Labrador
I. Northern Territory
J. U.S. A
K. Mexico
L. Outside of North America

7. **Where was your youth protection placement location (check all that apply)**
   A. Quebec
   B. Ontario
   C. British Columbia
   D. Prince Edward Island
   E. Saskatchewan
   F. Alberta
   G. New Brunswick
   H. Newfoundland / Labrador
   I. Northern Territory
   J. U.S. A
   K. Mexico
   L. Placement outside of North America
8. **Did you ever stay in a Hebrew Orphanage?**
   A. Yes
   B. No
9. **Did you ever reside in a residential school?**
   A. Yes
   B. No
10. **What is your current Marital status?**
    A. Single
    B. Married / Common Law
    C. Divorced
    D. Widowed
    E. Prefer to self-describe _____________
11. **How many children do you have?**
    (Pull down menu)
12. **Were either of your parents ever in youth protection placement or out-of-home care?**
    A. Yes, both of my parents were in placement
    B. Yes, one of my parents was in placement
    C. No, neither of my parents experienced placement
    D. I am not sure
13. **Were any of your grandparents ever in youth protection placement or out-of-home care?**
    A. Yes, I had at least one grandparent who experienced out-of-home care
    B. No, I did not have a grandparent who experienced out-of-home care
    C. I am not sure about my grandparent’s history with youth protection

14. **Highest Education Completed**
    A. No Formal Education (No elementary or secondary)
    B. Elementary
    C. Some High School
    D. High School Diploma
    E. GED
    F. Some college or Trade School
    G. Community college or CEGEP grad/associate degree
    H. Bachelor’s degree
    I. Master’s degree
    J. Ph.D. or other professional degree
    K. Prefer not to say
15. **Income**
    A. Less than $12,000 a year
    B. $12,001-15,000
    C. $15,001 - $30,000
    D. $30,001 - $55,000
    E. $55,001- $75,000
    F. $75,001-120,000
    G. $120,001+
16. **Do you currently rely on income supports to make ends meet?**
    A. Social Assistance / Welfare
    B. Disability-based income benefits
    C. Food stamps / Food bank
    D. Subsidized housing
    E. Currently in jail
    F. Currently in supported housing
17. **How long were you in out-of-home placement?**
    A. Less than a year
    B. 1-2 Years
    C. 3-4 Years
    D. 5-7 Years
    E. 7-10 Years
    F. 10-15 Years
    G. 15+
18. **How many times did you switch homes during your childhood (including unofficial kinship and short-term emergency placements)?**
    A. 1-2
    B. 2-5
    C. 5-8
    D. 9-11
    E. 12-16
    F. 17+
19. **How many times did you switch homes (if you exclude short-term placements and unofficial kinship)?**
    A. 1-2
    B. 2-5

    C. 5-8
    D. 9-11
    E. 12-16
    F. 17+

20. **How long did you spend in family-based foster homes?**
    A. I was never placed in a foster home
    B. I was placed in foster homes for 1-2 years
    C. I was placed in foster homes for 2-5 years
    D. I was placed in foster homes for more than 6 years
21. **How long did you spend in group home care?**
    A. I was never placed in group homes
    B. I was placed in group homes for 1-2 years
    C. I was placed in group homes for 2-3 years
    D. I was placed in group homes for 4-5 years
    E. I was placed in group homes for more than 6 years
22. **Time in youth protection residential care centres (Includes: rehabilitation centres, mom and baby centres, psychiatric hospitals if the unit was focused on foster children, cottage-based campuses that host over 20 children)?**
    A. I was never placed in residential care centres
    B. I was placed in residential care for 1-2 years
    C. I was placed in residential care for 2-3 years
    D. I was placed in residential care for 4-5 years
    E. I was placed in residential care for more than 6 years
23. **Time spent in juvenile detention facilities**
    A. I was never placed in detention centres
    B. I was placed in detention centres for less than 6 months
    C. I was placed in detention centres for 7 -12 months
    D. I was placed in detention centres for more than 1 year but less than 2 years
    E. I was placed in juvenile detention centres for more than 2 years
24. **If applicable, please specify your religion**
    A. No Religion
    B. Catholicism/Christianity
    C. Judaism
    D. Islam
    E. Buddhism
    F. Hinduism
    G. Other: ______
    H. Prefer not to say

