Does Placing Children in Out-of-Home Care Affect Their Future Criminality?

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SNS – the Center for Business and Policy Studies, is an independent, non-profit organization founded in 1948 that aims to be Sweden's leading platform for objective debate and knowledge-sharing among decision-makers on key societal issues. SNS brings together representatives from the business community, public sector, academia, and politics. SNS takes no positions on policy issues, which supports its bridge-building role. Members include companies, public authorities, and organizations.

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Matthew J. Lindquist

Preface

Children and youths who have been placed in out-of-home care by social services are clearly overrepresented in crime statistics, both in Sweden and internationally. Is this because out-of-home care in some way harms children and youths? Or can this be explained by, for example, difficult conditions when growing up or the generally lower level of education in this group? This report gives an overview of research in this area and highlights important lessons based on such research.

The author of the report, Matthew Lindquist, is a professor of economics at the Swedish Institute for Social Research at Stockholm University. The report is part of the three-year SNS research project "Crime and Society." SNS hopes that the report will contribute to increasing our knowledge and initiating more discussions on how out-of-home care for children and youths affects them and how to improve such care. The author of the report is responsible for the analysis, conclusions, and suggestions. SNS as an organization does not take a position in relation to these. SNS initiates and presents research-based and policy-relevant analyses regarding key social issues.

This research project is followed by a reference group consisting of representatives from some twenty companies, organizations and government agencies. The reference group has also contributed with funding for the project. However, the reference group is not in any way responsible for the contents of the report. SNS expresses a word of gratitude to the reference group, which consists of Akavia, Avarn Security, Confederation of Swedish Enterprise, Fryshuset, City of Gothenburg, City of Malmö, City of Stockholm, Mellby Gård, MKB fastighets AB, Insurance Sweden, Swedish Bar Association, Swedish

Enforcement Agency, Swedish Ministry of Finance, Swedish National Courts Administration, Swedish Police Authority, Swedish Police Union, Swedish Prison and Probation Service, Swedish Property Federation, Swedish Prosecution Authority, Swedish Public Employment Service, Swedish Social Insurance Agency, Swedish Supermarket Owners' Association and Swedish Tax Agency.

Martin Hällsten, professor of sociology at Stockholm University, participates in the reference group as a representative of the SNS Scientific Council. Lars Brännström, professor at the Department of Social Work at Stockholm University, has reviewed a draft of the report at an academic seminar.

Stockholm in September 2023

Louise Lorentzon
Research Director, SNS

Summary

In Sweden – in 2021 – more than 26,000 children and youths between 0 and 20 years old spent at least one night in out-of-home care (OHC). The most common form of OHC is foster family care, where children and youths are placed in private homes and live together with vetted caregivers. The second most common placement type is residential care, which includes live-in care facilities (hem för vård eller boende, HVB-hem) and more secure facilities (särskilt ungdomshem, SiS hem).¹

The decision to remove a child from their family is one of the most invasive acts that we as a society can impose on a child and their family. It requires that our representatives (social workers and judges) weigh the goals of family stability and preservation – which we believe to be beneficial for most children in most families – against protecting children from abuse, neglect, and the risks associated with self-harming behaviors, such as drug use and criminality.

Key elements of this discussion include decisions about what kind of in-home care (if any) should be given to those families in which the child has *not* been removed and what kind of out-of-home care should be given to those children who are removed.

The goal of much of the academic research that investigates the effects of OHC on the well-being of children and youths is to help inform these decisions. We want to know who benefits from placement in OHC, who is potentially harmed by being placed in OHC, and why. We want to know the size of the potential costs and benefits so that, when making their decisions, policymakers can compare them with the

I. Socialstyrelsen 2022.

risks of abuse and neglect in the home and the risks from self-harming behaviors.

One important outcome often highlighted in the OHC research is the future criminal behavior of formerly placed children and youths. This approach is primarily motivated by their overrepresentation in the crime statistics in Sweden and abroad.

In the United States, for example, roughly 20% of prison inmates have spent time in the child protection system, ² while 70% of formerly placed children will be arrested at least once by age 26.³ Children born in Sweden in 1990 or 1991 who spent time in OHC before age 20 are between 3 and 10 times more likely (depending on gender and placement type) to receive a conviction between the ages of 20 and 25. They are 5 to 20 times more likely to be sentenced to prison than children never placed in OHC.

While these OHC–crime associations are alarmingly large, they do not actually tell us that placement in OHC damages children in some way that causes them to commit more crimes as adults. It is just as likely that their adult criminal behavior is brought on by the poor childhood conditions and traumas that they have experienced in combination with the fact that they typically have lower education, worse mental and physical health, and higher unemployment rates than other adults who were not placed in OHC as children. Therefore, it is important to carefully read the research and emphasize those studies with credible research designs that allow us to come closer to answering questions concerning causality. Does placing children in OHC cause an increase in their future criminality? If so, are there ways to mitigate the unintended negative consequences of placement in OHC?

This SNS report provides both a general introduction to the topic and a selective survey of the academic literature on the effects of placement in OHC on future criminal behavior. This survey includes several key studies from Sweden and several studies that can be given a more causal interpretation carried out in Canada and the United States. I also present a few recent studies concerning our Nordic neighbors and touch upon resource availability and in-care treatment.

This report was written as a part of the SNS project "Crime and Society." I have two reasons for writing about this topic: in this forum and

^{2.} BJS 2016.

^{3.} Courtney et al. 2011.

format. First, I hope to introduce the topic of out-of-home care and crime to a broader audience in an accessible manner. Second, I want to highlight some lessons that can be learned from existing research on the topic. In doing so, I hope to encourage more discussion of this important issue among concerned citizens and policymakers.

This report draws 14 lessons from academic research on the effects of out-of-home care on subsequent criminality. Two key lessons stood out.

Research suggests a tradeoff between the quality of out-of-home care and future criminality. Higher quality care lowers crime. Furthermore, the social and economic costs of crime are so high that improvements in out-of-home care quality will pay for themselves.

Research also tells us that children placed in OHC suffer from large deficits in health and education. Therefore, we need to pay more attention to the health and education of children and youths placed in out-of-home care. Failing in school is one of the strongest predictors of criminal behavior as an adult.

As a result of the research overview, there are six policy recommendations.

I. INCREASE THE NUMBER OF RESOURCE-RICH FOSTER HOME PLACEMENTS

The number of resource-rich (TFCO) foster home placements should be increased. These new foster home placements should be used as an alternative to residential care.

The main difficulty with this recommendation is recruiting and training new foster families. An alternative to recruiting and training new families could be to provide more training, support, and resources to existing foster families.

2. INCREASE THE QUALITY OF SECURE RESIDENTAL CARE UNITS The quality of the secure residential care units (SiS-hemmen) must be improved. Both by increasing staff qualifications and increasing the knowledge on how deal with youths with ADHD, Autism, and mental health issues. It must also be ensured that the care units are safe and free from sexual abuse. These recommendations are in line with The Health and Social Care Inspectorate's (IVO) recommendations for quality improvements.

Health and education are essential for living a meaningful, law-abiding life. Decades of Sweden-specific research has documented large deficits in later life health and education for children and adults who have spent time in out-of-home care. While we cannot say that out-of-home care caused these deficits, we can be certain that out-of-home care has not led to improvements along these dimensions. Regardless of their source, these inequalities need addressing. Doing so will most likely reduce future criminality.

3. INTRODUCE MANDATORY HEALTH CHECKUPS

Regular health checkups should be mandatory for all children and youths in out-of-home care. These examinations should include mental, physical, dental, and reproductive health checkups.

Significant progress has been made in the rules and laws governing healthcare provision for children and youths in out-of-home care. The word "mandatory," however, is seldom used, and our ability to ensure that appropriate care is actually being provided is somewhat limited (see recommendation 6 below). A recent investigation by the Swedish Association of Local Authorities and Regions (*Sveriges Kommuner och Regioner*) concluded that improvements in meeting the health needs of children and youths in out-of-home care were still needed.⁴

4. INTRODUCE MANDATORY EDUCATION CHECKUPS

Regular education checkups should be mandatory for all children and youths in out-of-home care. Tutoring services should be provided to remediate deficits.

The SAMS program (*Samverkan socialtjänst skola*) for coordinated efforts between local child welfare services should be supported. More effort is needed to ensure the availability and quality of appropriate educational programs for those living in HVB homes and SiS residential units (see recommendation 6 below).

Government oversight functions did not keep pace with the rapid privatization of out-of-home care. Today, we must recognize the importance of central government oversight to ensure that children and youths receive proper care. It is IVO's role to have well-functioning licensing and quality control practices in place. It is the government's responsibility to see that IVO has the necessary resources to do so.

^{4.} SKR 2020.

5. INVESTIGATE THE CONTROL FUNCTIONS OF IVO

Investigate the control function of IVO. Does it function well? Does IVO have the necessary resources to perform its control function?

A part of this oversight function could potentially be aided by expanding on the amount and type of information that is required of municipalities to report to the National Board of Health and Welfare's child and youth services register and by enabling a coordinated use of this register along with IVO's register on HVB facilities and data from SiS. This expanded flow of information could also help municipalities better judge the suitability of family foster homes and residential care institutions that are taking in children from more than one municipality at a time. Furthermore, access to this information would increase our ability to evaluate the efficacy of out-of-home care.

6. EXPAND THE REGISTER OF THE NATIONAL BOARD OF HEALTH AND WELFARE

Expand the National Board of Health and Welfare's (*Socialstyrelsens*) register of child and youth services to include information on placement type, placement reason, placement dates, placement stability and reasons for how and why a placement ends, in-care services provided, results from mandatory health checkups, and results from mandatory education report cards. Each placement should also have a placement home identifier or placement residential care unit identifier to enable merges with other key data kept by IVO, SIS, and Statistics Sweden (*Statistiska centralbyrån*).

