

# What if Universal Services Don't Have a Universal Impact ? A Spatial Equity Perspective on the Prevalence of Child Protection Intervention in a Canadian Province

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# LA RESPONSABILITÉ DES ACTEURS PUBLICS DANS LE REPÉRAGE DES ENFANTS EN DANGER

# **What if Universal Services Don't Have a Universal Impact? A Spatial Equity Perspective on the Prevalence of Child Protection Intervention in a Canadian Province**

Tonino Esposito, Johanna Caldwell, Martin Chabot, Sonia Hélie  
and Nico Trocmé<sup>1</sup>

1. The authors have defined the order of presentation.

## ABSTRACT

Over the past few decades, strong evidence has shown that family and neighbourhood-level socioeconomic vulnerabilities are significantly associated with higher risk of child protection intervention. For children and families in the Canadian province of Quebec, relatively high spending on universal and targeted services and income transfers has reduced income inequality to one of the lowest levels in North America. While intervention by the child protection system is meant to be “exceptional”, recent evidence on the prevalence of child protection involvement in Quebec demonstrates that child protection involvement over the course of childhood is fairly similar to rates in other jurisdictions with similar child protection regimes, but varied levels of social support. This commentary piece draws on recent prevalence findings from Quebec to illustrate how child protection outcomes vary significantly among territories despite universal services being allocated across the province. Specifically, we illustrate these disparities across areas with varied socioeconomic vulnerabilities and population density. Through a theoretical lens of spatial equity, we examine possible explanations for disparities in child protection outcomes across territories, considering accessibility, availability, and appropriateness of benefits, differential risk related to structural and colonial histories, and variation in risk perception related to family situations – all of which can also have an impact on how effective universal policies are in reaching families and having a desired positive impact on their lives. This discussion calls upon policymakers, practitioners, and researchers in jurisdictions with universal policies to examine how well these policies align with the unique needs within a population. In order to ensure that universal services have a universal impact, evidence must demonstrate that equitable outcomes are actualised rather than simply envisioned.

## RÉSUMÉ

### **Et si les services universels n'avaient pas d'impact universel ? La prévalence des interventions en matière de protection de l'enfance dans une province canadienne analysée au prisme de l'équité spatiale**

Au cours des dernières décennies, des preuves solides ont montré que les vulnérabilités socio-économiques au niveau de la famille et du quartier sont significativement associées à un risque plus élevé d'intervention de la protection de l'enfance. Pour les enfants et les familles de la province canadienne du Québec, les dépenses relativement élevées consacrées aux services universels et ciblés et aux transferts de revenus ont permis de réduire les inégalités de revenus à l'un des niveaux les plus bas d'Amérique du Nord. Bien que l'intervention du système de protection de l'enfance soit censée être « exceptionnelle », des données récentes sur la prévalence de l'intervention de la protection de l'enfance au Québec montrent que l'intervention de la protection de l'enfance au cours de l'enfance est assez similaire aux taux d'autres juridictions ayant des régimes de protection de l'enfance similaires, mais des niveaux de soutien social variés. Ce commentaire

s'appuie sur les résultats récents de la prévalence au Québec pour illustrer comment les résultats en matière de protection de l'enfance varient de manière significative entre les zones géographiques malgré l'allocation de services universels dans toute la province. Plus précisément, nous illustrons ces disparités entre des régions présentant des vulnérabilités socio-économiques et des densités de population variées. À travers une lentille théorique d'équité spatiale, nous examinons les explications possibles des disparités dans les résultats de la protection de l'enfance à travers les géographies, en considérant l'accessibilité, la disponibilité et la pertinence des prestations, le risque différentiel lié aux histoires structurelles et coloniales, et la variation de la perception du risque liée aux situations familiales – tous ces éléments peuvent également avoir un impact sur l'efficacité des politiques universelles à atteindre les familles et à avoir un impact positif souhaité sur leur vie. Cette discussion invite les décideurs politiques, les praticiens et les chercheurs des juridictions dotées de politiques universelles à examiner dans quelle mesure ces politiques s'alignent sur les besoins uniques d'une population. Pour que les services universels aient un impact universel, il doit être prouvé que des résultats équitables sont obtenus plutôt que simplement envisagés.