25. **Did you ever experience a placement in a home where you feel your religious or cultural values were not respected?**
    Yes
    No
26. **Did you age out of care or emancipate from care between 16-21?**
    A. No, I did not age out of care because I returned home or was adopted
    B. No, I did not age out because I ran away before aging out

C. No, I became of age in juvenile detention
D. Yes, I aged out of a foster home
E. Yes, I aged out of a group home
F. Yes, I aged out of a residential centre
G. Yes, I aged out of an orphanage
H. Yes, I aged out of residential school
I. Yes, I aged out of an independent living program

27. **How would you classify your youth protection experience?**
A. Very negative
B. Mostly negative
C. Somewhat negative
D. Neutral
E. Somewhat positive
F. Mostly Positive
G. Very positive

28. **Do you believe that at your current age you would still benefit from additional support due to your early childhood experiences, your placement experiences, or challenges you faced aging out of care?**
A. Yes
B. No
C. Unsure
D. Decline to answer

29. **If you do feel you could benefit from ongoing support, what kind of support would you identify as being helpful (Check all that apply)**
A. Psychotherapy
B. Financial Support
C. Health-related supports (medication, physical therapy, dental work)
D. Social outings

30. At what age did you feel financially independent?
A. 16-20
B. 21-25
C. 25-30
D. 31-40
E. 41-50
F. 51-60
G. 61+
H. I do not feel financially emotionally.

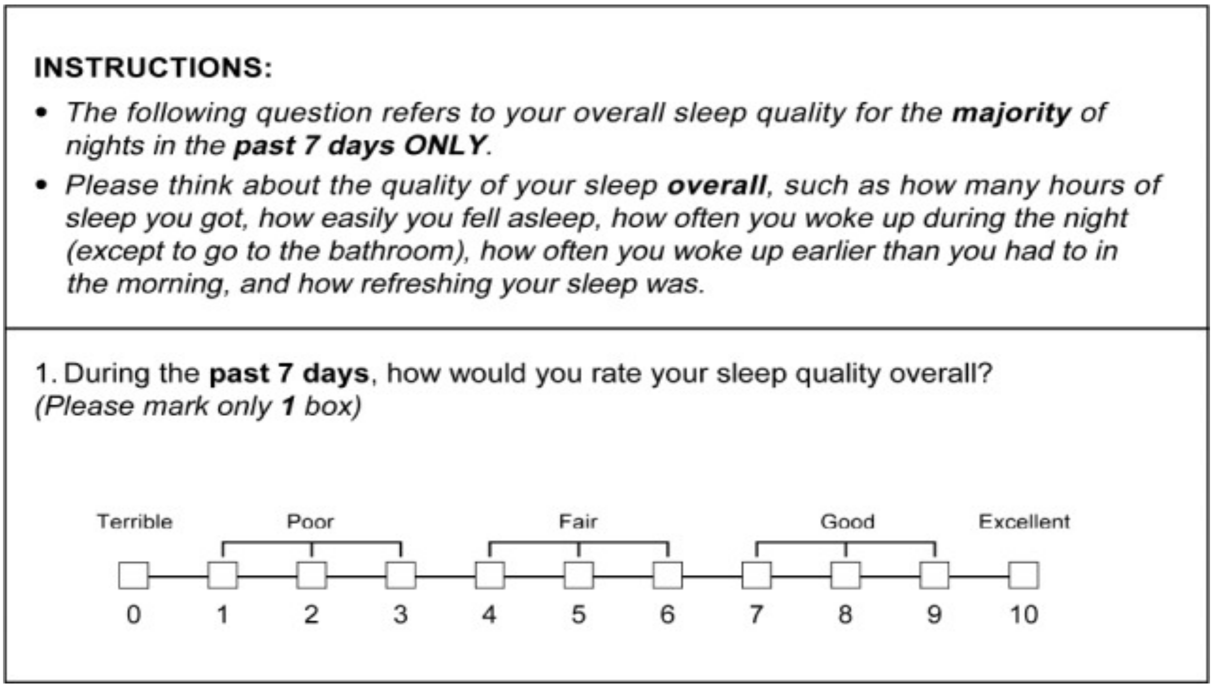
31. At what age did you feel emotionally recovered from family or youth protection related hardships?