Additional information needs to be collected and reported in such a way that it guarantees the guarantee the integrity of individuals and families and does not increase the administrative burden of social workers so that they need to reduce their time working directly with children and their families. However, most necessary information is already being keyed into one or more municipality-level IT systems. Thus, the sharing of more information can be achieved by coordinating the collection of existing information and does not necessarily require collecting more information.

I. Introduction

Approximately one child in every Swedish classroom will spend some time in out-of-home care (OHC) before age 18.5 In 2021, more than 26,000 children and youths between 0 and 20 years old spent at least one night in OHC. The most common form of OHC is foster family care (71%), where children and youths are placed in private homes and live together with vetted caregivers. The second most common placement type is residential care, which includes live-in care facilities (hem för vård eller boende, HVB hem) (23%) and more secure, state-run facilities (särskilt ungdomshem, SiS hem) (4%).6

The decision to remove a child from their family is one of the most invasive acts that we as a society can impose on a child and their family. It requires that our representatives (social workers and judges) weigh the goals of family stability and preservation – which we believe to be beneficial for most children in most families – against protecting children from abuse, neglect, and the risks associated with self-harming behaviors, such as drug use and criminality.

In some cases, it is clear that the child is in immediate danger of losing life or limb and must be removed from the family. In other cases, the child thrives in a loving and stable environment and must never be removed from the family. The policy discussion on child removal needs to focus on these clearer cases. Instead, the discussion concerns cases serious enough to warrant a thorough investigation but where two experienced social workers and/or judges might reasonably disagree

^{5.} Vinnerljung 2006. Socialstyrelsen 2022A.

^{6.} Socialstyrelsen 2022A.

on the correct decision. Should we remove the child or not? Which choice is in the best interest of the child?

Key elements of this discussion include decisions about what kind of in-home care (if any) should be given to families where the child has *not* been removed and what kind of out-of-home care (e.g., placement type) should be given to those children who are removed. In practice, and in the absence of an immediate threat to the child's safety and well-being, in-home care will be provided before considering OHC.

The goal of much of the academic research that investigates the effects of OHC on the well-being of children and youths is to help inform these decisions. We want to know who benefits from placement in OHC, who is potentially harmed by being placed in OHC, and why. We want to know the size of the potential costs and benefits so that policymakers can compare them with the risks of abuse and neglect in the home and the risks from self-harming behaviors when making their decisions.

One important outcome often highlighted in the OHC research is the future criminal behavior of formerly placed children and youths because of their overrepresentation in the crime statistics both in Sweden and abroad. In the United States, for example, roughly 20% of prison inmates have spent time in the child protection system,⁷ while 70% of formerly placed children will be arrested at least once by age 26.8 Children born in Sweden in 1990 or 1991 who spent time in OHC before age 20 are between three and ten times more likely (depending on gender and placement type) to receive a conviction between the ages of 20 and 25. They are 5 to 20 times more likely to be sentenced to prison than children never placed in OHC.9

While these OHC-crime associations are alarmingly large, they do not actually tell us that placement in OHC damages children in some way that causes them to commit more crimes as adults. It is just as likely that their adult criminal behavior is brought on by the poor childhood conditions and traumas that they have experienced in combination

^{7.} BJS 2016.

^{8.} Courtney et al. 2011.

^{9.} In Chapter 3, I explain how I calculated these numbers. Sallnäs and Vinnerljung (2008) report that boys placed in out-of-home care were more than ten times more likely to end up in prison when compared with their non-placed peers, while placed girls were 27 times more likely to go to prison than non-placed girls!

with the fact that they typically have lower education, worse mental and physical health, and higher unemployment rates than other adults who were not placed in OHC as children. This is why it is important to carefully read the research and emphasize those studies with credible research designs that allow us to come closer to answering questions of causality. Does placing children in OHC cause an increase in their future criminality? If so, are there ways to mitigate the unintended negative consequences of placement in OHC?

I.I Purpose

This SNS report provides both a general introduction to the topic and a selective survey of the academic research on the effects of placement in OHC on future criminal behavior. This survey includes several key studies from Sweden and several studies that can be given a more causal interpretation carried out in Canada and the United States. I also present a few recent studies concerning our Nordic neighbors and touch upon resource and treatment availability for those in OHC. ¹⁰ At the end of this report, I present six recommendations drawn from and based on my reading of the existing research.

The studies that I have chosen to discuss in this review are both necessarily and intentionally selective and are primarily limited to studies that specifically look at the relationship between OHC and later criminal convictions. There is a vast amount of highly relevant research on, for example, the effects of OHC on mental and physical health, education, and employment that will not be included. I will, however, point to several Sweden-specific references on these topics. We should expect that beneficial outcomes along these dimensions will lower future criminality. There is also a large body of research studying the direct effect of child maltreatment on delinquent and criminal behavior that will not be discussed in this report. In

This report was written as a part of the SNS project "Crime and Society." I have two reasons for writing about this topic: in this forum and in this format. First, I hope to introduce the topic of out-of-home

^{10.} Recent reviews by Yoon et al. (2018) and Font and Kennedy (2022) only include studies from the United States and Australia.

II. See, e.g., Malavaso et al. 2018.

care and crime to a broader audience in an accessible manner. Second, I want to highlight some lessons that can be learned from existing research on the topic. In doing so, I hope to encourage more discussion of this important issue among concerned citizens and policymakers.

I.2 Outline

This report is outlined as follows. In Chapter 2, I provide some basic facts about the child welfare system that is in place in Sweden today. In Chapter 3, I illustrate the OHC–crime association using population data for all persons born in Sweden in 1990 or 1991. I present hypotheses concerning potential mechanisms in Chapter 4. How might OHC increase or decrease future criminal behavior? In Chapter 5, I discuss the important issue of distinguishing between correlation and causation and point out several key challenges researchers face in this field. In Chapter 6, I begin reviewing the existing research by presenting a set of studies from Canada and the United States that adopt causal research designs. Chapter 7 reviews the Sweden-specific research, while Chapter 8 presents a few selected research articles using data from our Nordic neighbors. Chapter 9 discusses the topic of incare treatment programs and resource availability. Chapter 10 provides a concluding discussion and recommendations drawn from and based on my review of the research.

2. The Swedish Context

According to Swedish Family Law and the United Nations' Convention on the Rights of Children, a child has the right to a safe and nurturing upbringing, free from physical punishment and psychological abuse. A child also has the right to have their basic material and emotional needs met. The primary responsibility for a child's care and upbringing is their legal guardian, which by default is the child's birth parents. In cases of need, the local municipality's social welfare committee (SWC) (Socialnämnden) supports children and their families. In practice, the provision of this support is carried out by the local social welfare services (Socialtjänsten, Socialförvaltningen).¹²

Importantly, Sweden's first line of defense regarding meeting children's material needs is its relatively well-functioning labor market with high employment rates and low-skilled wages. Together with a generous parental leave system and universal access to affordable daycare, this allows most families to avoid chronic poverty. On top of this, Sweden provides child allowances to all families, rent subsidies to low-income families with children, and free access to publicly provided education and healthcare.

Despite this well-functioning labor market and generous welfare system, some families still need to turn to their local social welfare services for financial aid. Local welfare offices also have the operational

^{12.} Placement in out-of-home care is regulated by the Social Services Law (Socialtjänstlagen, SoL) and by the Law with Special Provisions for the Care of Children and Youths (Lag med särskilda bestämmelser om vård av unga, LVU).

^{13.} Lindquist and Sjögren Lindquist 2012, Mood and Jonsson 2013.

responsibility for child protection, which includes investigating and providing services in cases of child abuse and neglect and cases involving youths who expose their health or development to serious risk of harm through substance abuse, criminal behavior, or other anti-social behavior. This support can either be given while the child is still in their home, or it can be provided in out-of-home care (OHC).

Sweden's child welfare and protection system has been described as "family service-oriented, aimed at early support and intervention to avoid removing the child or youth from their home origin. But when OHC is necessary, the overriding goal is reunification with the family of origin as soon as possible."¹⁴

2.1 Age and gender of children and youths placed in out-of-home care

Figure I shows the number of children and youths that spent at least one night in OHC during 2021, broken down by age and gender. Two things stand out in this figure. First, boys and girls aged 17 and younger tend to be placed in OHC at about the same rate, with a small overrepresentation of boys. Second, youths aged 15-20 are placed in OHC to a much larger extent than children aged 14 or younger. One key difference is that younger children are being placed in need of protection from their home environments. In contrast, youths aged 15-20 are frequently placed in response to their own risky behaviors, including alcohol and drug abuse and crime. ¹⁵

This age pattern for OHC placement becomes particularly striking when we compare it to the age pattern for OHC placement seen in the United States, where the removal rates for younger children are much higher than those in Sweden. That is, Sweden is much more restrictive than the U.S. regarding removing young children from their families. ¹⁶ On the other hand, Sweden's SWCs place more youths aged 15-20 in OHC than U.S. child protection agencies. ¹⁷

^{14.} Berlin 2020, p. 13.

^{15.} See Berlin (2020) for a description of how OHC has developed over time, 1975-2015, by age and gender.

^{16.} See Figures A1 and A2 in Helénsdotter 2022.

^{17.} In Table 3a of Thoburn's article from 2007, she reports age profiles for those entering out-of-home care across 17 different countries and geographical regions. Sweden and

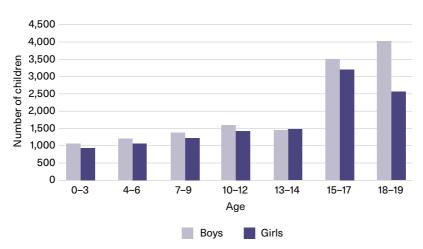


Figure 1. Out-of-home care by age and sex.