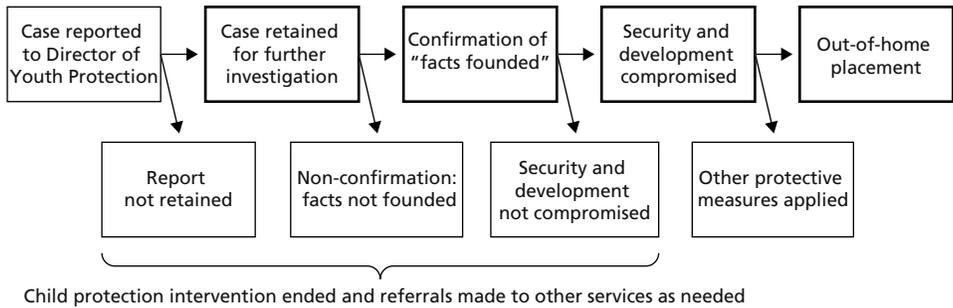
## Introduction

The social policy paradigm in Canada includes several universal health and social benefits. The notion of universality in service provision in Canada is based on principles of collective responsibility, inclusion, and equality of opportunity, and is implemented through policies of “equal benefits or equal access” (Béland *et al.*, 2020, p. 125). Compared to targeted means-tested benefits, universal policies are meant to reflect the possibility for all individuals to experience a variety of needs throughout their lives. They are intended to function as a source of social protection, human development, stable economic growth, and social solidarity (Ortiz, 2018).

In Quebec, a province where around one quarter of Canadians live, a hybrid model of both universal and targeted benefits creates a relatively robust social safety net, particularly for families with children. Quebec spends more on child and family services than any other Canadian jurisdiction (Statistics Canada, 2018). As a result of its progressive array of social programmes – such as drug prescription subsidies, subsidised public childcare, access to early intervention and childhood education services, social pediatric services for high-needs families, housing subsidies for low-income families with children, and progressive tax rates and child tax benefits – Quebec maintains one of the lowest levels of after-tax and transfer income inequality in North America (Callahan and Swift, 2006; Esposito *et al.*, 2017; Fréchet *et al.*, 2020; Kurnaz and Yip, 2022; Macdonald, 2018; Retraite Québec, 2020). Though childcare is highly subsidised at a provincial level, the coverage of childcare spaces across different territories varies highly – it is much more available in cities than in rural areas (MacDonald, 2018). Indeed, a recent external investigation illustrated both the uniquely inclusive childcare coverage compared to other jurisdictions as well as disparities in accessing this benefit across the province (Williams, 2018). While income transfer benefits are administered through the provincial and federal tax regime and are therefore available to tax filers, universal health and social services must be accessed through points of service such as a “Centre communautaire de services sociaux” (CLSC) where there may be long wait times or eligibility hurdles (e.g., immigrants can easily lose access to the universal provincial health plan even when they are technically eligible, meaning they must pay out of pocket and hope for reimbursement).

In this context of child and family support policies, child protection intervention is meant to be “exceptional”, only used as a last resort when all other potential sources of support for parents and families have been exhausted (Ministère de la santé et des services sociaux, 2010). Child protection in Canada is administered at the provincial and territorial levels. In Quebec, the child protection system is governed by the Youth Protection Act, whose purpose is to “protect children whose security or development is or may be considered to be in danger” (Youth Protection Act, section 2). The law allows representatives of the State to intervene in families when they determine that parents are not fulfilling their responsibilities to care for a child. Figure 1 illustrates a basic trajectory of intervention within the Quebec child protection system.

FIGURE 1  
Overview of Decision Points Following a Child Protection Report in Quebec



**Note:** A version of this figure appears as 'Figure 2' in Esposito *et al.*, 2023.

While child protection involvement is meant to be exceedingly rare among the population, our team's recent findings in Quebec demonstrate that at least once during childhood, 10.1 % of all children in Quebec will experience a substantiated child protection concern, more than half of which (5.5 % of all children in Quebec) will be removed from their home as a result at some point, before turning 18 years old (Esposito *et al.*, 2023). These rates are comparable to findings from a recent study using similar methods in the United States in which 12.5 % children had substantiated child protection concerns and 5.9 % were placed outside their home (Wildeman and Emmanuel, 2014). Similar rates of involvement with child protection systems suggest that across jurisdictions child protection involvement is not so exceptional after all.