A. I did not feel or do not remember feeling emotionally scarred.
B. 16-20
C. 21-25
D. 26-30
E. 31-40
F. 41-50

G. 51-60
H. 61+
I. I do not feel emotionally recovered.

32. If you could give advice for what the system should do differently, what would you recommend?

Sleep-Quality Scale



INSTRUCTIONS:

- *The following question refers to your overall sleep quality for the* ***majority*** *of nights in the* ***past 7 days ONLY****.*
- *Please think about the quality of your sleep* ***overall****, such as how many hours of sleep you got, how easily you fell asleep, how often you woke up during the night (except to go to the bathroom), how often you woke up earlier than you had to in the morning, and how refreshing your sleep was.*

1. During the **past 7 days**, how would you rate your sleep quality overall? *(Please mark only **1** box)*

Terrible: ☐ 0
Poor: ☐ 1 ☐ 2 ☐ 3
Fair: ☐ 4 ☐ 5 ☐ 6
Good: ☐ 7 ☐ 8 ☐ 9
Excellent: ☐ 10

LUBBEN SOCIAL NETWORK SCALE—6-Item Version.

LSNS-6

FAMILY: *Considering the people to whom you are related either by birth or marriage or placement*

1. How many relatives do you see or hear from at least once a month?

0 = *none* 1 = *one* 2 = *two* 3 = *three or four* 4 = *five thru eight* 5 = *nine or more*

2. How many relatives do you feel close to such that you could call on them for help?

0 = *none* 1 = *one* 2 = *two* 3 = *three or four* 4 = *five thru eight* 5 = *nine or more*

3. How many relatives do you feel at ease with that you can talk about private matters?

0 = *none* 1 = *one* 2 = *two* 3 = *three or four* 4 = *five thru eight* 5 = *nine or more*

FRIENDSHIPS: *Considering all of your friends including those who live in your neighborhood ….*

4. How many of your friends do you see or hear from at least once a month?

0 = *none* 1 = *one* 2 = *two* 3 = *three or four* 4 = *five thru eight* 5 = *nine or more*

5. How many friends do you feel close to such that you could call on them for help?

0 = *none* 1 = *one* 2 = *two* 3 = *three or four* 4 = *five thru eight* 5 = *nine or more*

6. How many friends do you feel at ease with that you can talk about private matters?

0 = *none* 1 = *one* 2 = *two* 3 = *three or four* 4 = *five thru eight* 5 = *nine or more*

SF-8 Health Survey Questions that were used in this survey.
This survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities.

1. **Overall, how would you rate your health during the past 4 weeks?**

- Excellent
- Very good
- Good
- Fair
- Poor
- Very poor

2. **During the past 4 weeks, how much did physical health problems limit your usual physical activities (such as walking or climbing stairs)?**

- Not at all
- Very little
- Somewhat
- Quite a lot
- Could not do physical activities

3. **During the past 4 weeks, how much difficulty did you have doing your daily work, both at home and away from home, because of your physical health?**

- None at all
- A little bit
- Some
- Quite a lot
- Could not do daily work

4. **How much bodily pain have you had during the past 4 weeks?**

- None
- Very mild
- Mild
- Moderate
- Severe
- Very Severe

5. **During the past 4 weeks, how much energy did you have?**

- Very much
- Quite a lot
- Some
- A little
- None

6. **During the past 4 weeks, how much did your physical health or emotional problems limit your usual social activities with family or friends?**

- Not at all
- Very little
- Somewhat
- Quite a lot
- Could not do social activities

Appendix 2: [Interview Guide]

Interview semi-structured questions.

1. Tell me about your placement history. How long were you in care and what type of placements did you live in during care?

2. Tell me about your experiences in your transition to adulthood from the ages of 16-25?

3. Tell me about your life now. Do you associate anything as being more challenging or less changing due to your youth protection experiences?

4. Tell me about your transition to parenthood what was that like? (If applicable)

5. Can you tell me more about xxx. difficulties (challenges during group care or the transition to adulthood) that you mentioned earlier?