Figure I shows the number of children and young people who spent at least one night in out-of-home care during 202I by age and sex. Source: Socialstyrelsen 2022-9-8096-tabeller.

There are two primary explanations for this. First and foremost, most youths who commit crimes in Sweden are turned over to the SWCs for care and monitoring. In the U.S., many of these individuals would be placed in juvenile detention and/or adult jails and prisons instead. Criminal policy in Sweden focuses on diverting youths away from the criminal justice system and toward the social welfare system. More generally, OHC for youths and young adults is less about protecting them from parental abuse and neglect and more about providing care for their own risky and destructive behaviors. This tendency towards risk-assessed needs and care is much stronger in Sweden than in most Western countries.¹⁸

Germany are rather similar and are the clear outliers. Sweden and Germany have fewer children entering out-of-home care before age five and many more adolescents entering out-of-home care between the ages of 15 and 20. Norway also had many adolescents entering out-of-home care.

18. Thoburn 2007, Vinnerljung and Sallnäs 2008.

The second explanation of Sweden's particular age profile of placements is due to a rise in the number of unaccompanied minors migrating to and seeking asylum in Sweden over the past two decades. In 2021, 17% of youths aged 15-20 placed in OHC were unaccompanied minors. Those children and youth under 18 are assigned a legal guardian (*god man*) whose job is to see to the best interest of their wards. Most studies on OHC exclude this group since their backgrounds and reasons for placement are quite different from the "typical" child or youth placed in OHC.

2.2 Three types of out-of-home placements

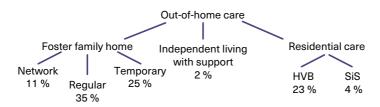
There are primarily three broad categories of out-of-home placements: (1) foster homes (familjehem), (2) independent living with support (stödboende), and (3) residential care (hem för vård eller boende, HVB), which includes the secure facilities (särkilt ungdomshem) run by the National Board of Institutional Care (Statens institutionsstyrelse, SiS). As mentioned above, the most common form of OHC placement is foster family care (71% in 2021), followed by HVB residential care (23% in 2021).

Foster family care consists of foster parents vetted by the SWCs and bringing children and youths into their own private homes. Foster homes are not run as for-profit businesses, i.e., financial support from the SWCs should not be used as a main source of a family's income. Financial support from the SWCs comprises a taxable income of around \$1,000 USD per month per child and a stipend that covers the living expenses of the child or youth. There is no legal ceiling on the number of foster children in the same home. However, the foster family and the SWC must report the number of children to an oversight authority (Inspektionen för vård and omsorg, IVO) if more than three children are placed in the same foster home. Also, while not common, foster homes with more children can be transformed into smaller, professional residential care units.

There are three distinct types of foster family homes: (1) network foster homes (*nätverkshem*) – when a child or youth is placed with a close relative or friend of the family; (2) regular foster homes (*familjehem*),

^{19.} Socialstyrelsen 2022A.

Figure 2. The different types of out-of-home care.



and (3) temporary foster homes (*jourhem*). Among new cases entering the foster family care system in 2021, 49% were placed in regular foster homes, 15% with close relatives or friends, and 36% in temporary foster homes. ²⁰ Among those placed in foster homes, 60% were placed with the guardians' consent (*enligt Socialtjänstlagen*, SoL), and 40% were placed after obtaining a court order (*beslut i förvaltningsrätten enligt Lag med särskilda bestämmelser om vård av unga*, LVU). In this context, parental consent does not necessarily imply that the placement was voluntary or consensual since consent may be given when compliance is required to avoid a court-ordered removal.

Most foster family care placements are temporary and end with a family reunion. For younger children, time spent in foster family care has fallen over the past 15 years from an average of 3 to just over 2 years. For older children, time spent in foster family care has fallen from an average of 4.5 years to just over 3 years.²¹

In 2021, 501 HVB residential care units provided care and living arrangements for children and youths placed in out-of-home care.²² The majority of these are owned and operated by for-profit companies (78%); 3% are run by non-profit organizations, and 20% by the local public sector.²³ In the mid-1980s, the majority of residential care units

^{20.} Socialstyrelsen 2022A.

^{21.} Socialstyrelsen 2020.

^{22.} Shanks et al. 2021. This number excludes an additional 500 residential care units that specialize in caring for unaccompanied minors seeking asylum in Sweden or providing long-term care for children and youths with disabilities.

^{23.} Shanks et al. 2021.

were run by the local public sector.²⁴ Since then, there has been a rapid movement toward privatization of public housing, health, education, and welfare services. Licensing and quality control functions did not keep pace with privatization. Since 2013, the Health and Social Care Inspectorate (*Inspektionen för vård och omsorg*, *IVO*) has been responsible for licensing and monitoring all HVB residential care units in Sweden.

The average size of an HVB residential care unit serving children and youths was 6.4 persons per HVB home in 2013.²⁵ A report from IVO in 2013 stated that 49% of the residential care staff had what IVO considered to be an appropriate educational background.²⁶

In 2023, there are also 21 secure residential care units (*särskilt ung-domshem*—commonly referred to as—*SiShem*) with roughly 730 places in total. These are run by the National Board of Institutional Care (*Statens institutionsstyrelse*, *SiS*) and serve approximately 1,000 children and youths per year. Those placed tend to be teenagers with more serious problems, e.g., drug abuse or severe criminality. They are taken under custody through a court order placing them into forced care. Most have received some other form of care prior to being placed in a secure facility.

2.3 Three additional features of the Swedish child welfare system

Three other features of the Swedish child welfare system deserve attention. First, while exiting foster family care through adoption is considered a good outcome in some countries, it is not common in Sweden.²⁷ Formal adoption requires the consent of both biological parents. In a few cases, however, custodial rights are handed over permanently to the child or youth's longtime foster parents. This occurred 319 and 432 times in 2020 and 2021, respectively.²⁸ Remember that the primary goal of the SWCs is family reunion and not permanency in placement.

Second (as mentioned above), Sweden's child welfare system is

^{24.} Ibid.

^{25.} IVO 2013.

^{26.} Ibid.

^{27.} Hjern et al. 2019, Berlin 2020.

^{28.} Socialstyrelsen 2022A.

organized at the municipality level, which has several implications, including the fact that both the quantity and type of services provided vary across geographic regions within Sweden.²⁹ It also means that record keeping is not centralized, making oversight and research more difficult. Third, Sweden's SWCs do not systematically provide exit services to youths who age out of OHC.³⁰

^{29.} Wiklund 2006, Mattson and Vinnerljung 2016.

^{30.} Höjer and Sjöblom 2010, Nordens Välfärdscenter 2015, Berlin 2020.

3. The Out-of-Home Care – Crime Association: Descriptive Evidence for Two Birth Cohorts

How large is the out-of-home care (OHC)-crime association in Sweden?

To answer this question, I combine register data from Statistics Sweden (*Statistiska centralbyrån*), the National Board of Health and Welfare (*Socialstyrelsen*), and the National Council for Crime Prevention (*Brottsförebyggande rådet*). I start by selecting a sample of all children born in Sweden between 1990 and 1991, including 249,050 individuals. Importantly, this means that I am excluding children and youths who immigrate to Sweden, including the many unaccompanied minors who came to Sweden during the past two decades.³¹

Among all individuals born in Sweden in 1990 or 1991, 3,013 (1.2%) died before age 26. Figure 3 shows that those who experience foster family care at least once before age 20 and never experience residential care have the same mortality rate as those who were never placed in OHC, namely 1.2%. Those who have experienced both foster family care and residential care have a mortality rate of 2.6%, while those who experience only residential care have a tragically high mortality rate of 3.3%. These are our most troubled children and youths.

^{31.} These two cohorts are chosen as a convenient example given the data that I currently have access to for this project. Earlier and later cohorts produce similar results. The goal here is to follow individuals from birth to age 20 to see if they have *ever* spent time in OHC. This is one reason for excluding unaccompanied minors from this example. All unaccompanied minors spend time in OHC. But they have not been actively removed from their families but rather migrated to Sweden without a caretaker and were therefore placed in OHC.

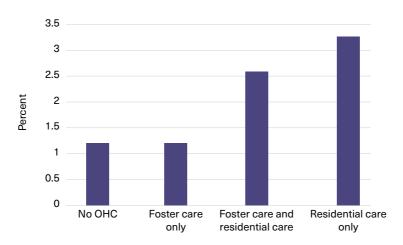


Figure 3. Share of children who died before age 26.

Figure 3 shows the share of children who died before age 26. The shares are shown separately for children with no out-of-home care, foster care only, foster and residential care, and residential care only. The data is for children born in Sweden in 1990 and 1991. The sample sizes are 240,722; 3,428; 2,533 and 2,365, respectively.

Results are presented separately for males and females due to the large differences in their baseline likelihoods of being convicted of a crime and going to prison. In Figure 4, only 2% of females never placed in OHC received a criminal conviction when aged 20-25. Those placed in only foster or foster family care and residential care have 5 to 11 times higher conviction rates than those who have never been placed. Prison rates are 5 to 24 times higher. Those placed in residential care only have conviction rates that are ten times higher than those never placed in any form of OHC. They were also sentenced to prison 22 times more often.

Over II% of men who have never experienced OHC received at least one criminal conviction aged 20–25; I% of these convictions includes a prison sentence (see Figure 5). Those who have experienced foster family care when young have conviction rates that are 3 to 5 times higher than those who have never been placed in any form of OHC. Their prison rates are 6 to 19 times higher. Those placed in residential

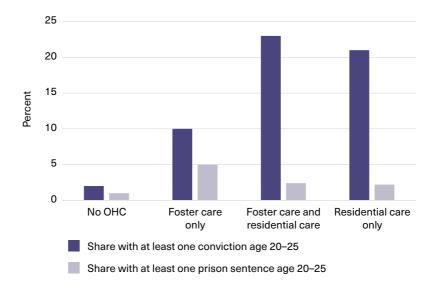


Figure 4. Convictions and prison sentences, females.