In jurisdictions such as Quebec, high levels of income transfer designed to reduce inequality and other child and family benefits are assumed to improve outcomes and reduce risk for children, indicated in part by reduced child protection involvement. This assumption is supported by data: a recent U.S.-based study estimated that federal poverty reduction policies could reduce child protection involvement by 11.3 % to 19.7 % on an annual basis, and further that this could diminish rates of disproportionality in child protection among racialised groups (Pac *et al.*, 2023). However, empirical findings demonstrate that in Quebec, significant inequities in child protection involvement remain related to Indigenous and Black children, socioeconomic vulnerability, and geographic residence (e.g., Boatwain-Kyte *et al.*, 2020; Esposito *et al.*, 2022; De la Sablonnière-Griffin, 2016). In this province, socioeconomic vulnerabilities explain over 50 % of the neighbourhood-level variation in increased chances of placement and 25 % of neighbourhood-level variation in decreased chances of children returning to live with their families (Esposito *et al.*, 2017a; Esposito *et al.*, 2017b). These data indicate that systemic problems persist and that more work is needed in order to understand the broader mechanisms of neighbourhood socioeconomic effects on child maltreatment.

Socioeconomic vulnerability at the family and neighbourhood levels can impact parenting and family functioning in several ways. Stressors and risk factors

proximal to circumstances of socioeconomic vulnerability put populations at risk for poorer health and psychosocial outcomes and negatively impact child safety and healthy development (Berger, 2004; Berger, 2007; Berger and Waldfogel, 2011; Bornstein and Bradley, 2014; Cancian *et al.*, 2010). Areas with high levels of family poverty are likely to have broader neighbourhood-level socioeconomic vulnerabilities such as poor access to quality food, transportation, housing, social services, education, and well-compensated employment (Bell *et al.*, 2014; Crawford *et al.*, 2014; Elgar *et al.*, 2010; Ferguson, 2006; Fowler *et al.*, 2013; Freisthler *et al.*, 2006; Garbarino and Kostelny, 1992; Hernandez *et al.*, 2010; Oreopoulos, 2008; Ross *et al.*, 2013; Perchoux *et al.*, 2014). Stressors related to these material challenges can raise cortisol levels in children and parents, cause poor mental health outcomes and externalising behaviours, and compromise children’s well-being and developmental outcomes (Johnson *et al.*, 2013; Loman and Gunnar, 2010; McBride *et al.*, 2011; Poon and Knight, 2012; Razza *et al.*, 2010; Yoshikawa *et al.* 2012). To observers, outward indicators of socioeconomic vulnerability can be perceived and labeled as “neglect”, causing a family to be chronically reported to child protection systems (Berger, 2007; Cancian *et al.*, 2010; Garbarino and Collins, 1999; Jonson-Reid *et al.*, 2010; Slack, 2004). In such cases, while a child welfare investigation may not substantiate a case as meeting the legal definition of neglect, it often falls on child protection organisations to find ways of reducing the impact of socioeconomic vulnerabilities – a task that the system may not be equipped to carry out (Trocmé *et al.*, 2014).

Research examining these patterns has prompted policy recommendations targeting unmet and sometimes chronic needs in families who may be flagged by child protection systems, often for neglect cases due to poverty, either in the family or in the area where they live. A high proportion of involvement with child protection systems across jurisdictions in North America is driven by child neglect which is closely linked to a lack of family support resources and poverty. A large majority of child protection cases in Canada relate to chronic need rather than “urgent” safety concerns (e.g., Trocmé *et al.*, 2014). Like other jurisdictions, probabilistic studies in Quebec show a correlation between family- and neighbourhood-level socioeconomic vulnerability and involvement with the child protection system, particularly related to neglect cases (Esposito *et al.*, 2021; Esposito *et al.*, 2017a, 2017b). There may be an interaction with neighbourhoods’ population density as well: in a recent study, our team found that population density explained 37 % of the poverty-driven variation in substantiated neglect cases (Esposito *et al.*, 2022).