6. Do you feel that you have come to terms with your childhood experiences?

7. If yes when did your journey towards coming to terms with your experiences begin and what was most helpful?

8. If you could change one thing about youth protection or residential care placement, what would it be and why?

3rd Contact - Member Checking –

The Interviewer will schedule a telephone call to ensure accuracy using member checking. The researcher will inquire about unclear details in the audio recordings. Participants were allowed to remove quotes or material from the transcripts. The telephone calls take on average 30 minute

Appendix 3

List of the included scoping review articles and key extracted data

Article	Care Leaver N	Country	Type of Care	Comparison Group	Study Name	Health or Mental Health	Mental Health outcomes	Health outcomes
Achdut, et al. (2022)	2, 295	Israel	Group Care	a doubled matched comparison group	Israel Youth Villages Alumni	Mental Health	Life Satisfaction	n/a
Anctil et al. (2007a)	564	USA	Foster family care	none	Casey National Alumni Study	Mental Health	Self Esteem DSM diagnoses lifetime & last 12 months,	n/a
Anctil, et al. (2007b)	1,087	USA	Foster family care	Alumni without childhood disabilities	Casey National Alumni Study (CNAS)	Both	DSM diagnoses last 12 months	SF-12 Health Survey; medical appt frequency
Brännström, et al. (2017)	881	Sweden	unreported	Cohort w/o hx of child welfare involvement	Stockholm Birth Cohort (SBC) study	Mental Health	Psychiatric Hospitalizations	n/a

Article	Care leaver n	Country	Type of care	Comparison Group	Study Name	Health or Mental Health	Mental Health Outcomes	Health Outcomes
Brännström & Vinnerljung, (2020)	533	Sweden	unreported	Non-placed siblings	Swedish National Board of Health and Welfare	Mental Health	criminality, psychiatric care, psychiatric meds, suicide attempts alcohol addiction	n/a
Bullock & Gaehl (2012)	152	UK	All types of care 51% residential care	Children who left care within a few weeks of placement	Lost in Care Study	Mental health	Criminal Convictions	Early mortality
Cameron et al. (2018).	1383	England, Germany, Finland	unreported	Cohort w/o hx of child welfare involvement	UK(BCS70/LSYPE). Finland (FBC); German SOEP,	Mental health	Depression, psychiatric diagnosis, psychotropic medication,	Health satisfaction, early mortality,

Article	Care leaver n	Country	Type of care	Comparison Group	Study Name	Health or Mental Health	Mental Health Outcomes	Health Outcomes
Cooley & Murray (2018)	49	USA	unreported	Non-matched community sample	Cooley Low Income medical clinic	Both	Depression, anxiety, alcohol use	RAND-36, BMI, Number of medical diagnoses
DeGue & Spatz Widom, (2009)	665	USA	Reported as foster family care vs. other types of care.	Abused youth who were not removed from their home N=107	DeGue (2009) Administrative data	Mental health	Adult criminal convictions	n/a
Dregan, & Gulliford, (2012)	431	UK	All types of care, reported on, controlled for in analysis	Cohort w/o hx of child welfare involvement	British Cohort Study	both	Life Satisfaction, Self-efficacy, smoking, criminal convictions	Health Satisfaction

Article	Care leaver n	Country	Type of care	Comparison Group	Study Name	Health or Mental Health	Mental Health Outcomes	Health Outcomes
Fechter-Leggett et al. (2010)	1582	USA	Kinship and Foster family care	Time in kinship care versus foster care	Casey National Alumni Study (CNAS)	Mental health	psychiatric diagnoses, mental health scores, PTSD, Alcohol dependence	n/a
Fernandez et al. (2017)	669	Australia	group care	none	Stolen Generations study	both	Psychological distress	Qualitative discussion of physical health trauma siliquae
Garcia, et al. (2015)	805	USA	foster family care	White vs Latino vs black youth in care	Casey National Alumni Study (CNAS)	Mental health	Mental health diagnoses with CIDI	n/a
Harris et. al. (2010)	708	USA		Subgroup white versus black alumni	Casey National Alumni Study (CNAS)	Mental health	CIDI mental health diagnoses lifetime, CIDI mental health diagnoses last 12 months,	n/a