Figure 4 shows the share of females with at least one conviction at age 20-25 and the share of females with at least one prison sentence at age 20-25. The shares are shown separately for children with no out-of-home care, foster care only, foster and residential care, and residential care only. The data is for females born in Sweden in 1990 and 1991 who were still alive at age 25. The sample sizes are 115,733; 1,855; 1,306; and 1,006, respectively.

care only have conviction rates that are 5 times higher than those who have never been placed in OHC. They are 20 times more likely to be sentenced to prison.

Lesson 1: Out-of-home care is a strong predictor of future criminality.

These are the OHC–crime associations that we want to understand. In particular, we want to know if children and youths placed in OHC are harmed in some way that induces them to commit more crimes. If they are harmed, are there ways to mitigate the unintended negative consequences of placement in OHC?

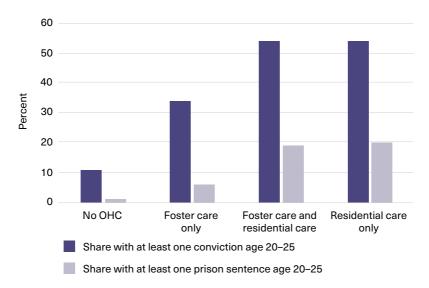


Figure 5. Convictions and prison sentences, males.

Figure 5 shows the share of males with at least one conviction at age 20-25 and the share of males with at least one prison sentence at age 20-25. The shares are shown separately for children with no out-of-home care, foster care only, foster and residential care, and residential care only. The data is for males born in Sweden in 1990 and 1991 who were still alive at age 25. Samples sizes are 122,163; 1,531; 1,163; and 1,280, respectively.

4. Potential Mechanisms: How Might OHC Affect Crime?

4.1 Human capital and crime

As a labor economist who studies crime, I have a particular theoretical framework in mind when thinking about the underlying causes of crime. Taking the current criminal justice system as given (i.e., the expected risk of getting caught and the expected punishment), the cornerstones of this framework are individual- and social human capital. Individual human capital comprises a person's productive characteristics, primarily education and health – both physical and mental. Social human capital is comprised of a person's family and peer networks. They can provide needed support and encourage prosocial values and behaviors. Both types of human capital are important for living productive lives and not getting involved in crime. Thus, when asking how out-of-home care (OHC) might affect crime, I ask how OHC might affect a child's (i) education, (ii) physical health, (iii) mental health, (iv) family ties, and (v) peer groups.

This theory of human capital and crime has additional elements that are particularly relevant in the context of child welfare services. First, while societal investments in adult education (for example) may be considered normatively fair (since they correct a disadvantage), early investments in children's human capital that prevent them from falling behind in the first place can be viewed as both normatively fair and economically efficient. Simply put, it is less costly to help children not fall behind their peers regarding their health and education than

^{32.} But it also includes cognitive and non-cognitive abilities, informal education, work experience, etc.

correcting these deficits and inequalities among adults.

Second, this theory allows youths to have agency and, therefore, encourages training in cognitive and non-cognitive skills (in general) and decision-making skills (more specifically). These skills help youths make better decisions and reflect upon the consequences of their choices and actions for themselves and others. The efficacy of such programs has been demonstrated in large-scale randomized controlled trials among disadvantaged youths in the U.S. city of Chicago, including youths held in juvenile detention centers.³³

Another key element is opportunity, i.e., the time and opportunity to commit crime. Keeping youths busy in productive environments (e.g., school) keeps them out of trouble.³⁴ And since delinquent and criminal behaviors tend to be quite persistent, keeping them out of trouble today may even keep them out of trouble tomorrow.

4.2 How Might OHC Lower Crime?

There are several reasons to believe that placement in OHC could lower future criminality. If children and youths are removed from criminogenic environments and placed into positive environments, then this should cause them to commit less crime than they otherwise would. For example, if a set of negative parental role models is replaced by a set of positive adult role models, this can reduce future crime.³⁵ OHC children and youths receive services, such as therapeutic treatments or healthcare, that improve their mental and physical health and well-being, which, in turn, has been shown to lower crime.³⁶

OHC children and youths may receive more stability in their day-to-day routines and do better in school,³⁷ which is key for gainful employment as an adult. Both education and employment have been shown to lower crime.³⁸ Removing a child may increase the uptake of health services provided to parents suffering from mental health problems

^{33.} Heller et al. 2017.

^{34.} Jacob and Lefgren 2003.

^{35.} Hjalmarsson and Lindquist 2012.

^{36.} See Hjalmarsson, Lindquist, and Malmcrona (2022) for a review.

^{37.} Gross and Baron 2022.

^{38.} Lochner and Moretti 2004, Machin et al. 2011, Hjalmarsson et al. 2015, Grönqvist 2011, Bell et al. 2018, Bell et al. 2022, Britto et al. 2022.

or addiction.³⁹ If this improves the outcomes of parents and leads to a stable environment for the child to return to, then this may also lead to improvements in outcomes for former OHC children and youths.

The main reason for removing *young* children from their homes is to protect them from parental abuse or neglect. This removal can also be viewed as an attempt to break the intergenerational cycle of violence and abuse that is all too commonplace.⁴⁰ But even in the absence of violence, neglect itself is highly correlated with future criminal behavior.⁴¹ Conversely, adolescents are more frequently removed from their homes due to their own negative behaviors, such as addiction and crime. The goal is to successfully treat them and their families so they may be reunited. If successful, then such treatment should lower future criminality.

OHC typically implies spending more time under adult supervision and less time in environments with high opportunities and possibilities for committing crime. If this is the case, then OHC can incapacitate crime for the moment, but perhaps even in the long run if these children are building persistent, pro-social habits and pro-social human capital.

The length of a stay in OHC may also affect what we might expect to happen. For example, it is hard to see how short stays in out-of-home care could have long-lasting effects on behavior if behavioral changes require that investments be made over a longer period.

4.3 How Might OHC Raise Crime?

There are several reasons to believe that placement in OHC could (instead) increase future criminality. In particular, many worry that children may suffer from being separated from their parents and that this trauma may increase self-harming and anti-social behavior, including crime. ⁴² Furthermore, OHC placements are not always stable. Placement breakdown is typically defined as a sudden, unplanned separation of the child from their foster family. It can be initiated by the child, the

^{39.} Grimon 2021.

^{40.} Widom 1989, Currie and Tekin 2012.

^{41.} Malvaso et al. 2018, Font and Kennedy 2022.

^{42.} More generally, researchers (e.g. Goldsmith et al. 2004) argue that the severance of social bonds and the separation from attachment figures may harm children.

foster parents, or (in some cases) the biological parents. Placement breakdown is not uncommon – especially for more difficult (crime-prone) cases.⁴³ Unstable placements do not provide the emotional and environmental stability that was hoped for. In some instances, children and youths may actually be placed in abusive and neglectful OHC environments, which compounds their problems.⁴⁴ It may also be that access to quality healthcare goes down while placed in OHC,⁴⁵ which could – in turn – raise criminality.⁴⁶

Placement stability is key for educational continuity. All OHC placements come with some risk of interruption of a child or youth's education that may lower overall academic achievement and, hence, increase future crime.⁴⁷ Related to this, Barn and Tan (2012) discuss how various forms of "strain," such as the length and stability of a foster family care placement, social exclusion, and higher unemployment rates, correlate highly with future criminal activity among former foster family care youth. Lastly, we might worry about negative peer effects if exposure to other youths with problems increases while in residential care.⁴⁸

^{43.} Newton et al. 2000.

^{44.} SOU 2011:61, Allrogen et al. 2017, IVO 2023-01.

^{45.} Socialstyrelsen and Skolverket 2013, SKR 2020, Socialstyrelsen 2022B.

^{46.} Jacome 2020, Hjalmarsson, Lindquist, and Malmcrona 2022.

^{47.} Skolinspektionen, 2010, Forsman 2019, Berlin 2020, Socialstyrelsen 2022B. Forsman, Brännström, Vinnerljung, and Hjern (2016) show that poor school performance among Swedish foster children negatively impacts psychosocial problems as young adults.

^{48.} Levin (1998) gives examples of this in his work on residential care in Sweden. SBU Report 279 (2018, p. 55) and SBU Report 308 (2020, p. 14) raise similar concerns. Font and Mills (2022) raise this concern but find no evidence of peer effects in juvenile delinquency among youths placed in residential care in the U.S. state of Wisconsin.

5. Methodological Challenges

5.1 Correlation versus Causality

Some share of the relationship between out-of-home care (OHC) and crime is most likely correlational and not causal. To illustrate this point, let us assume that placement in OHC does not impact future criminality and that we know this fact with 100% certainty. Why might there still be a positive correlation between OHC and crime? Why do those placed in OHC commit more crimes than those not placed in OHC, even though we "know" (in this simple example) that the OHC experience does not affect criminal behavior?

The answers to these questions are rather intuitive. Children placed in OHC exhibit several negative characteristics and behaviors and come from more negative home environments than non-placed children. OHC does not cause these negative characteristics. They are the reasons children are placed in OHC, i.e., they are pre-existing characteristics. Furthermore, these negative, pre-existing characteristics are known to be strong predictors of future criminal activity. Thus, children and youths with these negative characteristics will be placed more often in OHC and commit more crimes as adults. However, it is these negative characteristics – and not placement in OHC – that generate the positive correlation between OHC and crime. They would likely have committed more crimes even if they had never been placed in OHC.

Why cannot we simply correct our measures of the OHC–crime association by collecting information on these negative characteristics? The problem is that researchers can never collect information on all relevant factors. There will always be some missing information. So,

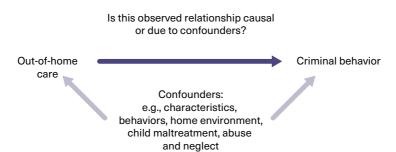


Figure 6. Measuring causal relationships between out-of-home care and criminality.