In this paper, we reflect on potential explanations for high child protection involvement in Quebec despite unique policy provisions assumed to support families. In doing so, we rely on “spatial equity”, a theoretical notion that helps us look at disparate child protection involvement through a geographical lens. In this theoretical perspective, *equality* refers to equivalent distribution of services across a population, and *equity* to “equal distribution of the effects of these services”, which acknowledges possible unequal distribution based on variation in population strengths and needs (Bennett, 1983; Truelove, 1993, p. 21). These concepts prompt questions of how child protection risk is distributed across territories and

in turn how this may relate to availability, accessibility, and appropriateness of resources and services around these families, as well as other possible reasons that differentially increase risk of child protection involvement across territories. While spatial equity is a concept that is applied in many social policy contexts related to health and social well-being, a lack of consistency appears in the definitions and measures of the term itself (Talen and Anselin, 1998 ; Whitehead *et al.*, 2019). The scale, level of aggregation or disaggregation, and measurement approach (e.g., number of service points in a region vs. average travel distance to a service point) influence empirical findings and implications from a spatial equity perspective (Talen and Anselin, 1998 ; Truelove, 1993 ; Tsou *et al.*, 2005). In addition, specifically in child protection systems, variation in practice norms and legislation related to risk threshold across jurisdictions can also impact equitable outcomes within these systems.

This paper draws on recent empirical findings regarding prevalence of child protection involvement in Quebec. We rely on the spatial equity framework to look at the prevalence of child protection intervention according to geographic measures of a) socioeconomic vulnerability, and b) population density, which serves as a proxy for proximity of formal and informal services. This approach provides a foundational evidence base across the entire jurisdiction of Quebec, encompassing a large territory that shares nominally uniform social policy. By illustrating patterns of child protection involvement across these geographically measured indicators, we can demonstrate geographic anomalies in child protection prevalence from a spatial equity perspective. These anomalies can help address two main questions: 1) How can we understand child protection intervention as “exceptional” – as articulated by the provincial legal framework – when empirical data suggest otherwise? and 2) What mechanisms may explain the significant levels of child protection involvement in Quebec despite universal health, social service, and family support policies? Addressing these questions at a conceptual level is crucial for reducing the current level of child protection intervention and improving empirical inquiry related to inequities in family outcomes. The data-driven conceptual discussion in this article aims to contribute to empirical grounding of policy arguments designed to reduce prevalence of child protection involvement. A consensus is forming across policy, research, and practice domains that child protection systems are not where families should be turning to address chronic needs. In order to make child protection truly exceptional, there must be nuanced consideration of the contexts of vulnerability impacting families that may also compromise the efficacy of the “universal” services around them. Such an exercise can challenge the assumption that existing family services will adequately target the unique needs of all families. In order to move toward equity in service delivery, examination of the pockets of vulnerability across a given territory is a requisite first step. With the empirical measures of prevalence – rather than annual rates or estimates – used in this paper, the extent of child protection involvement across childhood (age 0-17) becomes more visible. This, when situated within geographic spaces, can illustrate patterns of spatial inequity grounded in a specific jurisdiction such as Quebec.