Article	Care leaver n	Country	Type of care	Comparison Group	Study Name	Health or Mental Health	Mental Health Outcomes	Health Outcomes
Jackson Foster et al. (2015)	1038	USA	Foster family care	none	Casey National Alumni Study (CNAS)	Mental health	DSM diagnoses lifetime & last 12 months,	n/a
Kaspar (2014)	599	Canada	Unreported	Cohort w/o hx of child welfare involvement	2006 Aboriginal Peoples Survey (APS) and Métis Supplement survey form (APS-M)	Mental health	Major depressive episode, lifetime suicidal ideation, self-esteem, cultural adherence,	n/a
Lindquist & Santavirta (2014)	3290	Sweden	unreported	Cohort w/o hx of child welfare involvement	Stockholm Birth Cohort Study (SBC)	Mental health	Criminality	n/a
Nuytiens, et al. (2018)	38	Belgium (Flanders)	All types of care but more group care.	none	Nuytiens (2018) Qualitative	Mental health	Perspectives on Resilience	n/a
McKenzie, R. B. (2003)	839	USA	group care	Between age cohorts of sample, and population norms	McKenzie US Orphanage Alumni	Mental health	Happiness	n/a

Article	Care leaver n	Country	Type of care	Comparison Group	Study Name	Health or Mental Health	Mental Health Outcomes	Health Outcomes
Okpych & Courtney (2021)	53	USA	All types of care. Congregate care controlled for in analysis	Low-income college student's w/o child welfare hx	Midwest Study and National Student Clearinghouse	Mental health	Mental Health Problems, substance abuse problems	n/a
Parsons, S., & Schoon, I. (2022)	105 out of home care and 93 whose mother had been placed	UK	unreported	Care leavers vs. their children vs. no hx of child welfare involvement	British Cohort Study	both	Mental health, anxiety, feelings of loneliness, low locus of control	Malaise, poor general health
Roberts, et al. (2017)	141	WALES	Unreported	Parents w/o hx of child welfare involvement	Wales Adoption Study	Mental health	Mental health diagnoses recorded in public system	n/a
Schneider, et al. (2009)	368	USA	unreported	study participants w/o hx of child welfare involvement	California Women's Health Survey	both	Mental health problems	general health rating, smoking, obesity
Sulimani-Aidan, et al. (2022)	4917	Israel	Group	Matched Control Group	Israeli youth villages alumni	Mental health	Optimism	n/a

Article	Care leaver n	Country	Type of care	Comparison Group	Study Name	Health or Mental Health	Mental Health Outcomes	Health Outcomes
Villegas & Pecora, (2012)	910	USA	Foster Family Care	Between sample white to African American to Hispanic	Casey National Alumni Study (CNAS)	Mental health	DSM diagnoses lifetime and past year	n/a
Villegas et al., (2011)	910	USA	Foster family care	n/a	Midwest study	both	n/a	Physical health survey No chronic medical condition
Vinnerljung, & Hjern (2014)	16,986	Sweden	Unreported	Panel study General population, vs adoptees, vs foster youth	Swedish national cohort study	both	Psychotropic drug prescriptions, hospitalizations	psychiatric hospitalization
Von Borczyskowski et al. (2013)	2408	Sweden	Foster family care	Adoptees, nonplaced siblings, majority population peers	Swedish national cohort study	both	criminal arrests, family of origin substance use	Substance Abuse related hospitalization
Zlotnick et al. (2012)	1188	USA	Unreported	Cohort w/o hx of child welfare involvement	California Health Interview Survey (CHIS).	both	Mental health problems, disability rates.	General health ratings and specific diagnoses

Appendix 4 Consent forms

Participant Consent Form for Online Surveys

Researchers:

Principal Investigator: Amanda Keller, School of Social Work

Supervisor: Dr. Michael MacKenzie : michael.j.mackenzie@mcgill.ca Direct Supervisor

Title of Project: Life After Residential Care

Sponsor(s): Vanier Canada Graduate Scholarship Program

Please read this document before continuing to the survey. Submitting your study responses indicates that you consent to participate in this study. Please save or print a copy of this document to keep for your own reference.