Figure 6 shows that confounders may affect both the probability of being placed in out-of-home care and the probability of criminal behavior. The variation in out-of-home care must be isolated from confounders to be able to interpret the relationship between out-of-home care and criminal behavior as a causal relationship.

while we can most certainly make better comparisons and collect more data that allows us to improve on our measures, there may always be some unobserved factor that hinders us from obtaining a consistent measure of the true impact of OHC on criminal behavior.

In other contexts, researchers can run randomized controlled experiments. Randomization into a specific treatment means that all relevant characteristics (both observable and unobservable) will "balance" across the treatment and control groups. Both the treatment and control groups will have the same average characteristics. If we see any differences in outcomes between the treatment and control groups in a randomized controlled experiment, then we can be more certain that this difference is due to the causal effect of the treatment.

In the context of OHC, such a randomized controlled experiment is neither legal nor ethical. However, as we shall see in a moment, certain situations arise naturally that appear to mimic the randomization process and, hence, allow us to measure the causal effect of placement in OHC, albeit with some caveats. These types of causal research designs are called "natural experiments." They use natural variation in the data – due to (for example) a government reform or being randomly

assigned to meet with a lenient or strict judge – that allows us to split our sample into treatment and control groups comparable along observable and unobservable characteristics.

Natural experiments also help us solve another difficult but poorly understood measurement issue. This issue is something that economists call "selection on gains." We hope that social workers are good at matching children and their families with the most appropriate form of treatment. This is a good thing! However, it makes evaluating the effects of one treatment versus another (e.g., in-home care vs. out-of-home care) more difficult because social workers are not assigning the different treatments randomly. They assign treatments to those they believe will respond positively to them. Therefore, once we have measured the effect of a specific program on a specific group of treated individuals and families, we cannot be sure that this treatment will work if given to a different type of individual or family. That is, we cannot be as sure about the external validity of our measured results.

I urge readers to keep these two measurement issues in mind when reading the literature review that follows: (I) selection on unobservable characteristics and (2) selection on gains. I also want to underscore the importance of the distinction between causality and correlation. Descriptive work helps us see clearly and identify potential problem areas that need to be addressed. However, designing policies that help more than they hurt requires a better understanding of the causal mechanisms and the causal link between policies and outcomes.

5.2 Defining the Treatment

Child welfare policies are also hard to study because we cannot always study a well-defined and delimited treatment. Many research papers study an aggregate of all forms of OHC. But foster family care is not the same treatment as residential care; even *within* the same placement type, variation in age at placement or length of placement, for example, gives rise to *different* treatments.

The comparison group may not be well-defined either since *not* being placed in OHC does not mean that people are not being treated (as in a medical experiment). In this context, the comparison group is likely receiving some form of alternative treatment in the home. Social workers choose these treatments to get the best outcomes possible for

children and their families (i.e., they assign treatments based on their perceived benefits).

5.3 Data

The information in the National Board of Health and Welfare's (Socialstyrelsens) child and youth services register is limited. More detailed information is held by each of the municipal social welfare authorities and varies in quality and quantity. This makes it harder for researchers to study the question. It also makes government oversight more difficult.

6. Causal Studies from the United States and Canada

6.1 Randomly assigned caseworkers in Cook County, Illinois

Doyle's work from 2007 is (to the best of my knowledge) the first causal study of the effects of foster family care placement on juvenile delinquency.⁴⁹ He uses data from the United States, and studies foster family care placement in Cook County, Illinois, which includes the city of Chicago. His sample includes just over 15,000 children whose families had been investigated for abuse or neglect. Delinquency is measured as an appearance in the Juvenile Court of Cook County. Such a court appearance usually entails that a juvenile has committed at least one very serious crime or that they have committed three or more lesser crimes.

Caseworkers are as good as randomly assigned to investigate child abuse and neglect reports. In cases of emergency, caseworkers can immediately remove the child from the home and later have this decision reviewed by a judge in the Cook County Child Protection Division of the Juvenile Court. Caseworkers can also determine that the child should not be removed from the home and (potentially) recommend further in-home services or support. Lastly, the caseworker can collect evidence on the case and present a recommendation for removal to a judge in the child protection court.

^{49.} See Yoon et al. (2018), Font and Kennedy (2022), and Bald et al. (2022) for recent reviews of the U.S. research on out-of-home care and crime.

^{50.} Doyle (2007, 2008).

Importantly, caseworkers differ in their propensities to recommend that a child should be removed from their home. Some caseworkers recommend child removal more often than other caseworkers. Their removal rates, however, are not generated from them regularly handling more severe cases of child abuse and neglect. We know this since caseworkers are as good as randomly assigned to cases (children), and the observable characteristics of children and their families are the same across "high" and "low" removal rate caseworkers. The institutional setting in Cook County, Illinois, generates a natural experiment that we can use to study the causal effect of foster family care placement on later outcomes.

To be clear, all caseworkers still remove all of the most severe cases; all of the unsubstantiated cases are still dismissed and, hence, not removed. Only those cases on the margin, where two caseworkers may disagree on their recommendation to the judge concerning whether or not to remove the child from their home, are affected by being randomly assigned to a "high" or "low" removal caseworker. This implies that Doyle (2007) measures the "marginal" effect of placing children in foster family care on their subsequent delinquent behavior.

What do I mean by a marginal effect? And how can we use an estimate of a marginal effect to inform policy?

Imagine that a policymaker wants to expand or contract some social program. For example, what if a policymaker decides that child protection (and child rights) should be emphasized more than family stability (or parental rights) and, therefore, decides to place one additional child into OHC? This child is the "marginal" child, and we want to know how OHC affects this particular child. That is, we do not want to expand the program unquestioningly. We want to expand the program if we believe it will help the marginal child more than it will hurt the marginal child.

Remember that all the most serious cases are already placed in OHC, so the marginal child can be seen as the most serious case that has not yet been placed. If the marginal effect benefits this child, we can expand the program and place this child in OHC. If the marginal effect is harmful, then it is in the child's best interest to stay at home.

Doyle (2007) reports the harmful marginal effects of being placed in foster care. On the margin, foster family care increases teenage pregnancy and delinquency and worsens early-life labor market outcomes.

Doyle (2007, p. 1599) concludes that "foster children have a delinquency rate three times that of children who were not placed in foster family care." This harmful effect is larger for children placed due to neglect rather than abuse. It is larger for children who are placed after the age of 10, and the increase in delinquency is actually larger for girls than for boys.

Doyle (2008) follows up on this study using data on adult arrests and incarceration, once again from the U.S. state of Illinois. As before, he reports that "... children placed in care have two to three times higher arrest, conviction, and imprisonment rates than children who remain at home." (p. 766). He also characterizes the so-called "complier" population. This exercise helps us to understand the demographic subgroups that drive these results. In particular, Doyle (2008) shows that these results are particularly relevant for girls and African Americans.

Lesson 2: Out-of-home care can causally increase future criminal behavior.

Lesson 3: The causal effects of out-of-home care can vary across different types of children (e.g., gender and race).

6.2 Adolescent males in Canadian British Columbia

Warburton et al. (2014) use the same research design as Doyle. Economists like to call this method the "caseworker fixed effects" method. They study males who were placed in out-of-home care (OHC) (the majority were placed in foster family homes) between the ages of 16 and 18, who may or may not have had previous placement experiences. Their sample is taken from the Canadian province of British Columbia. It consists of 20,727 adolescent males whose families were investigated by their local child welfare service, of which 2,260 were placed in OHC. The authors report results for high school graduation by age 20, receipt of income assistance at age 19, and whether or not they had a criminal conviction at age 19 or 20.

^{51.} Doyle (2007, 2008, 2013).

When using the caseworker fixed effects research design, Warburton et al. (2014) find decreases or delays in high school graduation and an increase in the need for income assistance. Thus, OHC appears to (causally) worsen these outcomes. However, they also report a *reduction* in criminal convictions. One potential explanation for this reduction could be that proper supervision when aged 16 to 18 could have a crime-reducing incapacitation effect. Since we know that behaviors (both good and bad) tend to be quite persistent over time, a temporary desistance from crime can also persist into the future. This is known as a "dynamic incapacitation effect."

Lesson 4: Out-of-home care placement can causally decrease future criminal behavior.

Lesson 5: Proper supervision of adolescents can lower their criminal behavior while supervised. This is called an "incapacitation effect". Less crime today will often spill over into the future, resulting in less crime tomorrow. This is called a "dynamic incapacitation effect."

6.3 A policy change in Canadian British Columbia

Warburton et al. (2014) also present the results from an exercise that uses a quite different source of as-good-as-random variation in placing children in out-of-home care (OHC). It is a different type of "natural experiment." It arose from the tragic death of a five-year-old child in 1992. The child's family had been investigated, but the court chose not to remove the child from their home. This death led to a public investigation that concluded that child welfare services should prioritize child protection (and children's rights) over family unity (and parental rights). The report was released in 1995. In that same year, nearly 350 new social workers were hired. Between 1995 and 1999, the number of children placed in out-of-home care rose in British Columbia from about 6,000 to nearly 10,000, which required the rapid recruitment of many new foster families and may have led to crowding in group homes.

^{52.} Bell et al. 2022.

The key here is that this rapid expansion of the OHC system is unrelated to the actual well-being of the new children drawn into the OHC system; reports of child abuse and neglect did not change during this short period.⁵³ This allows the authors to study the causal effect on the outcomes of these teenage boys of an actual policy that rapidly expanded the OHC system. In contrast to the results from their caseworker fixed effects research design, they now find large crime-*increasing* effects for the adolescent males in their analysis sample. These effects are more than three times larger than those a simple descriptive analysis produces^{54, 55}. One likely explanation for this increased crime is that these new placements were lower quality.