## Method

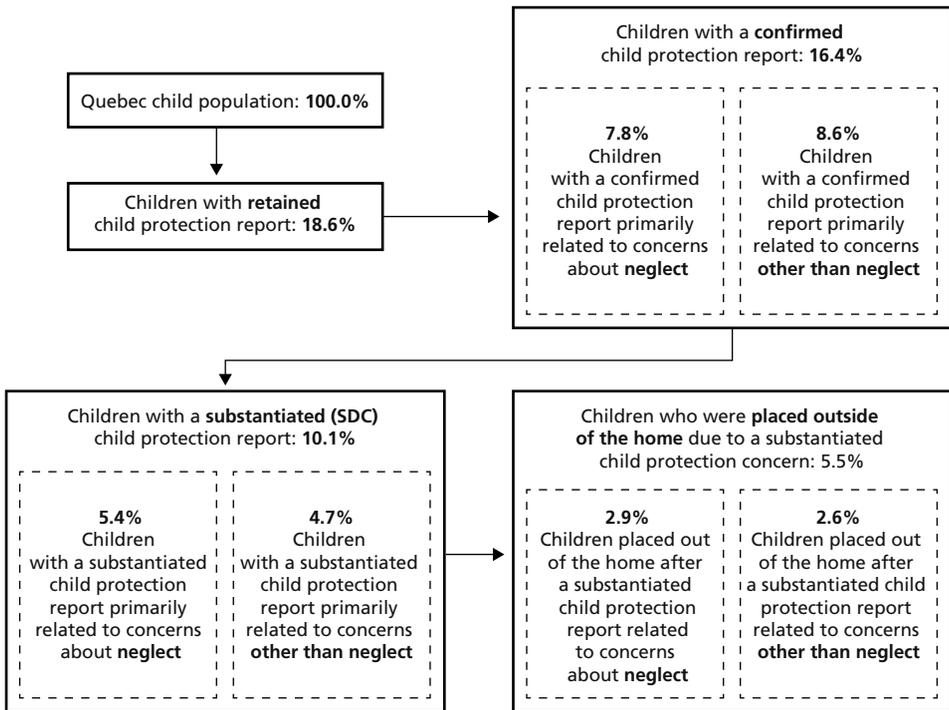
The empirical data we draw from in this article were produced using multiple sources of linked data which were then fed into survival tables for analysis of overall child protection prevalence and according to socioeconomic vulnerability and population density at an area level. Full method details are available separately in the expanded prevalence articles (see Esposito *et al.*, 2023; Esposito *et al.*, forthcoming a, b). Data used for the prevalence analyses included the following: 1) administrative child protection data from the provincial Ministry of Health and Social Services (Ministère de la santé et des services sociaux; MSSS); 2) annual child population data drawn from the MSSS; 3) Census data regarding socioeconomic information measured at the Canadian Census Dissemination Area (DA) level, or geographic areas representing between 400 and 700 individuals. DA-level data were used to create a socioeconomic status (SES) index that has been developed and validated in other studies (Pampalon *et al.*, 2012). Using these data sources, we used SPSS 26 to estimate overall prevalence and cumulative risk of child protection involvement by age at the stages of child protection involvement illustrated in Figure 1. In order to better understand potential environmental risk factors for high prevalence rates, two subsequent studies examined prevalence rates according to geographic variations. Accordingly, initial findings were examined based on a) socioeconomic index value by DA and b) child population density. The SES index includes five indicators measured at the DA level, as follows: individual-, family-, and household-level income, employment, and parents' schooling level. This index was calculated for almost all DAs (n = 10,650) in the province and divided into three tiers that represented the highest, middle, and lowest SES areas of Quebec. We examined SES findings specifically related to neglect by examining these territories in deciles, smaller areas that would give us more granular data on neglect patterns. Similarly, child population tiers were created using the annual child population data divided over the square kilometres of each DA. Child protection prevalence rates per DA were then grouped according to population density tier, which allowed for comparison of rates across these tiers and with an average provincial rate of child protection involvement. For the present article, the results of the studies described above were re-examined through a spatial equity lens. Relying on Truelove's (1993) definition of spatial equity as "equal distribution of the effects of [available] services" (p. 21), we considered possible explanations for the unequal child protection rates across geographical areas that vary according to certain characteristics – in this case socioeconomic status and child population density. We relied on the following premise: if one assumes that universal poverty reduction and family support services are evenly available and equally effective in reducing child protection rates, then one might also expect similar rates of child protection involvement across territories. Using this logical foundation, we considered possible explanations for the prevalence findings to contribute to policy discussions regarding spatial equity and child protection. Following the growing consensus in child and family services, we examined the conceptual rationale that

the existence of relatively robust universal and targeted services, as part of a jurisdiction's social policy, may reduce child protection involvement.

## Findings

In this section, we first provide abridged findings of the three prevalence studies we conducted (Esposito *et al.*, 2023; Esposito *et al.*, forthcoming a, b). In the discussion that follows, we present an overview of our analysis through a spatial equity lens. Together, the analyses demonstrated that overall prevalence of involvement with child protection is high, but that risk of child protection involvement skews toward territories with the least densely populated neighbourhoods and with the lowest socioeconomic status. These findings are summarised in Figures 3 and 4 below.