Purpose of the Study: You are invited to take part in a research study that focuses on garnering insights from adults over the age of 40 who experienced extended stays in residential and/or group home care placement during their childhoods. The purpose of this research study is to understand how individuals who experienced group child welfare placements fare over their lives.

Study Procedures: The first part of this study involves completing a 25-minute online survey pertaining to your childhood experiences and current life situation.

The second part of the study involves the recruitment of a subset of individuals who express an interest in ongoing research at the end of the online survey. Some renumeration will be provided for this interview. Individuals may choose to complete a recorded interview, for which there will be an additional consent form.

Voluntary Participation: Your participation is voluntary. You may decline to answer any question/take part in any procedure, and may withdraw from the study at any time, for any reason. If you withdraw before completing half of the surveys, your data will be destroyed. If you withdraw after completing at least half of the surveys, your de-identified information may be retained for statistical purposes. De-identified data can no longer be withdrawn as participation is anonymous.

Potential risks: Some questions may raise uncomfortable feelings or emotions related to past experiences. You can refuse to answer any question in this survey.

Confidentiality: All information obtained during the study will be kept strictly confidential. Only the research team will have access to the information, and we will NOT be sharing any of your personal information (for example, your name, address, and telephone number). Your contact information will be destroyed when you complete this study. Neither your name nor your identity will ever be revealed in any publication or academic presentation.

Potential Benefits: Participating in the study will have no direct benefit for you; however, we hope to learn about the needs and lived realities of people who have experienced group home and residential care across their lives and thus raise awareness about this neglected population.

Sharing What We Learn: The information we learn from this study will be shared through publishable articles, conference presentations, and/or theses. Your name or personal information will never be shared with others.

Questions

Contact Persons: Amanda Keller, MSc; Principal Investigator
If you have any questions about this study, please contact

Amanda Keller 514-706-8530; amanda.keller@mcgill.ca; Principal Investigator

or

Dr. Michael MacKenzie: michael.j.mackenzie@mcgill.ca Direct Supervisor

Research Team's Address:

McGill University
Center for Research on Children and Families

3506 University Street, Suite 106 Montreal, Quebec H3A 2A7

If you have any ethical concerns or complaints about your participation in this study and want to speak with someone not on the research team, please contact the Associate Director, Research Ethics at 514-398-6831 or lynda.mcneil@mcgill.ca, citing REB file number

Written Consent Form

McGill

Researchers:

Amanda Keller, Principal Investigator
School of Social Work
514-706-8530; amanda.keller@mcgill.ca; Principal Investigator

Supervisor:

Dr. Michael MacKenzie : michael.j.mackenzie@mcgill.ca Direct Supervisor

Title of Project: Life After Residential Care

Sponsor(s): Vanier Canada Graduate Scholarship Program

Compensation: There are two parts to this study. You have already completed Part One, the online survey. The second part of this study involves completing a 60–90-minute audiotaped interview. Individuals who complete the interview will receive 60 CAD or 45 USD in remuneration for your time.

Potential benefits: Participating in the study will have no direct benefit for you; however, we hope to learn about the needs and lived realities of people who have experienced group home and residential care across their lives, and thus raise awareness about this neglected population

Potential risks: Some questions may raise uncomfortable feelings or emotions related to past experiences. You can refuse to answer any questions. You may also choose to ask for a break or stop the interview at any point.

Voluntary participation: Participating in this study is your choice. You can refuse to participate by verbally declining this consent process or you may request to stop at any point without penalty.

Limitations to withdrawal of data: If you choose to withdraw, you can do so at any time, including after completing your interview. Your data will be destroyed upon withdrawal only up until the time that data are published. Once the data has been published, it may not be possible to withdraw it in its entirety if, for example, it has been integrated in analysis. University policy requires that published data be retained for 7 years. Following publication, I will only be able to remove your data from further analysis and from use in future publications.

Confidentiality: All information obtained during the study will be kept strictly confidential. Only the research team will have access to the information, and we will NOT share any of your personal or identifiable information. The interviews will be transcribed, and your name, if mentioned, along with those of your loved ones, will be replaced with a pseudonym or fake name. The electronic file containing the transcription of your interview will be password-protected, and the audio file will be deleted once transcribed. All remaining files will be kept in a password-protected computer in a locked room. If the transcripts are printed for any reason, they will be kept in a locked cabinet in a locked office. Your name and other personal identifying information will not be used in any reports, presentations, or publications.