Lesson 6: Not all out-of-home care placements have the same quality. Low-quality care may raise future criminal behavior.

6.4 Children and Youths in South Carolina

Roberts (2019) studies out-of-home care (OHC) in the U.S. state of South Carolina. The majority of these placements are in foster family homes. She uses Doyle's caseworker fixed effects research design⁵⁶ and focuses on first-time investigations of children and youths aged 10 to 17. Roberts finds that OHC doubles the likelihood of juvenile delinquency within five years of this first placement in OHC. This harmful effect is even larger for males and African Americans. Additional analyses show that those with previous delinquency drive the effects and that those placed before age 10 are *not* more likely to partake in delinquent behavior during the fourteen years after placement. Thus, the effects of care may differ by race, gender, own prior behaviors, and age at placement.

Lesson 7: The causal effects of out-of-home care may vary by age and reason for placement.

^{53.} Warburton et al. 2014.

^{54.} Using an ordinary least squares regression with control variables

^{55.} Compare columns 1 and 2 in Table 5 of Warburton et al. 2014.

^{56.} Doyle (2007, 2008, 2013).

6.5 Recent Evidence from Michigan

Baron and Gross (2022) is the most recent causal study of North America. They study roughly 120,000 child abuse and neglect investigations concerning 87,100 children aged 6 to 16. They use data from the U.S. state of Michigan; children were placed between 2008 and 2016. They also use Doyle's randomly assigned caseworker research design in line with previous research.⁵⁷

Baron and Gross (2022) study the effect of out-of-home care (OHC) placement on adult arrests, convictions, and incarceration between the ages of 17 and 19. Note that the age from which an offender is treated as an adult in the state of Michigan is 17. They find large crime-reducing effects on all three outcomes. Arrests are reduced by 68%, convictions by 80%, and incarceration by 80%. They also find that these crime-reducing effects are larger for boys than girls and larger when children are placed before the age of 12.

These results, using more recent data for the state of Michigan, stand in stark contrast to Doyle's (2007, 2008) earlier results for the state of Illinois. Baron and Gross (2022) argue that Michigan has a higher quality out-of-home care system than Illinois, with shorter and more stable placements. Placement stability is a factor that is often discussed in the OHC literature as an important indicator of placement quality.⁵⁸ They further argue that in the time since Doyle had done his studies, the U.S. federal government had made a concerted effort to improve the quality of OHC across the nation as a whole.⁵⁹

Baron and Gross also run a cost-benefit analysis that illustrates how the benefits of reducing crime offset the cost of quality OHC.

A comparison to Warburton et al.'s (2014) results echoes this quality vs. crime tradeoff. In the status quo, OHC reduced crime among teenage males. But, during a period of rapid expansion to the OHC system – and subsequent fall in the average quality of an OHC placement – crime among teenage males went up.

^{57.} Ibid.

^{58.} Ryan and Testa 2005, Rubin et al. 2007.

^{59.} Some differences in results across these particular studies can most likely be explained by the different types of children at risk of becoming the marginal child across time and space. Font and Kennedy (2022) discuss this in more detail in their review article.

In their recent review, Font and Kennedy (2022, p. 371) conclude that "For... children experiencing foster care, impacts on delinquency and crime likely vary by the quality of environments within and after their time in care—issues that, to date, have received too little attention."

Lesson 8: The causal research from Canada and the United States suggests an out-of-home care quality versus crime tradeoff.

Lesson 9: The social and economic costs of crime are so high that improvements in out-of-home care quality will pay for themselves.

Baron and Gross discuss the important role played by parents. OHC is not just about protecting the child. It is also about aiding the parents to change in ways that make them suitable to regain custody of their children. In their study, roughly 80% of the relevant population are reunited with their parents. To be reunited, the parents must demonstrate that they can provide a non-harmful environment for their children to return to. Improvements in parental behaviors may be one of the factors through which OHC lowers crime in the authors' setting.

Lesson 10: Providing services to parents may be important for improving the future outcomes of children placed in out-of-home care.

Grimon (2021) was the first to study this question using a causal research design. She uses recent data from the U.S. state of Pennsylvania and finds that a child welfare intervention initially increases mothers' enrollment in mental health and substance abuse services. Parents are also less likely to be investigated for child maltreatment in the future. The act of removing a child, however, appears to affect some parents more negatively. In particular, fathers have a higher likelihood of child welfare involvement in the future. However, it is not yet clear whether this is due to a change in fathers' behaviors (e.g., they behave more poorly) or due to a change in the behavior of social workers (e.g., these fathers are now labeled as bad fathers and are, hence, subject to more oversight in the future).

7. Sweden-Specific Studies

Vinnerljung (1996) thoroughly reviews the academic research on foster family care and the outcomes of former foster children before 1996. In particular, his overview provides us with a complete review of the Sweden-specific research before that date and a review of key works in the international academic literature. It also clearly describes the strong, positive association between placement in foster family care and subsequent criminal behavior. Importantly, Vinnerljung's review shows us that the out-of-home care (OHC) – crime association documented in Chapter 3 is neither a uniquely Swedish phenomenon nor a uniquely modern phenomenon. It has persisted across time and space for as long as researchers have collected data.

7.1 Negative peer effects in residential care?

Levin (1998) and Sallnäs (2000) present both original research and reviews of the existing Sweden-specific research concerning residential care up to that point. Levin's (1998) empirical work highlights a group of youths who entered a secure facility with no previous criminal record but were then exposed to older male youths with extensive experience of crime and/or drug abuse. Though he does not claim causality, the simple descriptive statistics and interviews with formerly placed youths suggest a strong criminogenic culture at the facility. Less troubled youths were exposed to detrimental peer effects that influenced them to commit more crimes after leaving the facility.

In a report from 2020, the Swedish Agency for Health Technology Assessment and Assessment of Social Services (*Statens beredning för* medicinsk and social utvärdering, SBU) warns of the potential problem of negative peer effects when mixing youths with low risks of future criminality together with high-risk youths in residential care. Discussions of such negative peer effects and different versions of this mixing problem (how to optimally sort youths into groups) are common in crime research. 60 However, one recent causal study from the U.S. state of Wisconsin found no evidence of detrimental peer effects in juvenile delinquency among youths placed in residential care. 61

Lesson II: Mixing youths with and without criminal experience in residential care may generate negative peer effects.

7.2 Health and education deficits among children and youths placed in OHC

Vinnerljung (2006) and Vinnerljung et al. (2006) discuss an array of poor outcomes during adolescence and young adulthood for former out-of-home care (OHC) children as compared to other children. Former OHC children have more severe mental and physical health problems, suicide rates (and attempts), and worse school outcomes. These poor outcomes have also been shown to continue into mid-life (ages 39 to 55).⁶²

Although Vinnerljung (2006) argues that these effects are not likely to be fully causal, he still stresses the fact that this type of research identifies a group in need of healthcare and education, one that could and should be targeted with services. He provides several straightforward policy suggestions. For example, he calls for mandatory physical and mental health checkups of all children placed in OHC and pedagogical follow-ups that would keep track of their progress in school. Both of these suggestions align with the economics of crime literature, which

^{60.} For example, Bayer et al.'s (2009) causal study of peer effects in juvenile correctional facilities in the U.S. state of Florida shows that drug dealers who spend more time with other drug dealers become bigger and better drug dealers after leaving the facility, while car thieves and drug dealers who spend more time together do not influence each other to commit more crime after release. See Lindquist and Zenou (2019) for a review of the peer effects in crime literature.

^{61.} Font and Mills 2022.

^{62.} Brännström et al. 2017.

argues that education causally improves labor market outcomes and lowers crime and that providing mental and physical healthcare causally lowers crime.⁶³

There has been a change in the Swedish law since this advice was first given, such that placement plans are now required to address issues concerning health and education. However, recent research by Forsman (2019) and Berlin (2020) (among others) points towards continued large educational deficits among former OHC children – as do yearly reports from the National Board of Health and Welfare (*Socialstyrelsen*). ⁶⁴ The same is true for health deficits. ⁶⁵ Several reports have pointed towards deficiencies in providing education and health services to children in OHC that still need addressing. ⁶⁶

In their policy report from 2015, the Nordic Welfare Centre (*Nordens välfärdscenter*) argues that "The most important factor for future success among children in foster care – if we look at their development in the long run – is that they don't fail in school." They also reiterate Vinnerljung's (2006) recommendations of regular education and health checkups and offer detailed advice on how this should be carried out in practice.

Lesson 12: Out-of-home care may lower health and education. These deficits may increase future crime.

7.3 Placement instability and placement type are correlated with crime

Vinnerljung and Sallnäs (2008) use a nationally representative sample consisting of 70% of all 13 to 16-year-olds who entered OHC in 1991. They examine adult outcomes, including crime between the ages of 20 and 24, and show that the length of time spent in out-of-home care is not associated with adult crime rates but that placement stability is. Those who experienced at least one breakdown in their placement

^{63.} Hjalmarsson et al. 2022

^{64.} See e.g. Socialstyrelsen 2022B.

^{65.} Socialstyrelsen 2022B, SKR 2020.

^{66.} Socialstyrelsen and Skolverket 2013, Nordic Welfare Centre 2015, Mattson and Vinnerljung 2016, SKR 2020, Socialstyrelsen 2022B.

^{67.} p.5 my translation.

were twice as likely to be convicted of a crime as an adult. Unfortunately, it is not possible for us to disentangle causality from correlation since placement breakdown may not occur randomly. Instead, it could be that placement breakdowns are driven by the unusually difficult behavior of particular adolescents. This behavior might drive future criminality and not placement instability per se. The idea that placement instability drives poor outcomes does, however, deserve attention since it is a common theme in the OHC research.⁶⁸

Lesson 13: Placement instability is correlated with poor adult outcomes, including crime.