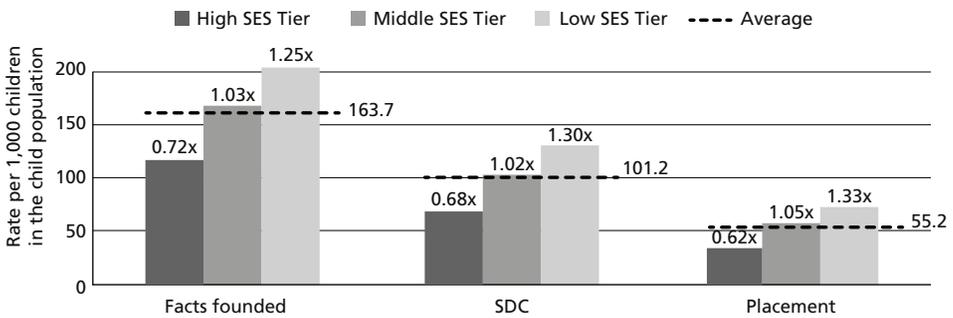
FIGURE 2  
Survival Table Estimates of Childhood Prevalence of Involvement in Quebec Child Protection System (as Percentage of Entire Child Population)



Note: This figure appears as 'Figure 2' in Esposito *et al.*, 2023.

Across the three SES tiers, there were notable differences in child protection prevalence rates: the most socioeconomically vulnerable areas saw the highest prevalence rates while the least vulnerable areas had the lowest prevalence of child protection involvement. Findings demonstrate that children who live in Quebec areas categorised in the lowest SES tier are at the highest risk of experiencing a child protection report being confirmed and substantiated, and of being removed from their home due to a child protection concern. Conversely, children living in areas in the highest SES tier consistently experienced the lowest risk of these outcomes within the child protection system. Below, Figure 3 illustrates these findings.

FIGURE 3  
 Disparity in Child Protection Involvement Age 0-17 across Geographic Area Socioeconomic Status tiers in Quebec (2000-2017)<sup>2</sup>



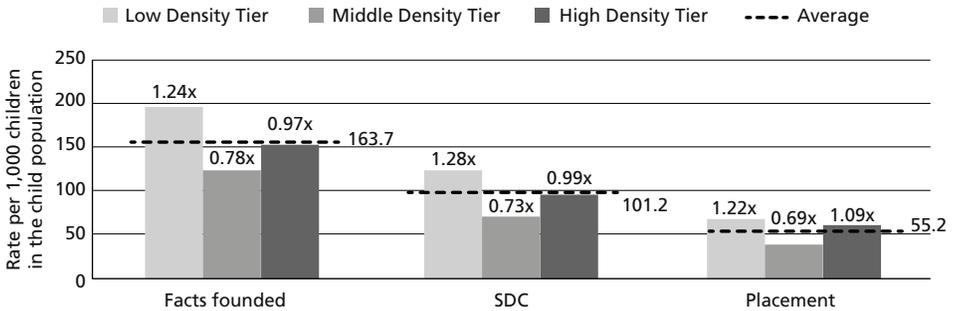
Note: This figure appears as 'Figure 4' in Esposito *et al.*, forthcoming-a.

When we examined the SES findings with more granularity, data showed even more variation according to confirmed and substantiated neglect cases. Specifically, prevalence rates of confirmed neglect cases in the most socioeconomically vulnerable decile were 2.8 times higher than those in the least vulnerable decile. This disparity between least and most vulnerable deciles rose to 3.3 times for substantiated neglect cases, demonstrating a significant relationship between neighbourhood-level socioeconomic vulnerability and neglect risk across childhood.

The second follow-up study examined child population density rates within children’s residential areas. Again, child protection rates varied across these tiers though not in a linear way. Child protection prevalence was highest in the least densely populated areas and second highest in the most densely populated tier. Figure 4 below summarises prevalence findings according to population density.

2. Please note that the average rates here are subject to variation due to rounding.

FIGURE 4  
Disparity in Child Protection Involvement Age 0-17 across Geographic Area Child Population Density Tiers in Quebec (2000-2017)<sup>3</sup>



Note: This figure appears as 'Figure 4' in Esposito *et al.*, forthcoming-b.