Furthermore, electronic manuscripts will be sent to you via email, and you may provide feedback via phone or email and request that we remove any content pertaining to your history.

Sharing What We Learn: The information we learn from this study will be shared through publishable articles, conference presentations, and/or theses. Your name or personal information will never be shared with others.

Contact Persons: Amanda Keller, MSc; Principal Investigator 514-706-8530; amanda.keller@mcgill.ca; Principal Investigator

or

Dr. Michael MacKenzie: michael.j.mackenzie@mcgill.ca; Direct Supervisor

Research Team's Address:

McGill University
Center for Research on Children and Families

3506 University Street, Suite 106 Montreal, Quebec H3A 2A7

This research was approved for ethical compliance by the McGill University Research Ethics Board. If you have any questions or concerns about your rights or welfare as a participant in this study, please call 514-398-6831 or email Lynda.mcneil@mcgill.ca to contact the McGill Research Ethics Officer Linda McNeil, who is independent of the investigator and works to protect participants' rights.

I have read the consent document, and by signing below I agree to allow my interview transcripts to be used for publication purposes.

Name (or initials) _________________ Signature _________________ Date _______________

Verbal Consent Form

McGill University
3506 University Street, Suite 106 Montréal, Quebec, H3A 2A7

Research Project
Life After Residential Care

McGill

Name of researchers:

Amanda Keller Principal Investigator
Dr. Michael MacKenzie Academic Supervisor

Compensation: There are two parts to this study. You have already completed Part One, the online survey. The second part of this study involves completing a 60–90-minute audiotaped interview. Individuals who complete the interview will receive 60 CAD or 45 USD in remuneration for your time.

Potential benefits: Participating in the study will have no direct benefit for you; however, we hope to learn about the needs and lived realities of people who have experienced group home and residential care across their lives, and thus raise awareness about this neglected population

Potential risks: Some questions may raise uncomfortable feelings or emotions related to past experiences. You can refuse to answer any questions. You may also choose to ask for a break or stop the interview at any point.

Voluntary participation: Participating in this study is your choice. You can refuse to participate by verbally declining this consent process or you may request to stop at any point without penalty.

Limitations to withdrawal of data: If you choose to withdraw, you can do so at any time, including after completing your interview. Your data will be destroyed upon withdrawal only up until the time that data are published. Once the data has been published, it may not be possible to withdraw it in its entirety if, for example, it has been integrated in analysis. University policy requires that published data be retained for 7 years. Following publication, I will only be able to remove your data from further analysis and from use in future publications.

Confidentiality: All information obtained during the study will be kept strictly confidential. Only the research team will have access to the information, and we will NOT share any of your personal or identifiable information. The interviews will be transcribed, and your name, if mentioned, along with those of your loved ones, will be replaced with a pseudonym or fake name. The electronic file containing the transcription of your interview will be password-protected, and the audio file will be deleted once transcribed. All remaining files will be kept in a password-protected computer in a locked room. If the transcripts are printed for any reason, they will be kept in a locked cabinet in a locked office. Your name and other personal identifying information will not be used in any reports, presentations, or publications.

Furthermore, electronic manuscripts will be sent to you via email, and you may provide feedback via phone or email and request that we remove any content pertaining to your history.

Sharing What We Learn: The information we learn from this study will be shared through publishable articles, conference presentations, and/or theses. Your name or personal information will never be shared with others.

Contact Persons: Amanda Keller, MSc; Principal Investigator 514-706-8530; amanda.keller@mcgill.ca; Principal Investigator

or

Dr. Michael MacKenzie: michael.j.mackenzie@mcgill.ca; Direct Supervisor

Research Team's Address:

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Consent:

Based on the consent that was read to me, I agree to participate in this study.

Name of Participant ______________________________

Date that verbal declaration of consent was obtained. ___________________________

Name of McGill Research Team Member ______________________________

Signature of McGill Research Team Member Date ______________________________