Adolescent placements tend to be more unstable than placements of young children. Sallnäs et al. (2004) report a breakdown rate of 40-60% within five years of placement for boys and girls placed for behavioral problems. In their study, Sallnäs et al. (2004) found no differences in criminal convictions between residential care and foster family care. However, those placed in secure facilities were five times more likely to have a criminal conviction than those placed in foster family care. This, however, should not be too surprising since these secure facilities house those with the most serious criminal histories. This is still an important contribution since we know very little about the relative efficacy of alternative forms of OHC. Most studies that have attempted to address this question show that children and youths placed in residential care fare much worse than those placed in foster family care. ⁶⁹

Lesson 14: The correlation between crime and residential care is higher than the correlation between crime and foster family care. In Sweden, this difference is driven to a large extent by youths placed in secure facilities.

^{68.} Newton et al. 2000, Ryan and Testa 2005, Rubin et al. 2007.

^{69.} Strijbosch et al. 2015.

7.4 Foster family care raises crime among teenage boys in the Stockholm Birth Cohort who were placed due to their own delinquent behavior

Using data from the Stockholm Birth Cohort (SBC) project, Lindquist and Santavirta (2014) continue in the same spirit as Vinnerljung et al. (2006) and Vinnerljung and Sallnäs (2008), albeit with several innovations that aid them in getting (somewhat) closer to a causal answer to the question of whether or not placing children in foster family care increases their adult criminality. Their paper evaluates the association between foster family care and adult criminality by comparing children who were placed in foster family care after an investigation by the child welfare services to children who underwent an investigation during the same period but were not removed from their families.

The SBC data includes information on all individuals born in 1953 and residing in the greater Stockholm metropolitan area in 1963. The SBC data contains a rich set of variables concerning individual, family, social, and neighborhood characteristics for more than 15,000 individuals. Furthermore, the case files kept by the local social welfare authorities and child welfare committees for each cohort member were manually coded. That information is included in the SBC data. Thus, all cohort members who came in contact with the child welfare committees are identified, and much of the information concerning their cases is known. Administrative crime records from the official police registry are also linked to the SBC data.

Lindquist and Santavirta (2014) find that men who were placed in foster family care as children are 23% more likely to be convicted of a crime as adults than their investigated but never-placed counterparts. For women, the point estimates are not statistically different from zero.

Their subsample regressions clearly show that boys who are placed in foster family care during adolescence (ages 13–18) account for the association between placement in foster family care and adult criminality. For this subgroup, the placed children are 55% more likely to commit at least one crime as an adult.

To assess the degree to which this strong association might reflect a causal effect, the authors explore the potential role of selection on unobservable characteristics (recall the discussion in Section 5) by running the sensitivity analysis proposed by Altonji et al. (2005). This

analysis enables them to present a range of statistical estimates interpreted as upper and lower bounds on the true causal effect, albeit under a set of very specific maintained assumptions. For example, if the selection of unobservable characteristics is assumed to be as large as a selection of observable characteristics, then an estimate of the causal effect of foster family care on crime for these young men can be bounded between 38% and 55%.

In contrast to their results for adolescent boys, Lindquist and Santavirta (2014) find no relationship between boys at earlier ages and girls at any age.

When analyzing subgroups by type of allegation leading to a removal investigation, the authors find a large and statistically significant positive association for adolescent boys investigated due to their own anti-social behavior. In contrast, those adolescent boys placed due to parental behavior had a substantially lower likelihood of being convicted of a crime than their investigated, but not removed, counterparts.

Thus, Lindquist and Santavirta (2014) point to one group that may be harmed by placement in foster family care. This group is comprised of teenage boys who are placed into care because of their own behavior. At the same time, this may also be the group with the largest set of negative unobservable factors, implying that they overestimate the harmful effects of foster family care. Furthermore, the fact that their sample was born in 1953 and committed their crimes during the 1970s and 80s may lower the relevance of their findings for informing the modern debate.

7.5 No effect when comparing siblings

Brännström et al. (2020) also use an explicit research design that attempts to come closer to measuring causal effects. Unlike Lindquist and Santavirta (2014) – who address the issue of selection on unobservable characteristics by estimating statistical models that correct for selection – Brännström et al. (2020) use data on siblings in a family fixed effects approach that attempts to directly control for unobserved confounding factors; i.e., factors that both increase the risk of placement in out-of-home care when young and increase the risk of committing a crime as an adult.

Their sample includes all persons born in Sweden between 1973 and 1982 who were alive and still registered as living in Sweden at age 15. Then, they select all persons who had spent at least five years in any form of OHC before age 13. Finally, they created a sample of 533 OHC children with at least one full or half sibling who shares the same mother but was not placed in OHC for any extended period. That is, the sibling was raised at home by the mother.

The main idea underlying this empirical method is that siblings share many important unobservable factors to the researcher, both pre-birth factors such as genes and pre-natal environment and post-birth factors such as home and neighborhood environments. By controlling for a mother fixed effect (i.e., by comparing siblings), Brännström et al. (2020) can hold some of these unobservable factors fixed and then address the differences between those in the sample who were placed in OHC to those who were not (after also controlling for age and sex).

The authors study many important outcomes, including adult crime. Simple comparisons show that 48% of the placed siblings had at least one adult criminal conviction, while 42% of the non-placed siblings had an adult conviction; II% of the placed siblings had received a prison sentence as an adult, while 9% of the non-placed siblings had also been sentenced to prison as an adult. Although these numbers are quite large compared to the general population, the differences between placed and non-placed siblings are not particularly large. In their statistical analyses that control for age, sex, and mother-fixed effects, Brännström et al. (2020) find only small and statistically insignificant differences between placed and non-placed siblings. Thus, they find no evidence that OHC harms or helps children regarding their criminal behavior. In related work, these same authors show that siblings who were adopted out of OHC (most likely by their foster parents) had better outcomes overall, including lower conviction rates, than their siblings whom their foster parents did not adopt.⁷⁰

^{70.} Hjern et al. 2019.

7.6 In Sweden, OHC does not increase crime among most children and youths ...

Using different research designs – with different strengths and weaknesses – both Lindquist and Santavirta (2014) and Brännström et al. (2020) find no evidence in favor of the idea that out-of-home care (OHC) causally increases crime for the majority of placed children in Sweden. I interpret this as good news in that (on average) OHC is not damaging children in a way that makes them commit more crimes as adults. Instead, it appears that the OHC–crime correlation is primarily driven by the fact that we are placing those children and youths with the most problematic backgrounds and most difficult circumstances into OHC.

... but it may increase crime among some.

Having said that, we have also seen one group whose criminal behavior may be made worse by time spent in OHC: teenage boys placed in OHC because of their own delinquent behavior. While we cannot say for certain that this effect is causal, we can say that this is the population that we should naturally be concerned with if our goal is to prevent future crime.

8. Recent Nordic Studies

8.1 Mixed Results Using Sibling Comparison in Finland

Sariaslan et al. (2021) studied out-of-home care (OHC) in Finland using population-wide register data for all children born between 1986 and 2000. They adopt a sibling fixed effect approach similar to the one used by Brännström et al. (2020) for Sweden, albeit with several key differences. First, they consider placements before age 15 of any length, whereas Brännström et al. (2020) examine those placed in OHC for at least five years before age 13. Studying placements of all lengths enables them to follow many cohorts throughout their childhood. Second, they use a sample of full biological siblings that most likely share a larger set of unobserved components (e.g., genes, prenatal and early childhood environment). Third, they have access to a large set of pre-placement characteristics for individuals and time-varying control variables for their parents.

Sariaslan et al. (2021) identified just over 30,000 individuals placed in OHC before age 15. Compared with their siblings, individuals placed in OHC care were 1.4 to 5 times more likely to experience adverse outcomes in adulthood. The highest relative risks were observed for those with violent crime arrests, more than four times those of their non-placed siblings. This result is quite different from the null results reported by Brännström et al. (2020) and is most likely due to differences in the types and lengths of OHC placements that differ across the two samples. For example, there are no detrimental effects on violent

crime when looking at those who experienced long-term placements,⁷¹ which aligns with Brännström et al.'s (2020) findings for Sweden.

Sariaslan et al. (2021) argue that their findings: "... suggest that outof-home care placement should remain a last resort intervention, and efforts should be directed toward improving the quality of care and reducing institutional placement and placement instability." (p. E9)

8.2 Norwegian study finds no effect on criminal behavior

In contrast to the Finnish study above, preliminary work from Norway shows no differences in criminal behavior when comparing those who were investigated and placed in out-of-home care compared to those who were investigated and, instead, offered services in their homes (Drange et al. 2022). The authors report results from event studies (with and without control variables) that follow an individual before, during, and after placement in OHC. Their research design controls for a rich set of observable variables and time-invariant fixed individual characteristics, which are used to control for time-invariant unobservable characteristics of each individual. Rich control variables and individual fixed effects give this study a strong causal flavor. In an alternative empirical exercise, they also use variation in placement rates across different geographical units in an instrumental variables framework, confirming their baseline results, albeit with much less statistical precision.

8.3 Danish study finds no effect on criminal behavior

Gram Cavalca et al. (2022) apply two different event study designs to Danish data. Their first design estimates the average treatment effect of OHC on two subsets of children: those placed due to parental behavior (as opposed to their own behavior) and those with no pre-removal history of mental illness. These groups find no effect of OHC placement on criminal convictions at age 15 or later. In their second design, they compare children with high-risk scores who were removed to those

^{71.} See Table 3 on p. E9 of Sariaslan et al. 2021.

with high-risk scores but were not removed to get at the marginal treatment effect of OHC. Once again, they find no effect of removal on criminal charges at age 15 or later.