While the results of these studies are examined in more detail in their respective publications (Esposito *et al.*, 2023; Esposito *et al.*, forthcoming a, b), this paper uses their empirical findings to consider how the notion of spatial equity applies to the results and what implications emerge for policy in Quebec and other similarly socialised jurisdictions. Using our definition of spatial equity mapped onto the results, we noted the significantly different child protection rates across territories. Accordingly, we consider the possibility that there is limited availability, accessibility, and/or efficacy of support to families across territories according to the SES and population density characteristics. In the discussion below, we examine in more granular detail what may contribute to this lack of spatial equity in outcomes, with attention to practice and policy implications.

## Discussion

The Quebec findings presented here suggest that, contrary to the policy goals of the child protection system, intervention in families' lives is not an exceptional occurrence. Child protection prevalence is noticeably higher in territories with the lowest socioeconomic status and in those with the lowest population density, findings which we relate in part to low family support resources within and around families in these areas. In the context of inflation and rising global inequality, the phenomenon of inequitable child protection involvement – indicative in part of reduced family functioning – stands to increase with time.

There are many possible explanations for this lack of exceptionality in child protection intervention. Because disparities in child protection are clearly illustrated when seen through a geographic lens, universal services may not be

3. Please note that the average rates here are subject to variation due to rounding.

accessible, available, or appropriate for all families' unique needs, even when they exist. Existing universal services in Quebec may not be reaching families effectively where they live. From a socioeconomic vulnerability perspective, there may be families who either struggle to access all available cash benefits and social services or find them inadequate to support their unique needs. When benefits and services meant to support families are used, they may vary in their efficacy when provided to a diverse population, a point that is especially pertinent in the most densely populated areas such as Montreal where the population includes a large proportion of immigrant and ethno-racially diverse families. Expenditure and staffing levels within different territories related to health and social services are not publicly available, though could theoretically add valuable information to frame the results of our analyses. While the findings across socioeconomic tiers were linear and may be explained by variation in access to needed support, more questions remain about the curvilinear findings regarding population density as related to child protection prevalence. For example, one would generally assume a high level of services and shorter distances to access them in more densely populated areas, so why does this area not experience the lowest levels of child protection involvement?

Several additional factors may contribute to child protection involvement that is not spatially equitable across these territories. Numerous prior studies show disparities in child protection intervention according to racial and ethnic groups, specifically for Black and Indigenous families in Quebec and elsewhere in North America (Boatswain-Kyte *et al.*, 2020; De la Sablonnière-Griffin, 2016; Esposito *et al.*, 2017a, 2022a; Yi *et al.*, 2023). Structural and historical patterns of disenfranchisement, social bias, culturally inaccessible services, and non-random patterns of residence in high- or low-density areas may all align with the child protection risks faced by Black and Indigenous families. Prior studies in the United Kingdom examining socioeconomic risk at both individual and neighbourhood levels have found that children with equally low family SES levels will experience differential risk of child protection intervention dependent on the SES circumstances in their neighbourhood (Hood *et al.*, 2016). However, they found that in higher SES areas, individual families experiencing poverty were more likely to become involved with child protection when compared to similar families in lower SES areas; this phenomenon is called the “inverse intervention law” (Webb *et al.*, 2020). In such cases, poor families in richer neighbourhoods may experience higher intervention because relatively more resources are available and poor families and the threshold for reporting may be lower in neighbourhoods with higher SES status. A similarly poor family living in a lower SES neighbourhood may experience reduced likelihood of child protection intervention simply because more families around them could be seen as needing such intervention due to their poverty level.

Variation in child protection intervention across jurisdictions may also be related to different risk thresholds, informed by legislative differences and individual worker or agency discretion. Indeed, child protection legislation varies significantly across Canadian provinces and territories in terms of how “risk” is treated (Caldwell and Sinha, 2020), and studies have found wide differences in worker

decision making, dependent on both agency culture and individual worker characteristics (e.g., Hollinshead *et al.*, 2021). Another explanation that may interact with family and neighbourhood vulnerability is referred to as “visibility bias” or “surveillance bias”, which proposes that families already involved with health and social services may experience higher risk of child protection reports because they are visible to mandated reporters to whom they come for support. While empirically this concept does not singularly account for increased risk, evidence shows that surveillance bias can exist to a small extent (e.g., Drake *et al.*, 2017). While a combination of these potential explanations could be applied to the geographic variation we found in the data presented in the present article, we raise these hypothetical explanations to illustrate ways to understand spaces around families that are at the highest risk.

When resources exist but outcomes – such as child protection involvement – are significantly different according to where families live, a spatial equity lens prompts the question of whether services are “universal” in their implementation. Universal services designed and administered centrally may not be equally effective across a population, given unique family needs that may demand tailored or culturally-informed services – in Quebec, one thinks of Indigenous families living more rurally and Black and immigrant families living in more urban settings. Unique family needs, particular characteristics of low- and high-density areas, and socioeconomic vulnerabilities at the family or neighbourhood levels are all relevant to consider whether equitable outcomes are the ultimate policy planning goal. While many policy proposals suggest increased funding and support for families to reduce inequities, the empirical evidence is not conclusive that this will be effective without considerably tailoring service design and implementation to unique populations. Rather, if policy can adapt with the assumption that universal services are unequal in their impact according to external factors, an equitable service delivery approach will become more feasible.

In jurisdictions where the social policy paradigm includes nominally universal services, a spatial equity paradigm would also require evidence that these policies are effective in reaching their stated goal of inclusion and inequity reduction. Specifically, future research is needed in order to show the impact of certain policies, programmes, and services across territories for children and families of various ethno-racial, Indigenous and SES backgrounds. Because there seem to be similar rates of child protection intervention in multiple jurisdictions despite policy differences, further consideration of the policy rationale underpinning universal service implementation in Canada is warranted. Advanced research methods can be used to model spatial equity with this objective in mind. For example, multilevel modelling allows for inclusion of variables that go beyond measuring individual effects on child protection outcomes (see: Esposito *et al.*, 2022). Implementation research and programme evaluation done through a spatial equity lens can highlight successes and gaps in how and where universal programmes are effective in achieving positive child and family outcomes. Such evidence can identify tangible opportunities for service referrals to be more impactful once children are involved with child welfare, and efficacy of prevention services that reduce the risk

that they ever will be. The policy and practice change that will reduce disparities within child welfare systems will largely take place outside those systems.

In child protection, we hope that this article presenting evidence from Quebec can push empirical research to examine how local mechanisms may lead to child protection disparities across territories, with the ultimate goal of making child protection involvement truly exceptional. More research into the role of formal and informal supports in the lives of families across territories would support this goal. While this article discusses spatial equity at a conceptual level using large geographical tiers to examine inequities, this approach can lay the groundwork for more granular studies related to service uptake, referrals, and client assessments in small local areas. In Quebec, the rest of Canada, and other jurisdictions with a universal health and social services paradigm, a spatial equity lens may provide a framework to interrogate how and why certain social inequities persist despite a relatively robust social safety net that is intended to be accessible to all. This in turn can set an example for jurisdictions with a weaker social safety net to learn how universal services may be effectively designed and implemented. In empirical studies examining inequitable outcomes across territories, researchers should not assume the accessibility, appropriateness, or efficacy of services that are proximal to families, nor can it be assumed that families face equal risk of family challenges that may lead to child protection reports.

The contents of this article provide support for the use of geographic research methods in order to explore notions of spatial equity related to inequitable outcomes in child protection and other social domains. The empirical landscape in Quebec provides one illustration of the variation in child protection involvement for children living in territories with different characteristics. Our overall prevalence findings demonstrate a lack of exceptionality and inequitable child protection involvement, despite universal child and family services and despite the goal of exceptional child protection involvement. The child protection prevalence findings related to socioeconomic variation and population density offer possible reasons why child protection involvement is not exceptional, especially for families living in certain socioeconomically vulnerable circumstances. This article can contribute to discussions around universal and targeted policy frameworks: equitable service provision may result from understanding family circumstances through a spatial lens. The empirical evidence presented in this discussion article illustrates how aggregate geographic data can show patterns of inequitable outcomes for families, which in turn can contribute to additional questions of why these stark patterns exist. Ultimately, this paper aims to prompt policymakers and researchers to re-examine the universal service paradigm through a spatial equity lens so that implementation of such services can reduce inequitable outcomes that are well-documented in child protection.

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