9. In-Care Treatment and Resources

What types of treatment programs and resources can we provide to improve the outcomes of children and youths in out-of-home care? Answering this key question is beyond the scope of this literature review, primarily since there is no clear-cut answer. In particular, there is no clear answer in the Sweden-specific research. However, I do see progress being made towards answering this question.

One important step was the broadening of the mandate of the "Swedish Agency for Health Technology Assessment ..." to include "... and Assessment of Social Services" (Statens beredning för medicinsk and social utvärdering, SBU) in 2015. Since then, they have produced several high-quality literature reviews and meta-analyses of social services and out-of-home care. SBU has concluded that some programs are potentially effective but that there is too little high-quality evidence to determine what "best practice" is in this policy space; in particular, they point to a shortage of randomized controlled trials of treatment programs carried out in the Swedish context. A second improvement is what I perceive as an expansion of funding available for doing this type of research, along with an increase in the pool of researchers both interested in and qualified to undertake these tasks.

Treatment programs also need money and trained personnel. As discussed above, higher-quality care can improve outcomes and lower crime. One such high-resource program evaluated in a Swedish context is the Treatment Foster Care Oregon program (*behandlingsfamiljer*).⁷² This program entails a foster home placement as an alternative

^{72.} Hansson and Olsson 2012, Bergström and Höjman 2015, SBU 2018. Note that this

to residential care for adolescents with particularly high needs. The foster family receives additional training and has access to a team of treatment professionals regularly. This team stays in contact with the youth's school and also provides treatment to foster youths and their original families.

These resource-rich foster home placements have been shown to reduce future crime and the number of days spent in secure facilities. ⁷³ The US gives them 60% more resources than a typical foster home placement. ⁷⁴ In Sweden, the cost is significantly less than a placement in a secure facility (*särskilt ungdomshem*) but a bit more than a placement in a standard residential care unit (*hem för vård och boende*, *HVB hem*). ⁷⁵ About 30 – 40 youths receive such placements each year. ⁷⁶ Despite the high short-run costs of this program (primarily training new families and new care teams), SBU deems this program cost-effective in the long run. ⁷⁷ A similar conclusion was made in the US. ⁷⁸

In a report from 2023, the Health and Social Care Inspectorate (*Inspektionen för vård och omsorg, IVO*) shows that more staff per youth, lower personnel turnover, and higher staff qualifications are positively related to clients' self-reported experiences in state-run secure residential care units (*särkilt ungdomshem*). These measures of quality and resources improve client well-being. The number of psychologists working in a care unit also positively correlates with clients' self-reported experiences. Importantly, these indicators of staff quality are also negatively correlated with an objective measure of incidents where youths are placed in isolation by staff members, where isolation is viewed by IVO and by SiS as a negative outcome. Again, higher quality care – which does cost more – produces better outcomes.

program has many alternative names including specialized foster care, therapeutic foster care, intensive foster care, and multidimensional treatment foster care.

^{73.} Ibid.

^{74.} Kessler et al. 2008.

^{75.} SBU 2018.

^{76.} Ibid.

^{77.} Ibid.

^{78.} Zerbe et al. 2009.

10. Discussion and Recommendations

A large body of research studies the adult outcomes of former outof-home-care children. This literature tells us that children who have spent time in foster family care or residential care have much worse outcomes as adults when compared to the population at large. They have (on average) less education, lower employment rates and income, worse mental and physical health, and higher crime rates. The important question then becomes: What would their lives have looked like if they had not been placed in out-of-home care and stayed with their families instead? Does out-of-home care damage children in some way that lowers their well-being in the long run? And, if so, what can we do to prevent this? What form(s) of in-care services could be provided to offset the unintended negative consequences of out-of-home care?

In this SNS report, I have tried to give the reader a good sense of the Sweden-specific research. I have also described several important causal studies from Canada and the United States. This report focuses on the strong, positive association between OHC and future criminal activity. Is it correlational? Is it causal? Is there scope for lessening crime among former out-of-home care children?

While crime is the focus of this specific report, that does not mean that I believe crime to be the single most important outcome to focus on. Other outcomes such as mental health, self-harming behaviors, attempted suicide, and suicide are all immediate and pressing problems that must be dealt with first in the here and now. Dealing with such issues in the present is likely to lower future criminality.

In the body of this report, I listed 14 lessons, all based on my reading of the existing academic research. I will refrain from restating them

here and, instead, present six recommendations drawn from and based on my reading of this literature.

My review of the causal research from the United States and Canada points towards a tradeoff between quality out-of-home care and future criminality. The Sweden-specific research also supports this conclusion. Since the cost of crime is so high, investments in quality out-of-home care most likely pay for themselves in the long run. SBU has calculated that the cost of one serious crime that leads to a 10-month placement in a secure residential care facility (*SiS hem*) is about 2.5 million SEK.⁷⁹ This should be seen as a lower bound on the cost of a serious crime since it excludes court costs and the cost of crime imposed on victims.

Let me give a few concrete examples of what I mean by quality care. First, researchers agree that placement stability is desirable and that moving from one placement home or type to another is undesirable. Second, giving placements more resources will also raise quality. Programs such as the Casey foster family care program in Washington and Oregon in the United States, which increased resources available to foster homes and children by 60%, gave desirable results and were cost-effective. In Sweden, SBU argues that the Treatment Foster Care Oregon program is a cost-effective way of caring for youths with serious behavioral problems. It can be used as an alternative to residential care. This program currently treats 30–40 youths per year.

I. INCREASE THE NUMBER OF RESOURCE-RICH FOSTER HOME PLACEMENTS

The number of resource-rich (TFCO) foster home placements should be increased. These new foster home placements should be used as an alternative to residential care.

The main difficulty with this recommendation is recruiting and training new foster families. An alternative to recruiting and training new families could be to provide more training, support, and resources to existing foster families.

2. INCREASE THE QUALITY OF SECURE RESIDENTAL CARE UNITS The quality of the secure residential care units (SiS-hemmen) must be improved. Both by increasing staff qualifications and increasing the

^{79.} SBU 2018, p. 45.

knowledge on how deal with youths with ADHD, Autism, and mental health issues. It must also be ensured that the care units are safe and free from sexual abuse. These recommendations are in line with The Health and Social Care Inspectorate's (IVO) recommendations for quality improvements.

Health and education are essential for living a meaningful, law-abiding life. Decades of Sweden-specific research has documented large deficits in later life health and education for children and adults who have spent time in out-of-home care. While we cannot say that out-of-home care caused these deficits, we can be certain that out-of-home care has not led to improvements along these dimensions. Regardless of their source, these inequalities need addressing. Doing so will most likely reduce future criminality.

3. INTRODUCE MANDATORY HEALTH CHECKUPS

Regular health checkups should be made mandatory for all children and youths placed in out-of-home care. These should include mental, physical, dental, and reproductive health checkups.

Significant progress has been made in the rules and laws governing healthcare provision for children and youths in out-of-home care. The word "mandatory," however, is seldom used, and our ability to ensure that appropriate care is actually being provided is somewhat limited (see recommendation 6 below). A recent investigation by the Swedish Association of Local Authorities and Regions (*Sveriges Kommuner och Regioner*) concluded that improvements in meeting the health needs of children and youths placed in out-of-home care were still needed.⁸⁰

4. INTRODUCE MANDATORY EDUCATION CHECKUPS

Regular education checkups should be made mandatory for all children and youths placed in out-of-home care. Tutoring services should be provided to remediate deficits.

The SAMS program (*Samverkan socialtjänst skola*) for coordinated efforts between local child welfare services should be supported. More effort is needed to ensure the availability and quality of appropriate educational programs for those living in HVB homes and SiS residential units (see recommendation 6 below).

80. SKR 2020.

Government oversight functions did not keep pace with the rapid privatization of out-of-home care. Today, we must recognize the importance of central government oversight to ensure that children and youths receive proper care. It is IVO's role to have well-functioning licensing and quality control practices in place. It is the government's responsibility to see that IVO has the necessary resources to do so.

5. INVESTIGATE THE CONTROL FUNCTIONS OF IVO

Investigate the control function of IVO. Does it function well? Does IVO have the necessary resources to perform its control function?

A part of this oversight function could potentially be aided by expanding on the amount and type of information that is required of municipalities to report to the National Board of Health and Welfare's child and youth services register and by enabling a coordinated use of this register along with IVO's register on HVB facilities and data from SiS. This expanded flow of information could also help municipalities better judge the suitability of family foster homes and residential care institutions that are taking in children from more than one municipality at a time. Furthermore, access to this information would increase our ability to evaluate the efficacy of out-of-home care.

6. EXPAND THE REGISTER OF THE NATIONAL BOARD OF HEALTH AND WELFARE

Expand the National Board of Health and Welfare's register of child and youth services to include information on placement type, placement reason, placement dates, placement stability and reasons for how and why a placement ends, in-care services provided, results from mandatory health checkups, and results from mandatory education report cards. Each placement should also have a placement home identifier or placement residential care unit identifier to enable mergers with other key data kept by IVO, SIS, and Statistics Sweden (*Statistiska centralbyrån*).

Collecting and reporting additional information needs to be done in a way that guarantees the integrity of individuals and families and does not increase the administrative burden of social workers to the point that they need to reduce the amount of time spent working directly with children and their families. However, most of the necessary information is already being keyed into one or more municipality-level IT systems. Thus,the sharing of more information can be achieved by coordinating the collection of existing information and does not necessarily require collecting more information.⁸¹

^{81.} For a more detailed suggestion of what such a system could look like, please see Lindqvist (2014).

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Children unable to live at home due to difficult conditions or due to their own risky behavior may be placed in out-of-home care by social services. Separating a child from his or her family represents a major intervention that requires careful consideration regarding the risks and benefits for the family and the child.

In this report, economist Matthew Lindquist presents an overview of the research on the effects of out-of-home-care on future criminal behavior. Based on lessons from this research, he presents recommendations for improving social care that would benefit not only the ones cared for but also society at large.

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